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DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A.Q. PROGRAM

PTC Application

City of Sandpoint Biogas Project

Contents

Contents i

1.0 Introduction 1

2.0 Process Description 4

3.0 Emissions Estimates 5

4.0 Facility Classification 5

5.0 Dispersion Modeling 5

6.0 Applicable Requirements 5

Federal Regulations 6

IDAPA Regulations 6

Appendixes

A DEQ Permit-To-Construct Application Forms

B Emissions Estimates and Compliance with IDAP A 58.01.01.677 and 786

C Manufacturer Specifications

D Air Dispersion Modeling Protocol

E DEQ Protocol Approval Letter

F Bonner Bee Legal Advertisement of Public Meeting

1 Introduction

The City of Sandpoint, Idaho, is requesting a Permit to Construct (PTC) approval in accordance with Idaho Administrative Procedures Act (IDAPA) 58.01.01.200 to permit the installation of a MAN 90BHP Biogas engine to replace the current biogas disposal method (uncontrolled candlestick flare) at our existing wastewater treatment plant (WWTP) located at 723 S Ella Avenue, Sandpoint, Idaho (facility). The facility covers approximately 5.5 acres of land located in a nonattainment area for PM-10 regulated air pollutants.

The objective of this air permit application is to obtain a minor source PTC to allow waste biogas (currently flared) to be run through a 90BHP engine generator/Combined Heat Power unit for the existing WWTP facility. A variety of stationary emission sources on the site have not been include in the application due to the fact that the proposed new emission source (a 90 BHP MAN Biogas Generator) will in fact burn biogas which is currently being flared to a rudimentary candlestick type, uncontrolled burner as it has for the past fifty plus years. Considering the existing uncontrolled emission from this source, and the intent of the project, which will channel the biogas through a controlled device, the City respectfully ask for a variance to the application requirement that the assemblage of HVAC units and other on site sources used for comfort heating and air conditioning purposes not be required to be modeled or included in the application. The City feels that the net emission from the proposed installation will be an improvement over the existing disposal of the waste biogas, resulting in a net reduction of pollutants at the facility.

Biogas produced in the digesters will run through an Iron Sponge filter prior to being burned in the engine. Future use of the existing flare will be limited to use during the rare times that the engine may be down for maintenance due to lack of gas storage facilities.

A site location map and scaled plot plan showing property boundary, and flare emission source location is included in Figure 1.

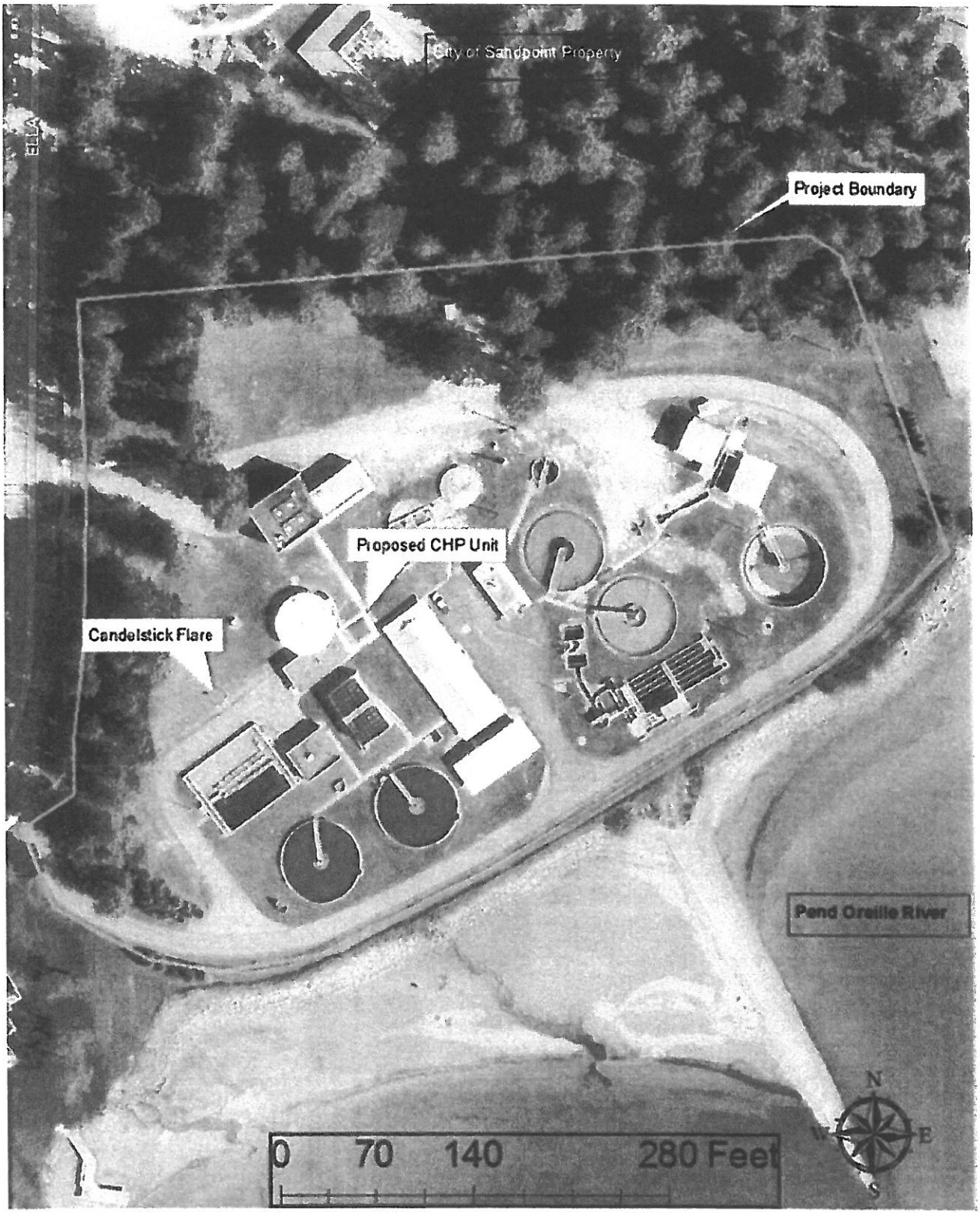

City of Sandpoint Property
Project Boundary
Proposed CHP Unit
Candelstick Flare
Pend Oreille River
0 70 140 280 Feet
N
W
E

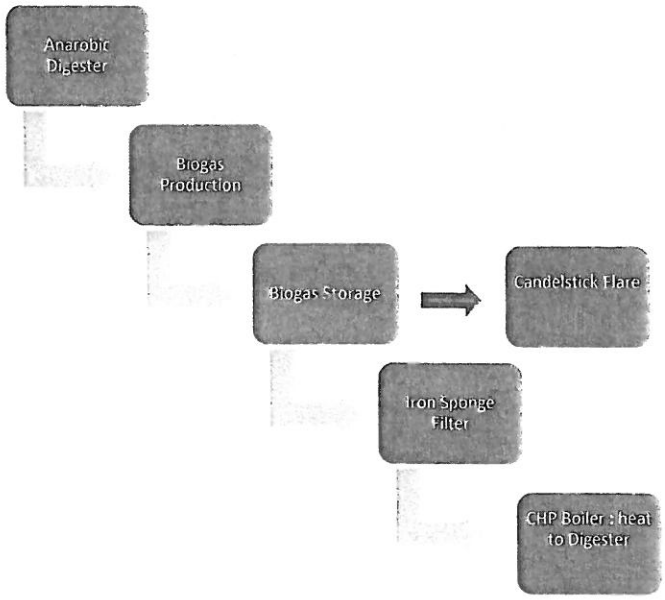
Figure 1

2.0 Process Description

The City of Sandpoint operates a WWTP to manage and treat municipal wastewater for the City of Sandpoint. Methane biogas is produced as a natural part of the anaerobic digestion process of the plant. Biogas is currently combusted through a rudimentary candlestick flare, as it has been for the entire 50+ year life of the plant. The Biogas has a composition of 55 to 60-percent methane (CH4), 40 to 45-percent carbon dioxide (C02), and less than 1-percent hydrogen sulfide (H2S). The Biogas generated from the anaerobic digesters is collected and piped to the candlestick flare where it is mixed with atmospheric oxygen and combusted. Prior to the flare the biogas would be diverted to an Iron Sponge to remove H2S and then directed to the proposed CHP unit within the WWTP facility. During cold months, the heat from the CHP unit is required to provide process heat to the anaerobic digesters which are required to maintain warm temperatures to facilitate proper wastewater disposal. The proposal is to install a new combined heat and power unit that runs the MAN engine which the modeling has been provided for within this application. See Figure 2 for process flow diagram of the biogas combustion process.

IDEQ permit application forms are provided for the WWTP in Appendix A.

Figure 2: Biogas Combustion Process



3.0 Emissions Estimates

Criteria pollutant and toxic air pollutant (TAP) potential emission estimates have been prepared for the proposed MAN CHP generator set.

The primary objective is to combust biogas in the MAN CHP unit to provide both electricity and to heat the anaerobic digesters. The city would maintain the candlestick flare which would only be used to burn biogas fuel under extreme circumstances in the future. Emission estimates were based on the following combustion equipment design specifications and biogas production assumptions:

MAN CHP Unit No.1:

Emission estimates are included in Appendix B and the manufacturer information is included in Appendix C.

4.0 Facility Classification

The City of Sandpoint WWTP facility is classified as a minor facility because its potential-to emit (PTE) is less than major source thresholds of 100 tons per year. The facility is not a designated facility as defined in IDAP A 58.01.01.006 and the facility is not a major source as defined in IDAPA 58.01.01.008.

The facility is located on approximately 5.5 acres within in the City of Sandpoint which is classified as non area for PM-10 regulated air pollutants.

5.0 Dispersion Modeling

The attached October 8, 2011 letter from Idaho DEQ employee Mr. Kevin Schilling confirms that the associated modeling and air impact analyses for the proposed modification to the facility will be conducted in accordance with IDEQ-approved protocol.

Detailed emissions screening for TAPs are provided with the emission estimates in Appendix B. TAP modeling results are summarized.

6.0 Applicable Requirements

A regulatory analysis was performed for the City of Sandpoint WWTP to determine the applicability of the state and federal air quality regulations. The regulatory applicability determinations are included in this section.

The following sections address air quality regulatory compliance requirements for the MAN CHP unit. As detailed below, the source complies with the applicable Idaho air quality regulations codified in Idaho Administrative Procedure Act (IDAPA) 58.01.01, as well as US Environmental Protection Agency (EPA) Federal regulations.

Federal Regulations

40 CFR 60 -Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

The MAN Engine CHP unit is subject to Subpart IIII. The generator will be used for daily disposal of waste biogass, producing electricity and heat which will be reused to maintain required temperatures of the anaerobic digesters. The applicability dates for the CHP unit is March 1, 2012. The date of commencement of construction refers to the date the engine is ordered by the owner or operator which is expected to be Mid December 2011.

The applicable requirements are provided below for the MAN CHP generator:

• Maintenance and testing hours of operation will not exceed 100 hr /yr.

• A non-resettable hour meter is required. The total number of operating hours per year will be monitored and records kept for use.

• The engine subject to this rule will be certified by the manufacturer and a copy of the manufacturer certification will be kept on file.

• An initial engine notification is not required.

• No controls are required.

IDAPA Regulations

Permit-to-Construct Required -IDAPA 58.01.01.201

This project does not meet the exemption criteria contained in IDAPA 58.01.01 Sections 220 through 223; therefore, a PTC is required.

Demonstration of Preconstruction Compliance with Toxic Standards - IDAPA 58.01.01.210

Uncontrolled TAP emission rates were used in the ambient impact analysis including hydrogen sulfide emissions. Preconstruction compliance with the toxic standards were successfully demonstrated through dispersion modeling for each carcinogenic and noncarcinogenic TAP that exceeded the EL, if any.

Visible Emissions-IDAPA 58.01.01.625

This regulation states that any point of emission shall not have a discharge of any air pollutant for a period aggregating more than three minutes in any sixty minute period of greater than 20% opacity. The MAN CHP unit and existing candlestick flare are subject to the visible emissions standard.

Rules for Control of Fugitive Dust-IDAPA 58.Q1.01.650

IDAPA 58.01.01.650 RULES FOR CONTROL OF FUGITIVE DUST

The WW1P facility will take all reasonable precautions to prevent the generation of fugitive dust as outlined under IDAPA 58.01.01.650-651.

GENERAL RULES

"All reasonable precautions shall be taken to prevent particulate matter from becoming airborne. In determining what is reasonable, consideration will be given to factors such as the proximity of dust emitting operations to human habitations and or activities and atmospheric conditions which might affect the movement of particulate matter. Some of the reasonable precautions may include, but are not limited to, the following:"

IDAPA 58.01.01.651.01 Use of Water or Chemicals

"Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land."

IDAPA 58.01.01.651.02 Application of Dust Suppressants

"Application, where practical, of asphalt, oil, water or suitable chemicals to, or covering of dirt roads, material stockpiles, and other surfaces which can create dust."

IDAPA 58.01.01.651.03 Use of Control Equipment.

"Installation and use, where practical, of hoods, fans and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations."

IDAPA 58.01.01.651.04 Covering Of Trucks

"Covering, when practical, open bodied trucks transporting materials likely to give rise to airborne dusts."

IDAPA 58.01.01.651.05 Paving

"Paving of roadways and their maintenance in a clean condition, where practical."

IDAPA 58.01.01.651.06 Removal Of Materials

"Prompt removal of earth or other stored material from streets, where practical."

The WWTP facility will monitor and maintain records of the frequency and the methods used (i.e., water) to reasonably control fugitive emissions.

Records will be maintained of all fugitive dust complaints received. Appropriate corrective action will be taken as expeditiously as practicable after receipt of a valid complaint. The records will include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the facilities assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Particulate Matter Standard for Boilers-IDAPA 58.01.01.677

The CHP unit is subject to IDAPA regulations beginning at IDAPA 58.01.01.675 (Fuel Burning Equipment-Particulate Matter). The regulations define maximum allowable concentrations of particulate matter (PM) for gas at 0.015 grains per dry standard cubic foot (gr / dscf) at 3 percent oxygen.

Compliance with the fuel burning equipment particulate matter standard for the CHP unit is demonstrated in Appendix B .

Control of Odors-IDAPA 58.01.01.775·776

"No person shall allow, suffer, cause or permit the emission of odorous gases, liquids or solids to the atmosphere in such quantities as to cause air pollution." This regulation is currently considered federally enforceable until it is removed from the State Implementation Plan (SIP), at which time it will be a state-only enforceable requirement.

The WWTP facility will take all reasonable precautions to comply with this requirement by maintaining records of any odor complaint received and take action as expeditiously as practicable.

Particulate Matter Standard for Incinerators-IDAPA 58.01.01.786.01

The flare is used to destroy excess biogas when the MAN CHP unit will not be operational or operating below biogas production rates. The WWTP candlestick flare meets the definition of "incinerator" per IDAPA 58.01.01.51:

Incinerator. Any source consisting of a furnace and all appurtenances thereto designed for the destruction of refuse by burning. "Open Burning" is not considered incineration. For purposes of these rules, the destruction of any combustible liquid or gaseous material by burning in a flare stack shall be considered incineration.

Therefore, the flare is subject to the PM standard for incineration per IDAP A 58.01.01.786.01, based on pounds of "refuse" burned:

.01 *General Restrictions.* No *person shall allow, suffer, cause or permit any incinerator to discharge more than two-tenths (0.2) pounds of particulate per one hundred (100) pounds of refuse burned.*

The term "refuse" is not defined in the air quality regulations at IDAPA 58.01.01. The flare is used to destruct excess biogas. For the purpose of this regulatory review, the "refuse" burned is considered to be biogas.

As detailed in Appendix B, PM emissions of biogas combustion is in compliance with the PM standard for incineration.

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Cover Sheet for Air Permit Application – Permit to Construct **Form CSPTC**

Please see instructions on page 2 before filling out the form.

COMPANY NAME, FACILITY NAME, AND FACILITY ID NUMBER

1. Company Name	City of Sandpoint Idaho
2. Facility Name	City of Sandpoint WWTP 3. Facility ID No.
4. Brief Project Description - One sentence or less	Permit existing City of Sandpoint Water Treatment Plant to burn Biogas in a MAN 90BHP Combined Heat & Power system rather than disposing it through the existing candlestick flare.

PERMIT APPLICATION TYPE

5. ☐ New Source ☐ New Source at Existing Facility ☐ PTC for a Tier I Source Processed Pursuant to IDAPA 58.01.01.209.05.c
☒ Unpermitted Existing Source ☐ Facility Emissions Cap ☐ Modify Existing Source: Permit No.:_____ Date Issued:_____
☐ Required by Enforcement Action: Case No.:_____

6. ☒ Minor PTC ☐ Major PTC

FORMS INCLUDED

Included	N/A	Forms		DEQ Verify
☒	☐	Form CSPTC – Cover Sheet		☐
☒	☐	Form GI – Facility Information		☐
☐	☒	Form EU0 – Emissions Units General		☐
1	☐	Form EU1– Industrial Engine Information	Please specify number of EU1s attached: 1	☐
☐	☒	Form EU2– Nonmetallic Mineral Processing Plants	Please specify number of EU2s attached: ____	☐
☐	☒	Form EU3– Spray Paint Booth Information	Please specify number of EU3s attached: ____	☐
☐	☒	Form EU4– Cooling Tower Information	Please specify number of EU3s attached: ____	☐
☐	☒	Form EU5 – Boiler Information	Please specify number of EU4s attached: ____	☐
☐	☒	Form CBP– Concrete Batch Plant	Please specify number of CBPs attached: ____	☐
☐	☒	Form HMAP – Hot Mix Asphalt Plant	Please specify number of HMAPs attached: ____	☐
☐	☒	PERF – Portable Equipment Relocation Form		☐
☐	☒	Form AO – Afterburner/Oxidizer		☐
☐	☒	Form CA – Carbon Adsorber		☐
☐	☒	Form CYS – Cyclone Separator		☐
☐	☒	Form ESP – Electrostatic Precipitator		☐
☐	☒	Form BCE– Baghouses Control Equipment		☐
☐	☒	Form SCE– Scrubbers Control Equipment		☐
☐	☒	Form VSCE – Venturi Scrubber Control Equipment		☐
☐	☒	Form CAM – Compliance Assurance Monitoring		☐
☐	☒	Forms EI-– Emissions Inventory		☐
☒	☐	PP – Plot Plan		☐
☒	☐	Forms MI1 – MI4 – Modeling	(Excel workbook, all 4 worksheets)	☐
☒	☐	Form FRA – Federal Regulation Applicability		☐

Instructions for Form CSPTC

This form is the cover sheet for an air quality permit application. It provides DEQ with basic information regarding the company and the proposed permitting action. This form helps DEQ efficiently determine whether the application is administratively complete. This form also provides the applicant with a list of forms available to aid the applicant to successfully submit a complete application.

Company Name, Facility Name, and Facility ID Number

1-3. Provide the name of your company, the name of the facility (if different than company name), and the facility identification (ID) number (Facility ID No.) in the boxes provided. The facility ID number is also known as the AIRS number or AIRS/AFS number (example: 095-00077). If you already have a permit, the facility ID number is located in the upper right hand corner of the cover page. The facility ID number must be provided unless your facility has not received one, in which case you may leave this box empty. **Use these same names and ID number on all forms**. This is useful in case any pages of the application are separated.

4. Provide a brief description of this permitting project in one sentence or less. Examples might be "Install/construct a new boiler" or "Increase the allowable process throughput." **This description will be used by DEQ as a unique identifier for this permitting project, in conjunction with the name(s) and ID number referenced in 1-3.** You will need to put this description, using the exact same words, on all other forms that are part of this project application. This is useful in case any pages of the application are separated.

Permit Application Type

5. Provide the reason you are submitting the permit application by checking the appropriate box (e.g., a new facility being constructed, a new source being constructed at an existing facility, an unpermitted existing source (as-built) applying for a permit for the first time, a permitted source to be modified, or the permit application is the result of an enforcement action, in which case provide the case number). If you are modifying an existing permitted source, provide the number and issue date of the most recent permit.

   If this PTC is for a Tier I source issued pursuant to the procedures contained at IDAPA 58.01.01.209.05.c, the source or modification may operate upon submittal of a Tier I Administrative Amendment issued pursuant to IDAPA 58.01.01.381.

6. Indicate if the application is a minor permit to construct application or a major permit to construct application by checking the appropriate box (e.g., major PTC or minor PTC). If the permit to construct application is for a major new source or major modification, you must ensure that all necessary information required by IDAPA 58.01.01.202, and .204, or .205, as applicable, is provided.

Forms Included

Check the "Included" box for each form included in this permit to construct application. If there are multiples of a form for multiple units of that type, check the box and fill in the number of forms in the blank provided.

The "N/A" box should only be checked if the form is absolutely unnecessary to complete the application. Additional information may be requested.

Application Fee

All applicants for a PTC shall submit a PTC application fee of $1000.00 to DEQ <u>at the time of the original submission of the application</u> as required by IDAPA 58.01.01.224. An application fee is not required for exemption applicability determinations, typographical errors, and name or ownership changes. An application fee can be paid by check, credit card, or Electronic Funds Transfer (EFT). If you choose to pay by credit card or EFT, call DEQs Fiscal Office to complete the necessary paperwork. Paper checks must be submitted with the original application as described below.

Submit Application

When complete, enclose a check for the application fee along with the hardcopy application certified by a responsible official (as defined in IDAPA 58.01.01.006.94), and send to:

Air Quality Program Office – Application Processing
Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706-1255

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

General Information **Form GI**
Revision 7
2/18/10

Please see instructions on page 2 before filling out the form.

All information is required. If information is missing, the application will not be processed.

IDENTIFICATION

1. Company Name	2. Facility Name:
City Of Sandpoint	Sandpoint Waste Water Treatment Plant

3. Brief Project Description:	Permit existing City of Sandpoint Water Tretment Plant to burn Biogas in a MAN 90BHP Combinded Heat & Power system rather than disposeing it through the existing candelstick flare.

FACILITY INFORMATION

4. Primary Facility Permit Contact Person/Title	Jeremy Grimm		Planning & Community Development Director	
5. Telephone Number and Email Address	208-255-1738		jgrimm@ci.sandpoint.id.us	
6. Alternate Facility Contact Person/Title				
7. Telephone Number and Email Address				
8. Address to Which the Permit Should be Sent	1123 Lake Street			
9. City/County/State/Zip Code	Sandpoint	Bonner	Idaho	83864
10. Equipment Location Address (if different than the mailing address above)	723 S. Ella Avenue			
11. City/County/State/Zip Code	Sandpoint	Bonner	Idaho	83864
12. Is the Equipment Portable?	☐ Yes ☒ No			
13. SIC Code(s) and NAICS Code	Primary SIC: 4952	Secondary SIC:	NAICS: 221320	
14. Brief Business Description and Principal Product	Waste water treatment plant WWTP for the City of Sandpoint, ID			
15. Indentify any adjacent or contiguous facility that this company owns and/or operates	Adjacent Lands to the north of subject property are owned by the City of Sandpoint, "Lakeview Park"			
16. Specify the reason for the application	☒ Permit to Construct (PTC) For Tier I permitted facilities only: If you are applying for a PTC then you must also specify how the PTC will be incorporated into the Tier I permit. ☐ Incorporate the PTC at the time of the Tier I renewal ☐ Co-process the Tier I modification and PTC ☐ Administratively amend the Tier I permit to incorporate the PTC upon your request (IDAPA 58.01.01.209.05.a, b, or c) ☐ Tier I Permit ☐ Tier II Permit ☐ Tier II/Permit to Construct			

CERTIFICATION

In accordance with **IDAPA 58.01.01.123 (Rules for the Control of Air Pollution in Idaho), I** certify based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

17. Responsible Official's Name/Title	Jeremy Grimm	Director of Planning & Community Development	
18. Responsible Official's Signature		Date:	11-04-11

19. ☒ Check here to indicate that you would like to review the draft permit prior to final issuance.

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

Emissions Units - Industrial Engine Information **Form EU1**
Revision 8
1/15/10

Please see instructions on page 2 before filling out the form.

IDENTIFICATION

1. Company Name:	2. Facility Name:	
City of Sandpoint Idaho	Sandpoint WWTP	

3 Brief Project Description: Burn Biogas in a MAN 90BHP Combined Heat & Power system rather than open burning.

ENGINE (EMISSION UNIT) DESCRIPTION AND SPECIFICATIONS

4. Type of Unit: ☒ New Unit ☐ Unpermitted Existing Unit
☐ Modification to a Unit with Permit #: Date Issued:

5. Engine Displacement: (liters per cylinder) 6. Ignition Type: ☐ Compression ☒ Spark

7. Use ☐ Emergency ☒ Non-Emergency

8. Engine ID Number:	9. Maximum Rated Engine Power:
MAN Biogas Engine E 0834 LE 302	90 Brake Horsepower (bhp)

10. Construction Date:	11. Manufacturer:	12. Model:	13. Model Year:
2011	MAN	MAN Biogas Engine E0834LE302	2011

14. Date of Modification (if applicable):	15. Serial Number (if available):	16. Control Device (if any):

FUEL DESCRIPTION AND SPECIFICATIONS

17. Fuel Type	☐ Diesel Fuel (#) (gal/hr)	☐ Gasoline Fuel (gal/hr)	☐ Natural Gas (cf/hr)	☒ Other Fuels (unit:)
18. Full Load Consumption Rate				0.6MMBtu/hr
19. Actual Consumption Rate				
20. Sulfur Content wt%		N/A	N/A	

OPERATING LIMITS & SCHEDULE

21. Imposed Operating Limits (hours/year, or gallons fuel/year, etc.):

22. Operating Schedule (hours/day, months/year, etc.):
24/7 365 days per year

Instructions for Form EU1

1 – 3. Provide the same company name, facility name (if different), and brief project description as on Form CS. This is useful in case any pages of the application are separated. This industrial engine may be subject to the *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* (40 CFR 60, Subpart IIII). Follow the link for applicability and compliance information. If Subpart IIII applies to this engine, complete and include Form FRA.

Engine Description and Specification:

4. Indicate whether the engine is new, existing but unpermitted, or being modified.

5. Indicate the engine displacement in liters per cylinder.

6. Indicate the ignition type as either compression or spark.

7. Indicate whether the primary use of the engine is emergency or non-emergency.

8. Provide the identification (ID) number of the engine emission unit (EU). Each engine in the application must have its own number. If engines included in this permit application are not identical in make and model, fill out a separate EU1 form for each engine. If the engines are identical, attach a separate sheet labeled EU1A listing them by ID number and date of construction or modification. The ID number can be any unique identifier you choose; however, this ID number should be unique to this EU and should be used consistently throughout this application and all other air quality permit applications (e.g., operating permit application) to identify this EU.

9. The maximum rated horsepower should be read from the engine's nameplate or from the manufacturer's user's manual or similar literature.

10. The date of construction of the engine is the date, month, and year in which construction or modification begins as defined in EU0 Form Instruction item 11.

11. Provide the name of the manufacturer of the engine.

12. Provide the model number of the engine. This number should be available from the nameplate of the engine.

13. Provide the model year of the engine.

14. If the engine has been or will be modified, give the date, month, and year of the most recent or future modification.

15. Provide the manufacturer's serial number for this engine, if available.

16. Provide the control device name and number if a control device is attached to this engine. The name and number of the control device should be consistent with control equipment forms and throughout the application.

Fuel Description and Specifications:

17. Indicate the fuel type used by the engine. If diesel fuel is used, you need to indicate the ranking number (e.g., diesel fuel No. 2). If the engine is a dual-fuel engine, please check the appropriate fuel type boxes.

18. The full-load consumption rate is the fuel consumption rate at the engine's rated capacity.

19. The actual consumption rate is the fuel consumption rate (usually daily average) under typical operational conditions.

20. Provide the weight percentage of the sulfur content in the diesel oil.

Operation Limits:

21. If any, indicate the operating limits you imposed to this engine in the units of operating hours per year, or gallons fuel per hour, per year, etc.

22. Indicate your operation schedule for the projected maximum operation of the engine.

Sandpoint Wastewater Biogas Project
Calculation Input Assumptions

Digester

Peak daily gas generation from digester	26,000	cf/day	
Average daily gas generation from digester	24,180	cf/day	
Annual gas production	8.83	MMcf/year	(based on average daily gas generation)
Estimated annual capacity factor	93%		
Biogas heat value	540	Btu/cf	
Biogas heat content	9,750	Btu/min	
Hourly heat energy in biogas	0.6	MMBtu/hr	

Emission Sources

	Emission Units (EU)
	1
Source type	Genset
Model number	Man E 0834 LE 302
Break Horsepower	91
Hourly Equipment Peak Input Biogas capacity (cf/hr)	1,057
Peak Biogas Heat Input capacity (MMBtu/hr)	0.6
Daily peak biogas capacity (cf/day)	25,375
Annual Equipment biogas capacity (MMcf/year)	9.26
Annual Estimated peak biogas capacity (MMcf/year)	8.61
End of Stack Temperature (°F)	1,004
Stack Height (ft)	18
Stack Diameter (in)	10.0
Exhaust flow rate at capacity (cfm)	453

Modeled Parameter

Stack height (m)	5.49
Stack Inside Diameter (m)	0.25
Stack exit velocity (m/s)	4.22
Stack gas temperature (°K)	813

Notes:

The stack gas temperature is the default value listed in the MAN Biogas Engin Technical Data Sheet Guide.

Sandpoint Wastewater Biogas Project

Emission Total from [redacted] – MAN CHP

	Pollutant	Genset Emissions (lb/hr)	Genset Emissions (ton/yr)	TAP EL (lb/hr)	Gensets Exceed EL?
Primary Pollutants	PM10	4.40E-05	1.79E-04		
	PM2.5	4.40E-05	1.79E-04		
	SO_2	-	-		
	NOx	0.20	0.82		
	NO_2	0.20	0.82		
	CO	0.50	2.04		
	VOC	0.04	0.16		
	Lead				
Section 585 TAP	Acrolein	2.93E-03	1.20E-02	1.70E-02	No
	Barium, soluble compounds, as Ba			3.30E-02	No
	Biphenyl	1.21E-04	4.93E-04	1.00E-01	No
	2-Chlorophenol (and all isomers) (ID)	1.17E-08	4.79E-08	3.30E-02	No
	Chromium metal - Including:			3.30E-02	No
	Cobalt metal, dust, and fume			3.30E-03	No
	Copper - Dusts & mists, as Cu			6.70E-02	No
	Cresols/Cresylic Acid (isomers and mixtures)	6.93E-07	2.82E-06	1.47E+00	No
	Cyclopentane	1.30E-04	5.28E-04	1.15E+02	No
	Dibutyl phthalate	2.30E-08	9.39E-08	3.33E-01	No
	Ethyl benzene	2.29E-05	9.35E-05	2.90E+01	No
	Methanol	1.43E-03	5.81E-03	1.73E+01	No
	Hexane (n-Hexane)	6.34E-04	2.58E-03	1.20E+01	No
	Hydrogen sulfide	0.00E+00	0.00E+00	9.33E-01	No
	Manganese as Mn Dust & compounds			3.33E-01	No
	Mercury (vapors except Alkyl as Hg)			3.00E-03	No
	o-Methylcyclohexanone	7.02E-04	2.86E-03	1.53E+01	No
	Molybdenum as Mo -Soluble compounds			3.33E-01	No
	Naphthalene	4.25E-05	1.73E-04	3.33E+00	No
	Nitrobenzene	5.48E-09	2.23E-08	3.33E-01	No
	Nonane	6.28E-05	2.56E-04	7.00E+01	No
	Octane	2.00E-04	8.16E-04	9.33E+01	No
	Pentane	1.48E-03	6.05E-03	1.18E+02	No
	Phenol	1.39E-05	5.67E-05	1.27E+00	No
	Pyridine	9.21E-09	3.75E-08	1.00E+00	No
	Styrene monomer (ID)	1.04E-08	4.24E-08	6.67E+00	No
	Toluene (toluol)	2.34E-04	9.53E-04	2.50E+01	No
	Trimethyl benzene (mixed and individual isomers)	4.06E-05	1.65E-04	8.20E+00	No
	2,2,4-Trimethyl-pentane	1.43E-04	5.81E-04	2.33E+01	No
	Xylene (o-, m-, p-isomers)	1.06E-04	4.31E-04	2.90E+01	No
	Zinc oxide dust			6.67E-01	No
Section 586 TAP	Aniline	1.44E-07	6.32E-07	9.0E-04	No
	Arsenic compounds			1.5E-06	No
	Benzene	2.34E-04	1.02E-03	8.0E-04	No
	Bis (2-chloro-1-methyl- ethyl) ether	1.42E-04	6.21E-04	3.3E-04	No
	Bis (2-ethylhexyl) phthalate	4.16E-08	1.82E-07	2.8E-02	No
	Cadmium and compounds			3.7E-06	No
	Carbon tetrachloride	1.51E-08	6.61E-08	4.4E-04	No
	Dichloromethane (Methylenechloride)	1.06E-05	4.65E-05	1.6E-03	No
	Formaldehyde			5.1E-04	No
	Naphthalene	3.95E-05	1.73E-04	9.1E-05	No
	Nickel			2.7E-05	No
	1,1,2,2,Tetrachloro-ethane	1.32E-06	5.77E-06	1.1E-05	No
	Tetrachloroethylene	1.96E-08	8.60E-08	1.3E-02	No
	1,1,2 - trichloroethane	3.06E-07	1.34E-06	4.2E-04	No
	Vinyl Chloride	7.91E-06	3.47E-05	1.2E-03	No

Sandpoint Wastewater Biogas Project
Emission Unit Calculations - Genset EU1

Emission unit number	1
Source type	Genset
Model number	Man E 0834 LE 302
Break Horsepower	91 bHP

Hourly Peak Biogas capacity (scf/hr)	1,057 cf/hour
Daily peak biogas capacity (scf/day)	25,375 cf/day
Annual estimated biogas capacity (MMcf/year)	8.61 MMcf/year

	Pollutant	Raw Biogas (lb/cf)	Control Factor	EF Un-Combusted Biogas (lb/cf)	EF Combust Products (lb/cf)	Comments	Emissions lb/hr	Emissions ton/yr
Primary Pollutants	PM10				4.16E-08	AP-42 Section 3.2 Table 3.2-2 (includes filterable and	4.40E-05	1.79E-04
	PM2.5				4.16E-08	condensible)	4.40E-05	1.79E-04
	SO_2 (3 hr and 24 hr)				0.00E+00	Based on maximum uncontrolled H2S concentration	0.00	0.00
	SO_2 (Annual)				0.00E+00	Based on controlled H2S concentration	0.00	0.00
	NOx				1.96E-04	MANTech Data: NOx = 1 g/bhp-hour as NO_2	0.20	0.82
	NO_2				1.96E-04	NO_2 = NOx	0.20	0.82
	CO				4.74E-04	MAN Tech Data: CO = 2.5 g/bhp-hour	0.50	2.04
	VOC				3.80E-05	Man Tech Data: NMHC + VOC = 0.2 g/bhp-hour	0.04	0.16
	Lead				NA			
Section 585 TAP	Acrolein				2.78E-06	AP-42 Table 3.2-2	2.9E-03	1.20E-02
	Biphenyl				1.14E-07	AP-42 Table 3.2-2	1.2E-04	4.93E-04
	2-Chlorophenol (and all isomers) (ID)	3.97E-10	97.2%	1.11E-11		EF Uncombusted Biogas based on max concentration	1.2E-08	4.79E-08
	Cresols/Cresylic Acid (isomers and	2.34E-08	97.2%	6.56E-10		EF Uncombusted Biogas based on max concentration	6.9E-07	2.82E-06
	Cyclopentane				1.23E-07	AP-42 Table 3.2-2	1.3E-04	5.28E-04
	Dibutyl phthalate	7.78E-10	97.2%	2.18E-11		EF Uncombusted Biogas based on max concentration	2.3E-08	9.39E-08
	Ethyl benzene	9.47E-09	97.2%	2.65E-10	2.14E-08	EF Uncombusted Biogas based on max concentration	2.3E-05	9.35E-05
	Methanol				1.35E-06	AP-42 Table 3.2-2	1.4E-03	5.81E-03
	Hexane (n-Hexane)				5.99E-07	AP-42 Table 3.2-2	6.3E-04	2.58E-03
	Hydrogen sulfide	0.00E+00	97.2%	0.00E+00		EF Uncombusted Biogas based on max concentration	0.0E+00	0.00E+00
	o-Methylcyclohexanone				6.64E-07	AP-42 Table 3.2-2	7.0E-04	2.86E-03
	Naphthalene	5.48E-10	97.2%	1.53E-11	4.02E-08	EF Uncombusted Biogas based on max concentration	4.2E-05	1.73E-04
	Nitrobenzene	1.85E-10	97.2%	5.18E-12		EF Uncombusted Biogas based on max concentration	5.5E-09	2.23E-08
	Nonane				5.94E-08	AP-42 Table 3.2-2	6.3E-05	2.56E-04
	Octane				1.90E-07	AP-42 Table 3.2-2	2.0E-04	8.16E-04
	Pentane				1.40E-06	AP-42 Table 3.2-2	1.5E-03	6.05E-03
	Phenol	6.99E-09	97.2%	1.96E-10	1.30E-08	EF Uncombusted Biogas based on max concentration	1.4E-05	5.67E-05
	Pyridine	3.11E-10	97.2%	8.71E-12		EF Uncombusted Biogas based on max concentration	9.2E-09	3.75E-08
	Styrene monomer (ID)	3.52E-10	97.2%	9.85E-12		EF Uncombusted Biogas based on max concentration	1.0E-08	4.24E-08
	Toluene (toluol)	3.58E-08	97.2%	1.00E-09	2.20E-07	EF Uncombusted Biogas based on max concentration	2.3E-04	9.53E-04
	Trimethyl benzene (mixed and individual				3.84E-08	AP-42 Table 3.2-2	4.1E-05	1.65E-04
	2,2,4-Trimethyl-pentane				1.35E-07	AP-42 Table 3.2-2	1.4E-04	5.81E-04
	Xylene (o-, m-, p-isomers)	2.21E-08	97.2%	6.19E-10	9.94E-08	EF Uncombusted Biogas based on max concentration	1.1E-04	4.31E-04
Section 586 TAP	Aniline	5.24E-09	97.2%	1.47E-10		EF Uncombusted Biogas based on average concen.	1.4E-07	6.32E-07
	Benzene	1.21E-09	97.2%	3.38E-11	2.38E-07	EF Uncombusted Biogas based on average concen.	2.34E-04	1.02E-03
	1,3-Butadiene				1.44E-07	AP-42 Table 3.2-2	1.4E-04	6.21E-04
	Bis (2-chloro-1-methyl- ethyl) ether	1.51E-09	97.2%	4.23E-11		EF Uncombusted Biogas based on average concen.	4.2E-08	1.82E-07
	Bis (2-ethylhexyl) phthalate	8.55E-10	97.2%	2.39E-11		EF Uncombusted Biogas based on average concen.	2.4E-08	1.03E-07
	Carbon tetrachloride	5.48E-10	97.2%	1.53E-11		EF Uncombusted Biogas based on average concen.	1.5E-08	6.61E-08
	Dichloromethane (Methylenechloride)				1.08E-08	AP-42 Table 3.2-2	1.1E-05	4.65E-05
	Naphthalene (PAH)	5.48E-10	97.2%	1.53E-11	4.02E-08	potential carcinogen per DEQ	4.0E-05	1.73E-04
	1,1,2,2,Tetrachloro-ethane				1.34E-09	EF Uncombusted Biogas based on average concen.	1.3E-06	5.77E-06
	Tetrachloroethylene	7.13E-10	97.2%	2.00E-11		EF Uncombusted Biogas based on average concen.	2.0E-08	8.60E-08
	1,1,2 - trichloroethene	1.11E-08	97.2%	3.12E-10		EF Uncombusted Biogas based on average concen.	3.1E-07	1.34E-06
	Vinyl Chloride				8.05E-09	EF Uncombusted Biogas based on average concen.	7.9E-06	3.47E-05

Emission Factor Calculation Details

7.70E-05 lb/Mmbtu * 0.0005 MMbtu/cf = 4.16E-08 lb/ cf biogas

Assumes all PM10 is PM2.5

Refer to Stoichiometric conversion of H2S to SO2 following worksheet

15310.6

33.33333 (31.29)

1	gr/ bhp-hour	/	453.59 gr/lb	/	11.62	cf biogas/bhp-hr	=	1.90E-04	lb/cf biogas
2.50	gr/ bhp-hour	/	453.59 gr/lb	/	11.62	cf biogas/bhp-hr	=	4.74E-04	lb/cf biogas
0.20	gr/ bhp-hour	/	453.59 gr/lb	/	11.62	cf biogas/bhp-hr	=	3.80E-05	lb/cf biogas

10.9879975

48.0398292

144.119488

Notes:

EF Un-Combused Biogas = Raw Biogas x (1-Control Factor)

585 TAP Emissions (lb/hr) = Hourly Peak Biogas Capacity x (EF Non-Combustion Biogas + EF Combustion Products)

585 TAP Emissions (ton/yr) = Annual Estimated Peak Biogas Capacity x (EF Non-Combustion Biogas + EF Combustion)Products) / 2000 lb/ton

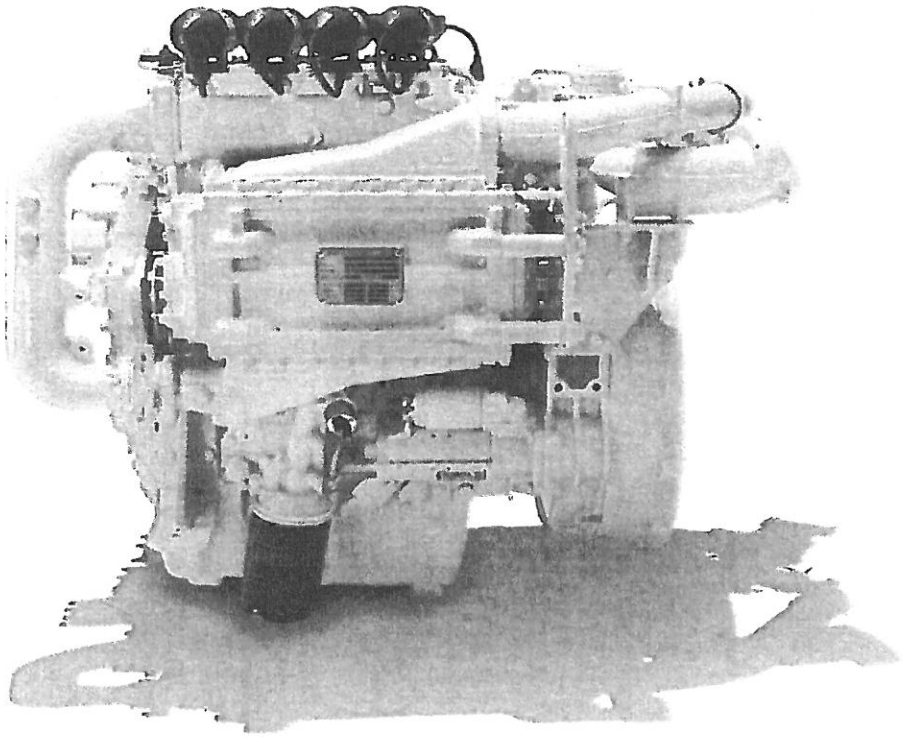
586 TAP Emissions (ton/yr) = Annual Estimated Peak Biogas Capacity x (EF Non-Combustion Biogas + EF Combustion)Products) / 2000 lb/ton

586 TAP Emissions (lb/hr) = 586 TAP Emissions (ton/yr) / 8760 hr/yr x 2000 lb/ton

Control Efficiency (AP42 Table 2.4-3 (2008 dr **97.2% (IC Engines)**

Grain Loading Calculation 6.19E-05 gr/dscf

Biogas Engine E 0834 LE 302
Preliminary Technical Data



Principle:	4-stroke Otto gas engine
No of cylinders:	4 in line
Supercharging:	Exhaust turbocharger with insulated turbine housing, forced-feed lubricated bearings and water-cooled bearing block
Mixture cooling:	Two-stage mixture cooling with high and low temperature cycle. Without mixture water pump the coolant circulation must be designed with external cooling water pumps with mixture temperature regulation at 50 °C.
Engine cooling:	Without engine water pump, coolant to be circulated by external water pump with temperature control.
Lubrication:	Pressure lubrication by gear-driven pump, exchangeable lube-oil filter in full flow and lube oil cooler integrated in engine coolant circuit.
Spark plugs:	Special spark plug for industrial gas engines.
Starter motor:	Pre-engaged-drive starter 24 V - 4.0 kW Starter battery capacity: 143 Ah, 24 V

Biogas Engine E 0834 LE 302
Preliminary Technical Data
for 60%-CH4 , 40%-CO2

Mixture cooling up to:		50 °C		122 °F
ENGINE DATA		**60 Hz**		**60 Hz**
λ = 1.45		**METRIC**		**ENGLISH**
Rated speed	min^{-1}	1800	rpm	1800
ISO standard power (COP)	kW	68	bhp	91
Air ratio	λ	1,45	λ	1,45
Configuration	in-line engine		in-line engine	
No of cylinders		4		
Bore	mm	108	in	4,25
Stroke	mm	125	in	4,92
Swept volume	l	4,58	cu in	279
Direction of rotation looking on flywheel	counter clockwise		counter clockwise	
Flywheel housing		SAE 2		SAE 2
Ring gear with number of teeth	Z	143	Z	143
Compression ratio	ε	11:1	ε	11:1
Mean effective pressure	bar	11,90	psi	172,6
Mean piston speed	m/s	7,5	in/s	295,3
Lube oil consumption	kg/h	0,040	lb/hr	0,011
Lube oil filling quantity min./max.	l	9/12	U.S. gal	2,38/3,17
Coolant filling quantity	l	13	U.S. gal	3,43
Max. operating pressure	bar	2	psi	29
Min. engine coolant circulation quantity	l/min	179	U.S. gal/min	47,2
Coolant temperature min.	°C	80	°F	190,4
Max. coolant temperature	°C	88	°F	42,8
Difference (inlet - outlet max.)	K	6	K	6
Max. mixture inlet temperature after throttle valve	°C	50	°F	113
Max. mixture cooling water inlet temperature LT	°C	45	°F	55
Min. mixture cooling water circulation quantity LT	l/min	13	U.S. gal/min	3,43
Max. mixture cooling water inlet temperature HT	°C	85	°F	32
Min. mixture cooling water circulation quantity HT	l/min	19	U.S. gal/min	3,43
max. suction pressure	mbar	15	psi	0,22
max. exhaust back pressure	mbar	40	psi	0,58
Engine width	mm	809	in	31,85
Engine length	mm	1055	in	41,54
Engine height	mm	866	in	34,09
Engine weight, dry	kg	485	lb	1069

Lube oil to MAN works standard M 3271 and coolant to MAN works standard M 324 Typ NF
Gas quality to MAN data sheet - minimum requirement for the gas quality for MAN gas engines
Air ratio measured by lambdameter ETAS LA 4_E

Biogas Engine E 0834 LE 302
Preliminary Technical Data
for 60%-CH4 , 40%-CO2

Mixture cooling up to: 50 °C

RATING DATA		**60 Hz**		
$\lambda = 1.45$		**METRIC**		
Load	%	100	75	50
Ignition timing	grad	22	22	22
ISO standard rating	kW	68	51	34
Coolant heat	kW	55	47	39
Mixture heat HT	kW	3	0	0
Mixture heat LT	kW	2	1	1
Exhaust heat up to 120 °C	kW	38	29	21
Radiation heat max.	kW	17	16	14
Energy input	kW	183	144	108
Fuel consumption	MJ/kWh	9,6	10,2	11,3
Efficiency				
mechanical	%	37,2	35,4	31,5
thermal	%	52,5	52,5	55,3
total	%	89,6	87,9	86,8
Mass flows				
Combustion air	kg/h	334	249	181
Fuel	kg/h	13	10	8
Exhaust gas mass flow rate, wet	kg/h	347	259	189
Temperatures				
Exhaust gas temperature	°C	540	525	510

Emissions at 100 % load (Correlation 5 % O_2)

NO_X	mg/Nm³	<	500
CO	mg/Nm³	<	1000
HCHO (Formaldehyd)	mg/Nm³	<	60
NMHC	mg/Nm³	<	150
Engine surface noise	dB (A)		100
Exhaust sound power level	dB (A)		130

Reference gas mixing unit: Deltec 1604 921083 und Zündsystem MIC 500

The technical data are based on a gas mixture of 60% methane and 40% carbondioxid
with a calorific value of 6.0 kWh/Nm³ and a methane no. > 100
The technical data indicated is based on standard conditions acc to DIN ISO 3046-1

Standard conditions:	Atmospheric pressure absolute:	100 kPa
	Air temperature	25 °C
	Relative air humidity	30 %

Rating adaptation at ambient conditions acc to DIN ISO 3046-1
The tolerance for the specific fuel consumption is + 5 % at rated output
The tolerance for the usable heat is 7 % at rated output
The coolant data are based on a 40 % portion of antifreeze

Biogas Engine E 0834 LE 302
Preliminary Technical Data
for 60%-CH4 , 40%-CO2

Mixture cooling up to: 50 °C

RATING DATA **60 Hz**

$\lambda = 1.45$ **ENGLISH**

Load	%	100	75	50
Ignition timing	°BTDC	22	22	22
ISO standard rating	Btu/min	3867	2900	1934
Coolant heat	Btu/min	3133	2644	2189
Mixture heat HT	Btu/min	171	0	0
Mixture heat LT	Btu/min	114	57	28
Exhaust heat up to 120 °C	Btu/min	2155	1655	1206
Radiation heat max.	Btu/min	967	933	785
Energy input	Btu/min	10407	8189	6142
Fuel consumption	Btu/bhp-hr	6785,1	7209,2	7951,3
Efficiency				
mechanical	%	37,2	35,4	31,5
thermal	%	52,5	52,5	55,3
total	%	89,6	87,9	86,8
Mass flows				
Combustion air	lb/hr	736	549	399
Fuel	lb/hr	29	23	17
Exhaust gas mass flow rate, wet	lb/hr	765	572	416
Temperatures				
Exhaust gas temperature	°F	1004	977	950

Emissions at 100 % load (Correlation 15 % O_2)

NO_X	g/bhp-hr	<	1
CO	g/bhp-hr	<	2,5
HCHO (Formaldehyd)	g/bhp-hr	<	0,07
NMHC	g/bhp-hr	<	0,2
Engine surface noise	dB (A)		100
Exhaust sound power level	dB (A)		130

Reference gas mixing unit: Deltec 1604 921083 und Zündsystem MIC 500

The technical data are based on a gas mixture of 60% methane and 40% carbondioxid
with a calorific value of 6.0 kWh/Nm³ and a methane no. > 100
The technical data indicated is based on standard conditions acc to DIN ISO 3046-1

Standard conditions:	Atmospheric pressure absolute:	100 kPa
	Air temperature	25 °C
	Relative air humidity	30 %

Rating adaptation at ambient conditions acc to DIN ISO 3046-1
The tolerance for the specific fuel consumption is + 5 % at rated output
The tolerance for the usable heat is 7 % at rated output
The coolant data are based on a 40 % portion of antifreeze

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 NORTH HILTON, BOISE, ID 83706 · (208) 373-0502

C. L. "BUTCH" OTTER, GOVERNOR
TONI HARDESTY, DIRECTOR

October 8, 2011

Jeremy Grimm
Planning & Community Development Director
City of Sandpoint
Sandpoint, ID

RE: Modeling Protocol for the City of Sandpoint proposed Biogas Engine at the Waste Water Treatment Plant

Jeremy:

Idaho DEQ modeling staff will be performing the air impact analyses for the biogas engine project on behalf of the City of Sandpoint. DEQ will use the following methodology to complete the analyses:

1. The City of Sandpoint will provide DEQ with an accurate plot plan showing existing buildings, the property boundary, and the proposed emissions source. This information has already been provided to DEQ.
2. The City of Sandpoint will provide DEQ with the following information needed to complete the analyses: a) exhaust stack final location and height from groundlevel; b) height of all buildings and tanks from groundlevel; c) final specification of the engine used.
3. Emissions for the proposed source will be calculated by DEQ permit writers and provided to the modeling staff for inclusion in the dispersion model. The City of Sandpoint may be required to provide operational information to the permit writer to enable calculation of emissions.
4. DEQ will use the AERMOD dispersion model with Sandpoint meteorological data to evaluate the impact of the proposed source.

DEQ's modeling staff considers the submitted information, with submission of the additional items noted above, to be an approved protocol. It should be noted, however, that approval of this modeling protocol is not meant to imply approval of a completed dispersion modeling analysis.

To ensure a complete and timely completion of the final analysis, our modeling staff advises that any requested information/data be submitted as soon as reasonably possible. If you have any further questions or comments, please contact me at (208) 373-0112.

Sincerely,

Kevin Schilling

Kevin Schilling
Stationary Source Air Modeling Coordinator
Idaho Department of Environmental Quality
208 373-0112

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THE INFORMATION BELOW.
The nature of the claim against you is for Reformation of the Legal Description Contained in Mortgage and for Judicial Mortgage Foreclosure on real property situate in Bonner County, Idaho.
YOU ARE HEREBY NOTIFIED that in order to defend this lawsuit, an appropriate written response must be filed with the above designated court within 20 days following the last publication date of this First Amended Summons. If you fail to so respond the court may enter judgment against you as demanded by the plaintiffs in the Complaint.
A copy of the First Amended Complaint and Summons can be obtained by contacting either the Clerk of the Court or plaintiff's attorney, John E. Miller, Esq., 206 E. Indiana Ave., Suite 200, Coeur d'Alene, ID 83814, telephone (208) 665-9464.
If you wish to seek the advice of or representation by an attorney in this matter, you should do so promptly so that your written response, if any, may be filed in time and other legal rights protected.
An appropriate written response requires compliance with Rule 10(a)(1) and other Idaho Rules of Civil Procedure and shall also include:
1.The title and number of this case.
2.In your response and Answer to the Complaint, it must contain admissions or denials of the separate allegations of the Complaint and other defense you may claim.
3.Your signature, mailing address and telephone number, or the signature, mailing address and telephone number of your attorney.
4.Proof of mailing or delivery of a copy of your response to the plaintiffs' attorney, as designated above.
To determine whether you must pay a filing fee with your response, contact the Clerk of the above-named court.

Resource Specialist - Navigable Waters at the above address or by calling (208) 263-5104.

/S/
EDWARD ROBINSON, Area Manager
Idaho Department of Lands
SNP Legal 13435
October 11, 18, 2011

NOTICE OF APPLICATION

Pursuant to Section 58-104(g) and 58-1301, et seq., Idaho Code (The Lake Protection Act) and rules of the State Board of Land Commissioners, notice is hereby given that BNSF Railway of 2454 Occidental Avenue South, Suite 2D Seattle, WA 98134-1451 made application to install riprap along 750' of shoreline for erosion control on Cocolalla Lake . Located on Cocolalla Lake, Idaho adjacent to: Section 8, Township 55 North, Range 2 East; B.M., in Bonner County.
Written objections to or requests for hearing in this matter must be on file with the Idaho Department of Lands, 2550 Highway 2 West, Sandpoint, Idaho 83864 within thirty (30) days after the first appearance of this notice. Specific information regarding this application may be obtained from Jamie Brunner, Resource Specialist - Navigable Waters at the above address or by calling (208) 263-5104.

/S/
EDWARD ROBINSON, Area Manager
Idaho Department of Lands
SNP Legal 13433
October 11, 18, 2011

NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the Bonner County Commissioners will hold a public hearing at the following time on **Wednesday, November 9, 2011,** in the 3rd Floor Board Conference Room of the Bonner County Administration Building, 1500 Highway 2, Sandpoint, Idaho, to consider the following request:
1:30 p.m. –File ZC345-11 – Zone Change Request: Rural-5 to Suburban – MMS LLC is requesting a zone change

02/03/2012 at 10:00 AM, (recognized local time) for the purpose of foreclosing that certain Deed of Trust recorded 03/11/2009 as Instrument Number 768266, and executed by SHANE TOTTEN AND KERRI TOTTEN, HUSBAND AND WIFE, as Grantor(s), in favor of MORTGAGE ELECTRONIC REGISTRATION SYSTEMS, INC., as Beneficiary, to RECONTRUST COMPANY, N.A., the Current Trustee of record, covering the following real property located in Bonner County, State of Idaho: THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 21, OF TOWNSHIP 57 NORTH, RANGE 3 WEST, BOISE MERIDIAN, BONNER COUNTY, IDAHO. The Trustee has no knowledge of a more particular description of the above referenced real property, but for purpose of compliance with Idaho Code, Section 60-113, the Trustee has been informed that the street address of, 1125 NORTH WRENCO RD, Sandpoint, ID 83864 is sometimes associated with said real property. Bidders must be prepared to tender the trustee the full amount of the bid at the sale in the form of cash, or a cashier's check drawn on a state or federally insured savings institution. Said sale will be made without covenant or warranty, express or implied, regarding title, possession or encumbrances to satisfy the obligation secured by and pursuant to the power of sale conferred in that certain Deed of Trust. The default for which this sale is to be made is: Failure to pay the monthly payment due 11/01/2010 of principal, interest and impounds and subsequent installments due thereafter; plus late charges, with interest currently accruing at 5.375% per annum; together with all subsequent sums advanced by beneficiary pursuant to the terms and conditions of said Deed of Trust, and any

MORTGAGE ELECTRONIC REGISTRATION SYSTEMS, INC., as Beneficiary, to RECONTRUST COMPANY, N.A., the Current Trustee of record, covering the following real property located in Bonner County, State of Idaho: TS# 11-0089888 LEGAL DESCRIPTION: Government Lot 18 in Section 5, Township 57 North, Range 4 West, Boise Meridian, Bonner County, Idaho; LESS County Road Right of Way, ALSO LESS a parcel of land situated in Government Lot 18 of Section 5, Township 57 North, Range 4 West, Boise Meridian, Bonner County, Idaho, more particularly described as follows: BEGINNING at a point on the East-West centerline of Section 5 that is S. 88 degrees 58'32" W., 30.00 feet from the true center of Section 5 and marked by a 3 inch aluminum post and cap reference monument; thence continuing S. 88 degrees 58'32" W., 641.21 feet to a pipe on the shore of Priest River; thence along the shores S. 46 degrees 58'32" W., 200 feet; thence S. 71 degrees [illegible] feet to

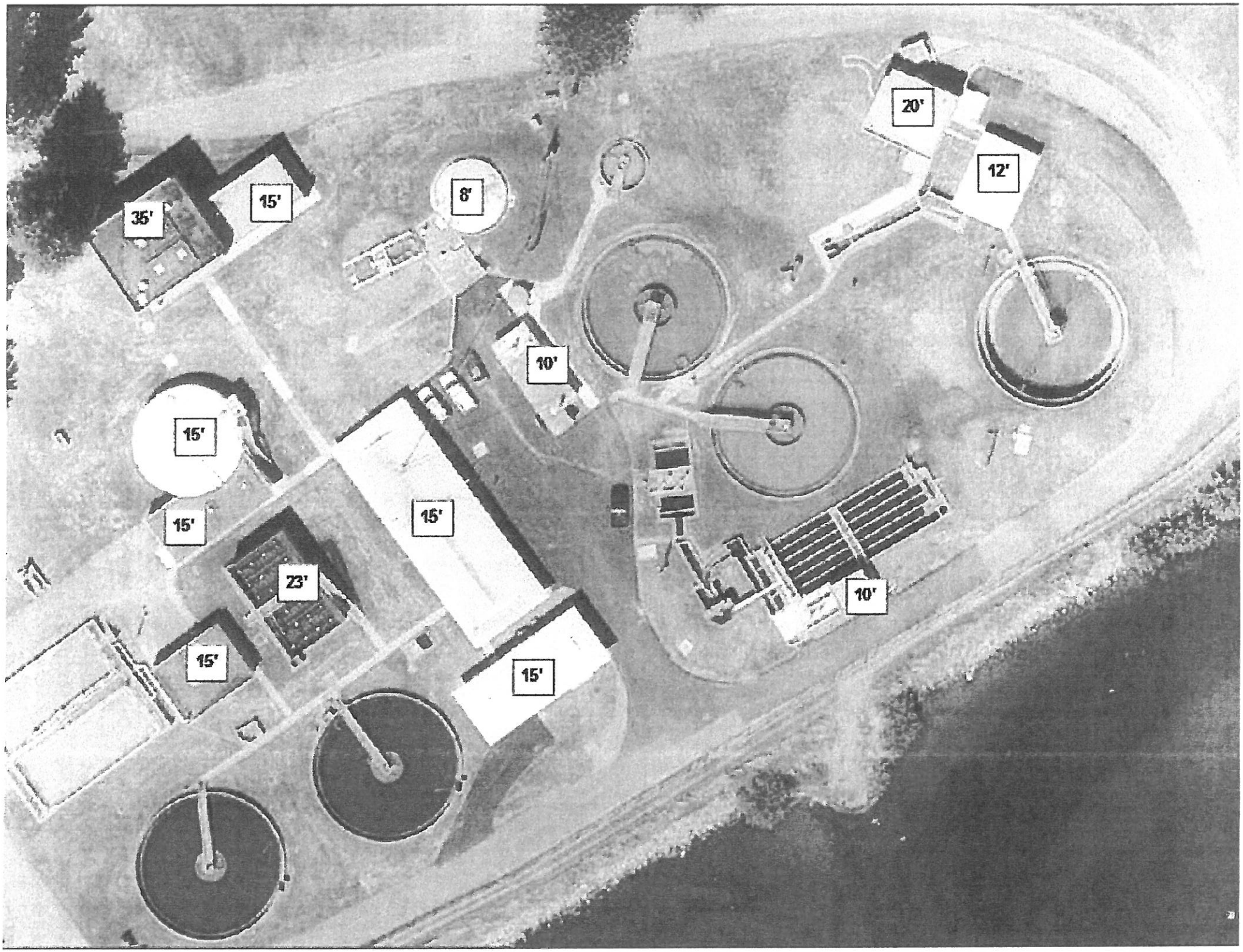
FIRM IS ATTEMPTING TO COLLECT A DEBT AND ANY INFORMATION OBTAINED WILL BE USED FOR THAT PURPOSE, AND THAT THE DEBT MAY BE DISPUTED. THE ABOVE GRANTORS ARE NAMED TO COMPLY WITH SECTION 45-1506(4)(a) IDAHO CODE. NO REPRESENTATION IS MADE THAT THEY ARE, OR ARE NOT, PRESENTLY RESPONSIBLE FOR THIS OBLIGATION. DATED: 09/12/2011. RECONTRUST COMPANY, N.A., Name and Address of the Current Trustee is: RECONTRUST COMPANY, N.A., 1800 Tapo Canyon Rd., CA6-914-01-94, SIMI VALLEY, CA 80028-1821, PHONE: (800) 281-8219. TS # 11-0089888 FEI # 1006.143272
SNP Legal 13397
October 4, 11, 18, 25, 2011

NOTICE OF PUBLIC MEETING

Notice is hereby given that the City of Sandpoint will hold a public informational meeting on Friday October 28, 2011, at noon in the council chambers at City Hall, 1123 Lake Street, Sandpoint, ID, to provide information on the following.

1. **Permit to Construct Informational Meeting.** As required by IDAPA rules, the City is providing information related to an application to the Idaho Department of Environmental Quality for a Permit to Construct for a new stationary source which is a 91 BPH horsepower biogas electrical generator at the City Wastewater Treatment Plant, located on Ella Avenue. The generator is proposed to burn existing methane gas which is currently flared as waste gas. The gas will produce electricity through the generator that will offset electrical demands at the plant. The project is being funded through the Idaho Office of Energy Resources using American Reinvestment and Recovery Act funds.

Any person needing special accommodations to participate in the above noticed meeting should contact the City of Sandpoint seven days prior to the meeting at City Hall, 1123 Lake Street, Sandpoint (263-3370).
SNP Legal 13349
October 18, 2011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