

## Landfill Gas Capture/Combustion Project Submittal Form

**Instructions:** Please complete all fields as thoroughly as possible. If the project in question is still in the planning/ development phase, all fields must be completed using best available data and estimates based on the proposed system design. This is an interactive Word form. Upon completion, please save this form as a PDF prior to uploading it to the Reserve. This will lock your answers and protect the document from any further changes. All fields must be completed, even if the answer is also provided elsewhere; if a field is not applicable insert N/A in the space provided.

### **Section 1: Project Contact Information**

Project Name (as it appears in the Reserve software): City of Thomasville MSW Landfill

Account Holder (as it appears in the Reserve software): City of Thomasville, Georgia

Is the Account Holder authorized to sign the "Attestation of Title" form? ☒ Yes ☐ No

Facility Owner: City of Thomasville, Georgia

Technical Consultants: Carlson Environmental Consultants, PC

Other Parties with a Material Interest: **NA**

Date of Form Completion: 06/06/11

Form Completed By (name, organization): James Petrak, PE - City of Thomasville

### **Section 2: General Project Site Information**

1. Name of Landfill: **City of Thomasville MSW Landfill**
2. Project Description (Please provide one to two paragraphs): **The City of Thomasville MSW Landfill is an active MSW landfill owned and operated by the City of Thomasville, Georgia. The City voluntarily installed a landfill gas collection and control system (GCCS) which consists of eighteen (18) vertical gas extraction wells, a header/lateral piping network, condensate management system, and a blower/flare station. The LFG system became fully operational on March 3, 2011. Future plans may include beneficial use of the collected LFG.**



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3. Project Site Address (including county and country): **88 Landfill Road, Thomasville, Georgia 31799 Thomas County, USA**
4. Owner of Landfill (name and organization): **City of Thomasville, Georgia - Contact is James Petrak, PE - City Engineer**
5. Type of landfill (sanitary, controlled, or open dump): **Sanitary lined landfill**
6. Type of waste accepted (MSW, demolition debris, organic, etc.): **MSW (SW Permit No. 136-018D(MSWL)) - Construction and Demolition Debris (SW Permit No. 136-017D(C&D))**
7. Average annual quantity of waste accepted at landfill (cubic meters or tonnes): **120,000 tons**
8. Total waste in place (cubic meters or tonnes): **Approximately 2,700,000 tons**
9. Designed landfill capacity (cubic meters or tonnes): **Approximately 5,650,000 cubic meters**
10. Year landfill opened: **1975**
11. Year landfill closed or estimated date of closure: **Estimated 2035**

**Section 3: Project Eligibility and Monitoring**

12. Project Start Date (Date project became operational; format MM/DD/YYYY): **03/03/2011**
13. Project Reporting Start Date (First date for which reductions will be reported on the Reserve; format: MM/DD/YYYY): **03/03/2011**
14. Have any vintage reduction tonnes from the project ever been registered with or claimed by another registry or program, or sold to another third party prior to registering with the Reserve?

☐ YES    ☒ NO

Vintage: NA Reporting Period: NA



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Revised February 9, 2010

Vintage: NA Reporting Period: NA

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If the answer is yes, you must complete and return a "*Project Transfer*" form.

15. Is the landfill subject to NSPS Regulation? (greater than 2.5 million tonnes capacity)?

☒ YES ☐ NO

16. If applicable, date of most recent Tier I or Tier II NMOC test (format MM/DD/YYYY)?

Tier II NMOC Testing performed on 03/31/2010 and 04/01/2010

a. NMOC emissions per year (Mg/year): 6.4 Mg/yr

b. Date at which landfill did or is expected to exceed 50 Mg NMOC per year (format MM/DD/YYYY): Not expected to exceed 50 Mg per year over next 10 years due to low waste acceptance rate and low NMOC concentration in LFG

17. Description and citation of all local and state air and water quality, explosive gas, or other regulations pertinent to the landfill or project: **The Landfill is regulated by the Georgia Environmental Protection Division Solid Waste Branch under SW Permit No. 136-018D(MSWL) and SW Permit No. 136-017D(C&D). These permits contain requirements for the design, operation, and maintenance of the landfill. The Landfill also holds a Part 70 Title V Air Operating Permit (No. 4953-275-0066-V-03-0) dated 02/04/2011 which includes air regulations for the landfill, leachate collection, and LFG collection and control system. The LFG collection and control system is listed as a voluntary system in the Landfill's Title V Permit.**

18. Is this project being implemented and maintained as the result of any law, statute, regulation, court order, or other preexisting legally binding mandate?

☐ Yes ☒ No

If yes, please explain. **NA**



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19. Has a detailed monitoring plan been developed for this project? If not, what date will a monitoring plan be in place? **Yes**

20. What version of the Landfill Project Reporting Protocol is the project based upon? **Version 3.0**

**Section 4: Pre-project Information**

21. Did the landfill ever collect and destroy landfill gas using a non-qualifying destruction device (e.g. passive flares)?

☐ YES ☒ NO

If yes:

- a. What date was this system operational (MM/DD/YYYY): **NA**
- b. Please describe (number of wells, destruction devices, etc.): **NA**
- c. What deduction will be taken to account for this pre-project destruction? **NA**
- d. What is the landfill gas flow rate (in scfm) and methane content? **NA**

22. Did the landfill ever collect and destroy landfill gas using a qualifying destruction device (e.g. candlestick flare, engine)?

☐ YES ☒ NO

If yes:

- a. What date was this system operational (MM/DD/YYYY): **NA**
- b. Please describe (number of wells, destruction devices, etc.): **NA**
- c. What deduction will be taken to account for this pre-project destruction? **NA**
- d. What is the landfill gas flow rate (in scfm) and methane content? **NA**



**Section 5: Landfill Gas Utilization Information for Project Activity**

23. Landfill gas utilization (e.g., open-flared, enclosed flare, generation of electricity, use on-site as a boiler or furnace fuel, or sale to a third party): **A 1,200 scfm open flare has been installed and operational since 03/03/2011. Future utilization may be implemented by the City of Thomasville.**

24. If designed to generate electricity:

- a. Type of engine-generator set (e.g., internal combustion engine, micro turbine or fuel cell with the name of the manufacturer, model, power output rating (kW or MJ) for biogas, and nominal voltage : **NA**
- b. Pretreatment of landfill gas (e.g., none, condensate trap, dryer, hydrogen sulfide removal, etc. with the names of manufacturers, models, etc.):

**NA**

- c. Exhaust gas emission control (e.g., none, catalytic converter, etc.):

**NA**

- d. If interconnected with an electric utility:

- i) Name of the utility: **NA**

- ii) Type of utility contract (e.g., sell all/buy all, surplus sale, or net metering): **NA**

- iii) If engine-generator set waste heat utilization:

- iv) Heat source (e.g., cooling system or exhaust gas or both) and heat recovery capacity (Btu or kJ/hr): **NA**

- v) Waste heat utilization (e.g., water heating, space heating, etc.): **NA**

25. If designed to use on-site as a boiler or furnace fuel, a description of the boiler or furnace and rated capacity (Btu or kJ/hr): **NA**



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26. If designed for biogas sale to a third party, a description of the methods of processing, transport, and end use: **NA**

i) Pretreatment of Biogas (e.g., none, condensate trap, dryer, hydrogen sulfide removal, etc.) include names of manufacturer, model etc.: **NA**

ii) Exhaust gas emission controls from gas processing step: **NA**

27. Provide a summary and citation of the permits obtained to build and operate this Landfill Gas Utilization System): **The Georgia Environmental Protection Division (GEPD) issued a Section 502(b)(10) Air Construction Permit (No. 4953-275-0066-02-1) dated May 14, 2010 for the voluntary construction of the GCCS and 1,200 scfm open flare. GEPD issued a modified Title V Air Operating Permit (No. 4953-275-0066-03-0) dated February 4, 2011 for the inclusion of the voluntary GCCS and 1,200 scfm open flare.**

Additional information: NA

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