



**To:** President and Members of the Munster Town Council

**From:** Jim Marino  
Town Manager

**Date:** July 21, 2025

**Re:** Landfill Gas Engine Air Emission Testing Services

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Clarke Energy recently replaced the existing Jenbacher Engine at the landfill due to diminishing landfill gas production and the age of the old unit. The conditions of the Town's landfill permit and the Indiana Department of Environmental Management testing requirements necessitates the Town conduct performance testing within 180 days of startup and every 8,760 hours of operation or three years, whichever occurs first, to demonstrate compliance with application air pollutant emission limits and/or standards.

Andrews Engineering, Inc. provided the attached proposal from Impact Compliance & Testing to perform this work. The scope of work includes air emission testing and analyses, project management and reporting, and report preparation for submittal to the USEPA. The cost for this service is \$15,300.

**Recommendation:**

By motion and roll call vote, accept the proposal from Impact Compliance & Testing to provide air emission testing services for the landfill gas engine in the amount of \$15,300, as presented.



June 25, 2025

Mr. Derek R. Mauntel  
Project Director  
Andrews Engineering, Inc.  
7486 Shadeland Station Way  
Indianapolis, IN 46256

**Subject:** Proposal to provide air emission testing services for a landfill gas engine;  
Andrews Engineering, Inc. – Munster Landfill  
ICT Proposal No. 250079

Dear Mr. Mauntel;

Impact Compliance & Testing, Inc. (ICT) is pleased to provide Andrews Engineering, Inc. with this proposal to perform air emission testing for a landfill (LFG) fueled combustion engine at the Munster Landfill located in Munster, Indiana.

## **Emission Testing Requirements**

The conditions of the Registration Revision Permit issued to the source (089-31308-00412) and the testing requirements for 40 CFR Part 60 Subpart JJJJ require the Munster Landfill to conduct performance testing according to 40 CFR §60.4244 for ICE-01 within 180 days of startup and every 8,760 hours of operation or three years, whichever occurs first, to demonstrate compliance with application air pollutant emission limits and/or standards.

## **Project Scope**

ICT will perform the following measurements and analyses as part of the air emission testing project:

- Exhaust gas properties will be determined by USEPA Reference Test Methods 3A (oxygen content) and Method 4 (moisture).
- CO and NO<sub>x</sub> emissions will be determined using instrumental analyzers according to USEPA Reference Test Methods 10 and 7E.
- VOC (as non-methane hydrocarbons) will be determined by USEPA Reference Test Method 25A and the procedures of alternative test method approval 096 (ALT-096).

## Impact Compliance & Testing, Inc.

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The compliance testing will consist of three (3) one-hour test periods for ICE-01.

Compliance with Subpart JJJJ and permit limits may be demonstrated by pollutant concentrations only. However, if requested, ICT will also measure exhaust gas velocity and volumetric flowrate by USEPA Reference Test Methods 1 and 2 for mass emission rate calculations (lb/hr and g/BHP-hr).

### Project Management and Reporting

A stack test protocol will be provided to the Indiana Department of Environmental Management (IDEM) at least 35 days prior to the scheduled test date.

The testing will be performed by ICT employees that are competent in the identified sampling methods and procedures. A senior level employee will review all calculations and reports for accuracy and content prior to being forwarded to Andrews Engineering, Inc. representatives for review and comment. The test report will be provided at least one week prior to the submittal deadline, which is 45 days following the field sampling.

### Test Report Preparation for Submittal to USEPA

ICT will use the data and information included in the air emission test report that will be submitted to IDEM, to prepare the air emission test report files for electronic submittal to USEPA via CEDRI.

ICT will provide detailed instructions explaining how Andrews Engineering, Inc. will:

- Electronically submit/certify the air emission test reports and how to request certifier rights, if necessary.
- Associate additional users (preparers, reviewers, administrators, etc.) to their site, if necessary.

ICT will notify Andrews Engineering, Inc. when the air emission test reports are ready for electronic submittal/certification.

*Beginning on February 26, 2025, within 60 days after the date of completing each performance test, you must submit the results following the procedures specified in [paragraph \(g\)](#) of this section. Data collected using test methods that are supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test must be included as an attachment in the ERT or an alternate electronic file.*

### **Site Safety Plan**

ICT will prepare a Site Safety Plan for the project that will be reviewed with Andrews Engineering, Inc. facility staff prior to beginning the field work and will be posted in the work area for the duration of the on-site activities.

### **Aerial Lift Rental**

ICT will arrange for the rental of an aerial lift for use by the emission test team for the duration of the project.

### **Materials to be Provided by Andrews Engineering, Inc.**

ICT requires that Andrews Engineering, Inc. provide the following:

- Appropriate sample ports for the gas streams required to be sampled. The ports must meet the criteria for a 'representative location' as specified in USEPA Method 1. The sampling ports must be installed and accessible prior to field work being conducted. If the sampling locations do not have installed sampling ports, ICT can provide guidance on the size and location of the access ports.
- Safe and reasonable access to the sampling location. Appropriate sampling ports must be installed and within standing height or safely accessible by a lift or platform. The sampling platforms must be able to support two field persons and associated testing equipment.
- Parking location to place the source test mobile trailers within 200 feet of the sampling locations with access to three (3) to five (5), uninterrupted, properly grounded, 110-Volt, 20-Amp AC power reserved for use by the sampling team during the testing program. A standard 240-Volt, 50-Amp welding plug may also be used within 100 feet of the sampling trailers. If no more than three (3) 110-Volt circuits are available, ICT will operate a portable generator on-site to power heated sampling lines and other equipment, as needed.
- Records for gas use rate, generator output, and any other process or device operating parameters that may be required by the regulatory agency during the sampling periods.
- Continuous, representative operating conditions suitable to accommodate the necessary sampling times.
- A facility representative with the authority to coordinate process operations with field sampling activities and provide the test crew with site-specific safety information.

**Schedule**

Based on communications with Andrews Engineering, Inc., an anticipated schedule for the week of October 6, 2025 is presented below:

10/7/2025	Travel to site Safety orientation Setup equipment Check engine emissions <sup>1</sup>
10/8/2025	Compliance testing (3 x one-hour tests) Pack up equipment, leave site
10/9/2025	Contingency day

1. Budgeted for up to 1.5 hours per engine. Additional time beyond 1.5 hours (total) will be added to the project cost.

## **Service Costs**

The proposed costs include professional service hours, travel expenses, and consumable materials to complete the project as described in the Project Scope. If changes are requested in the scope of services by Andrews Engineering, Inc. and/or the regulatory agency for project approval, adjustments may be made to the project cost as necessary.

The proposed cost does not include rental of a generator for use by the testing team. If Andrews Engineering, Inc. is unable to provide adequate power connections as specified in the 'Materials To Be Provided By' section of this document, rental fees for these items by ICT plus administration fees will be added to the proposed project cost.

If the field testing is delayed as a result of equipment or process malfunctions, weather conditions that endanger the sampling team or threaten the integrity of the testing, or a change in the scope of services is requested by Andrews Engineering, Inc., additional charges based on the following service rates and reasonably incurred expenses (at cost) will be added to the total project fees.

The proposed costs are based on the following professional fee schedule:

Job Class	Hourly Rate	Travel Rate
Sr. Project Manager	\$190	NA
Field Manager / Instrument Operator	\$170	-20%
Stack Technician / Aerial Lift Operator	\$130	-20%

## **Terms and Conditions / Approval**

This proposal is valid for sixty (60) days. Please indicate your approval of the proposal by signing the attached Project Authorization form or issuing a company purchase order referencing the services described in this proposal.

Payment terms are net 30 days for services rendered by ICT. Invoices will be submitted for payment at the completion of each project task as identified in the attached Proposal / Project Authorization form.

## **Impact Compliance & Testing, Inc.**

Mr. Derek Mauntel  
Andrews Engineering, Inc.

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We appreciate the opportunity to be of service to Andrews Engineering, Inc. Please contact us at (734) 357-8046 or [Tyler.Wilson@ImpactCandT.com](mailto:Tyler.Wilson@ImpactCandT.com) if you have any questions or require additional information.

Sincerely,

IMPACT COMPLIANCE & TESTING, INC.

A handwritten signature in black ink, appearing to read "Tyler J. Wilson", with a stylized flourish extending to the right.

Tyler J. Wilson  
Senior Project Manager

Table 1. Scope of Work and Associated Costs for Munster Landfill Engine Testing Services (Project No. 250079)

Task	Cost
Project and schedule management Prepare stack test protocol and site safety plan Project planning	\$ 1,265
Equipment preparation / calibrations	\$ 1,035
Field services; compliance testing for one (1) LFG fueled combustion engine for CO, NOx, VOC <sup>[1]</sup>	\$ 8,280
Test equipment, supplies, calibration gases (\$450 plus \$350 per engine)	\$ 920
Test report preparation (\$800 plus \$700 per engine)	\$ 1,500
Prepare test report for submittal to USEPA via CEDRI <sup>[2]</sup>	\$ 1,150
<b>Total Testing Services (Subpart JJJJ)</b>	<b>\$ 14,150</b>
Aerial lift rental <sup>[3]</sup>	\$ 1,150
<b>Total Project Cost with Lift Rental</b>	<b>\$ 15,300</b>

[1] Includes 1.5 hours of preliminary emissions measurements per engine on setup day (day before compliance testing begins).

[2] ICT will prepare the properly formatted air emission test report files using the Electronic Reporting Tool (ERT) for Andrews Engineering, Inc. to submit to USEPA via CEDRI (accessed through the Central Data Exchange (CDX)).

[3] Lift rental costs will be added to the invoice at cost plus 5%.

## Project Authorization

Please provide us with an authorization to commence the specified services by signing this form and/or issuing a purchase order (PO) to ICT. The completed authorization form or just the PO (which include the specified services and appropriate company approval signatures) can be sent by electronic mail to [accounts@impactcandt.com](mailto:accounts@impactcandt.com).

Accepted by:		Signature:	
Date		PO No.	