

**TWENTY THIRD AMENDMENT TO CONTRACT AGREEMENT  
INDIAN RIVER COUNTY SOLID WASTE DISPOSAL DISTRICT,  
INDIAN RIVER COUNTY, FLORIDA  
SOLID WASTE OPERATIONS AND MAINTENANCE**

**THIS TWENTY THIRD AMENDMENT TO CONTRACT AGREEMENT INDIAN RIVER COUNTY SOLID WASTE DISPOSAL DISTRICT, INDIAN RIVER COUNTY, FLORIDA SOLID WASTE OPERATIONS AND MAINTENANCE** (“Twenty Third Amendment”) is entered into as of the \_\_\_\_ day of \_\_\_\_\_, 2024 by and between Indian River County Solid Waste Disposal District, a dependent special district of Indian River County, Florida, whose address is 1801 27<sup>th</sup> Street, Vero Beach, Florida (hereinafter referred to as the “District” or “SWDD”), and Republic Services of Florida, Limited Partnership, whose address is 3905 Oslo Road, Vero Beach, Florida 32968 (the “Contractor”).

**RECITALS**

**WHEREAS**, on January 1, 2011, SWDD and Contractor entered into that certain Contract Agreement Indian River County Solid Waste Disposal District Indian River County, Florida Solid Waste Operations and Maintenance, as amended by the First Amendment to Contract Agreement, dated February 7, 2012; the Second Amendment to Contract Agreement, dated April 2, 2013; the Third Amendment to Contract Agreement, dated November 12, 2013; the Fourth Amendment to Contract Agreement, dated July 8, 2014; the Fifth Amendment to Contract Agreement, dated November 4, 2014; the Sixth Amendment to Contract Agreement, dated January 20, 2015; the Seventh Amendment to Contract Agreement, dated May 17, 2016; the Eighth Amendment to Contract Agreement, dated December 15, 2016; the Ninth Amendment and Extension to Contract Agreement, dated February 21, 2017; the Tenth Amendment to Contract Agreement, dated September 12, 2017; the Eleventh Amendment to Contract Agreement, dated September 18, 2018; the Twelfth Amendment to Contract Agreement, dated September 10, 2019; the Thirteenth Amendment to Contract Agreement, dated March 3, 2020; the Fourteenth Amendment to Contract Agreement, dated July 14, 2020; the Fifteenth Amendment to Contract Agreement, dated February 16, 2021; the Sixteenth Amendment to Contract Agreement, dated February 1, 2022; the Seventeenth Amendment to Contract Agreement, dated April 5, 2022; the Eighteenth Amendment to Contract Agreement, dated October 18, 2022; the Nineteenth Amendment to Contract Agreement, dated January 31, 2023; the Twentieth Amendment to Contract Agreement, dated March 7, 2023; and the Twenty First Amendment to Contract Agreement, dated May 16, 2023; the Twenty Second Amendment and Extension to Contract Agreement, dated November 21, 2023 (the “Contract”) for the Contractor to operate and maintain the SWDD landfill located at 1325 74<sup>th</sup> Avenue SW, Vero Beach, Florida (the “Landfill”) and customer convenience centers (“CCCs”); and

**WHEREAS**, the Contractor and SWDD have mutually agreed to revise the Contract as set forth herein.

**NOW THEREFORE**, in consideration of the mutual undertakings herein and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties agree, as follows:

1. **Recitals.** The above recitals are true and correct and are incorporated herein.
2. The existing Article 1 – SCOPE OF WORK of the Contract is modified to include the following:
  - A. **LANDFILL GAS SYSTEM OPERATION AND MAINTENANCE.** The Contractor shall provide the additional annual landfill gas system O&M services in accordance with the attached proposal from SCS Field Services.
    - a. Landfill Gas O&M – Contractor to provide O&M services for Calendar Year 2024.
    - b. Landfill Gas Well Extensions - Contractor to provide three vertical well extensions and three side slope collector extensions including replacement parts, materials, equipment, fuel and labor.
    - c. Landfill Gas Blower No. 3 – the Contractor will utilize Xpert Blower Repair for the repair of Blower No. 3 which includes disassembly, inspection, repair, reassembly, on-site installation and testing.
  - B. **Hurricane Preparedness Plan:** The existing Article 1 – SCOPE OF WORK of the Contract is modified to strike the current Hurricane Preparedness Plan language and replace with the following language:
    - a. Republic Services has provided a Hurricane Preparedness Plan for the 2024 Hurricane Season and is included as an attachment to this amendment. This plan is intended to allow for the seamless disposal of storm debris at the landfill and at the Customer Convenience Centers with the least amount of effect on the residents of Indian River County. Upon declaration of a state of emergency and as duly authorized by the County Administrator, Republic Services shall provide and be compensated for additional services as outlined in the plan.
3. The existing Article 3 – COMPENSATION of the Contract is modified to include the following:
  - vi) Annual Payment to Contractor for Landfill Gas System O&M shall be increased by \$1,265.00 for the period of January 1, 2024 through December 31, 2024 or \$105.42 per month, which includes a 15% management fee to Contractor. The overall payment for Calendar Year 2024 Non-Class 1 Landfill services shall be adjusted from the current \$3,566,849.71 per year to \$3,568,114.71 per year or \$297,342.89 per month.
  - vii) For the Landfill Gas Well Extensions – the Contractor will be paid on a time and materials basis for the work completed per the attached proposal by SCS to not exceed \$57,615.00 which includes a 15% management fee to Contractor.

viii) For the Landfill Gas Blower No. 3 Repairs – the Contractor will utilize Xpert Blower Repair for the repair of Blower No. 3 per the attached proposal to not exceed \$15,237.50 which includes a 15% management fee to Contractor.

4. **Ratification**. Except as specifically provided in this Twenty Third Amendment, all other provisions of the Contract shall remain in full force and effect.

*[signature page follows]*

**IN WITNESS WHEREOF**, the parties have caused this Twenty Third Amendment to be executed by their respective duly authorized officers as of the day and year first written above.

**Attest:**

**(Owner)**

Ryan L. Butler, Clerk of Court and  
Comptroller  
By:

**Solid Waste Disposal District  
Indian River County, Florida**

\_\_\_\_\_  
Deputy Clerk

\_\_\_\_\_  
Susan Adams, Chairman

**Date Approved by SWDD:** \_\_\_\_\_

**Approved By:**

**Approved as to Form and Legal Sufficiency By:**

\_\_\_\_\_  
John A. Titkanich, Jr., County Administrator

\_\_\_\_\_  
K. Keith Jackman, Assistant County Attorney

**Signed, sealed, and delivered in the presence  
of:**

**Republic Services of Florida, Limited Partnership  
("Contractor")  
By: Republic Services of Florida GP, Inc.,  
its General Partner**


\_\_\_\_\_  
Print Name: \_\_\_\_\_

\_\_\_\_\_  
Print Name: \_\_\_\_\_

\_\_\_\_\_  
Print Title: \_\_\_\_\_

\_\_\_\_\_  
Print Name: \_\_\_\_\_

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# 2024 Landfill Gas System Operations and Maintenance at the Indian River Landfill Indian River County, Florida

Brian Lewis  
Landfill Operations Manager  
Republic Services  
1327 74<sup>th</sup> Ave SE  
Vero Beach, FL 32968

**SCS FIELD SERVICES**

07223035.00 | November 21, 2023

Brian Basconi  
1800 Pembroke Dr., Suite 300  
Orlando, FL 32810  
401-486-4897

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## INTRODUCTION

SCS Field Services has been providing operation and maintenance (O&M) of the landfill gas collection and control system (GCCS) at the Indian River Landfill on behalf of Republic Services (Republic) since 2013. In 2018, a large area of the landfill known as segments one and two underwent a closure, gas system expansion and the installation of a new air compression station. In August of 2021 the installation of a gas system expansion was completed in segment three cell one which included sixteen new vertical wells and twenty-four new horizontal (side slope) collectors. Additionally, twenty-three new dewatering pumps located in segments two and three were brought online in September 2021. This proposal outlines an updated scope of work that includes services based on the gas system expansions, dewatering pump operation and conversations between SCS-FS, Republic, and Indian River County (County).

## ROUTINE SCOPE OF SERVICES

- Task 1 – Flare System and Wellfield Operation and Preventative Maintenance
- Task 2 – Monthly Reporting
- Task 3 – Semi-Annual Liquid Level Monitoring and Reporting
- Task 4 – Quarterly Condensate Sump and Dewatering Pump Maintenance
- Task 5 – Flare Station Blower Lubrication, Check Valve Inspection and Flow Straightener Inspection;
- Task 6 – Air Compressor Preventative Maintenance
- Task 7 – Flow Meter Calibration
- Task 8 – Landfill Gas Lab Analysis

Each of these tasks are described below.

## TASK 1 – FLARE AND WELLFIELD OPERATION AND MAINTENANCE

SCS-FS will perform routine site visits on a weekly basis to the Indian River Landfill. During each site visit, major components of the GCCS such as flare systems, condensate pumps and LFG header piping will be checked to ensure that the GCCS is operating normally. Monitoring data of the GCCS will be logged in a major components checklist and will be submitted in each monthly report. Any abnormalities observed during scheduled inspections will be reported to Republic immediately. Monthly operation and monitoring (O&M) reports will be prepared to present the data to Republic and summarize any LFG system operating issues that may require additional attention. Routine O&M of the GCCS is described in further detail in the sections below.

### Blower/Flare Station & Weekly GHG Readings

The Indian River Landfill currently operates one candlestick flare system that is equipped with three centrifugal blowers. The flare will be operated in auto-mode unless in an emergency circumstance or for the purposes of troubleshooting system issues it requires manual operation. During each routine site visit, SCS-FS will measure (and/or observe) and record at the flare station:

- LFG flow;

- LFG composition (methane, carbon dioxide, oxygen, and balance gas) at the inlet to the knockout pot and flare inlet;
- Main inlet header vacuum and flare inlet pressure;
- Blower/flare control panel status;
- Flame arrestor pressure drop;
- Knockout pot pressure drop;
- Air compressor outlet pressure.

Based on monitoring data at the blower/flare station, adjustments will be made to increase or decrease vacuum at the blower inlet to maintain gas quality and provide consistent vacuum to the gas collection system. Once per quarter during weekly site visits the flow meter will be cleaned and inspected. All flare readings will be taken with a factory calibrated GEM 5000 portable landfill gas meter or an equivalent instrument. During weekly flare readings, the gas meter will be field calibrated with a 50% methane/35% carbon dioxide/11% oxygen mix.

SCS-FS has developed a site-specific preventative maintenance checklist that will be completed by the field technician during each scheduled site visit and at the pre-determined frequency intervals. The preventative maintenance checklist records will be kept on site and included in the monthly O&M reports as applicable. Manufacturer recommended preventative maintenance documents and checklists are included for your reference as *Appendix A*.

### **LFG Extraction System**

There are currently 95 vertical wells, 32 horizontal collectors and 4 gas vents located in segments one, two and three. System components will be observed for proper operation during each wellfield monitoring event twice per month. Minor problems such as damaged or deteriorated monitoring ports and flex hoses will be replaced during the check. Major problems will be relayed to Republic immediately. At each extraction point, we will measure (and/or observe) and record:

- LFG flow (where possible);
- LFG composition (methane, carbon dioxide, oxygen, and balance gas);
- Wellhead gas pressure;
- Wellhead gas temperature;
- Dewatering pump cycle counter number as applicable;
- Well piping and well bore seal condition at the landfill surface will be noted;
- Inspect the cover integrity of the landfill and note it in the daily logs.

In conjunction with the extraction well monitoring, adjustments will be made at each well as required to maintain odor control, and system balance/methane composition.

## **TASK 2 - REPORTING**

SCS-FS will submit an O&M report summarizing routine and non-routine activities, if applicable, that were performed during the preceding month. The O&M report will contain the following monitoring and maintenance records:



- Wellfield monitoring results (two rounds of data per month);
- 6-month rolling wellfield monitoring results;
- Weekly GCCS checklist;
- Flare Station preventative maintenance checklist;
- Rolling 12-month condensate sump pump counter data;
- Recommended GCCS Repairs;
- Quarterly pump maintenance summary;
- Semi-annual liquid level data;
- Quarterly air compressor work logs (provided by sub-contractor).

### **TASK 3 - LIQUID LEVEL MONITORING AND REPORTING**

SCS-FS will measure liquid levels in each of the vertical extraction wells that are not equipped with dewatering pumps every six-months. SCS-FS will submit the collected data through the eTools mobile app and will be viewable through the eTools database. SCS-FS will also provide a list of wells that may require pumps based on historical field measurement data if needed.

### **TASK 4 – QUARTERLY CONDENSATE SUMP AND DEWATERING PUMP MAINTENANCE**

SCS-FS will remove each of the 42 pneumatic pumps located in condensate sumps and LFG vertical extraction wells to check operation of the pumps and identify corroded or faulty components that need to be replaced once during each quarter. SCS-FS will provide Republic with a summary of findings along with a recommended parts list based on our findings. SCS-FS will make efforts to coordinate purchasing pumps or replacement parts in advance of each scheduled preventative maintenance cycle so parts can be replaced during routine inspections.

### **TASK 5 – FLARE STATION BLOWER LUBRICATION/CHECK VALVE INSPECTION/FLOW STRAIGHTENER INSPECTION**

In addition to the manufacturers recommended maintenance, the following items will be performed twice per year:

- Inspection of bearings and housing following alternative greasing plan. Replacement grease will be added as needed;
- Blower Outlet check valve inspection and cleaning;
- Flow Straightener inspection.

### **TASK 6 – AIR COMPRESSOR PREVENTATIVE MAINTENANCE**

Once per quarter, SCS-FS and a qualified air compressor service company will perform minor and major services on the three air compressors and two air dryers located at the flare station based on manufacturer's recommendations. The services performed in 2024 will be performed by Air Compressor Works. Additional information on air compressor maintenance is referenced in *Appendix B*.

## **TASK 7 – FLOW METER CALIBRATION**

The flare station flow meter is factory calibrated once per year per the RS standard operating procedure. To minimize risk of drift outside the 5% tolerance SCS-FS recommends factory calibrating the flow meter every 6 months and performing an “as found” bench test prior to calibration as an alternative to quarterly field accuracy checks. During each calibration, a loaner unit will be installed by SCS-FS. Once the site meter is calibrated, the loaner meter will be removed and the site meter re-installed. Each occurrence will be performed on a flat fee basis. Any additional repairs beyond calibration and the bench test of the site meter will be at an additional cost. The flat fee is based on the calibration of the existing Fluid Components International ST-98 flow meter make and model. If the make or model is changed pricing is subject to change.

## **TASK 8 – LANDFILL GAS LAB ANALYSIS**

SCS-FS will provide staff and equipment to collect and ship a landfill gas (LFG) sample collected from the flare station blower discharge sample port once per quarter. The LFG sample will be analyzed by Air Technologies Laboratories, Inc. for the following:

- Fixed Gases (Methane, Carbon Dioxide, Oxygen and Nitrogen);
- TO – 15 Test including Siloxanes and VOC's;
- H2S Volume.

A lab report will be submitted to the County and Republic Services.

## **NON-ROUTINE SERVICES AND MAINTENANCE**

Non-routine maintenance and repairs will be performed on an as-needed basis. Prior to performing non-routine services SCS-FS will submit a proposal to Republic for approval. Each proposal will include a scope of work and costs. In the event that a proposal cannot be provided prior to performing work due to circumstances that require an immediate response time, SCS-FS will provide a summary of the work that was performed and costs in a proposal subsequent to the work.

### **Replacement Parts and Materials**

Replacement parts and materials will be needed in order to maintain components of the flare station, landfill gas extraction wells, piping systems, condensate sump pumps and vertical well dewatering pumps. SCS-FS will provide cost estimates and proposals to Republic prior to the purchase of any parts or materials. For budgetary purposes, an estimated parts and materials budget is included in Table 3.

## **ASSUMPTIONS AND CONDITIONS**

This scope of services and corresponding fee estimate are based on the following assumptions and conditions:

1. SCS is not responsible for trace constituents in the flare stack gas with respect to the potential health and safety hazards associated with flaring of the gas.

2. Additional reporting and/or analysis that may be requested by Republic will be performed as a non-routine service and billed on a lump sum or time-and-materials basis.
3. Propane or nitrogen for the blower/flare station will be provided by others.
4. The scope of services, labor schedule, and compensation for the O&M tasks was developed assuming that field personnel would perform routine services Monday through Saturday during regular working hours (7:00 a.m. to 5:00 p.m.) with unrestricted site access for personnel, equipment, and materials to enable completion of the work.
5. Work will be performed in OSHA Level D protection and in accordance with the SWANA Landfill Gas Management Division's, "A Compilation of Landfill Gas Field Practices and Procedures", dated August, 2011. Additional health and safety requirements can be provided with an adjustment in our price.
6. All permits (environmental, labor, structural, electrical, etc.) will be provided by others.
7. Republic is responsible for notifying SCS of any risks at the site and all environmental, safety and health procedures required by any applicable federal, state and/or local law, regulations, and order.
8. Pricing is valid for 60 days following the date of this proposal.
9. The pricing provided is valid through December of 2024 or is subject for adjustment if the work scope changes based on increased quantities or frequency of services.
10. This proposal and Assumptions and Conditions shall become a part of a mutually satisfactory contract agreement or purchase order.

## FEE ESTIMATE

The following tables show a breakdown of O&M tasks and costs based on the GCCS expansion and additional services from the original Republic contract. In 2023 there was an addendum issued to reflect an increased O&M cost of \$19,120 based on the proposal dated January 5, 2023. There will be an increase of \$1,100 for 2024 O&M services from the 2023 proposal amount. Table 1. summarizes the costs amounts per task from 2023 to 2024. Table 2 summarizes the total cost per task for 2024. Table 3 provides the recommended parts budgetary breakdown.

<b>Table 1. 2023/2024 Annual O&amp;M Cost Comparison</b>	<b>2023 Cost</b>	<b>2024 Cost</b>	<b>Annual Adjustment</b>
Task 1 – Flare Operation, Wellfield Operation & Weekly GHG Monitoring	\$72,000	\$72,000	\$0
Task 2 – Reporting	\$25,920	\$25,920	\$0
Task 3 – Liquid Level Monitoring and Reporting	\$5,500	\$5,500	\$0
Task 4 – Condensate Sump and Dewatering Pump Maintenance	\$36,000	\$36,000	\$0
Task 5 – Flare Station Blower Lubrication/Check Valve Inspection/Flow Straightener Inspection	\$5,000	\$5,000	\$0

<b>Table 1. 2023/2024 Annual O&amp;M Cost Comparison</b>	<b>2023 Cost</b>	<b>2024 Cost</b>	<b>Annual Adjustment</b>
Task 6 - Air Compressor Preventative Maintenance	\$15,000	\$16,100	\$1,100
Task 7 – Flow Meter Calibration	\$6,500	\$6,500	\$0
Task 8 – Landfill Gas Lab Analysis	\$6,200	\$6,200	\$0
<b>Total 2024 Increase:</b>			<b>\$1,100</b>

<b>Table 2. 2024 O&amp;M Costs</b>	<b>Quantity</b>	<b>Units</b>	<b>Unit Cost</b>	<b>Total</b>
Task 1 – Flare Operation, Wellfield Operation & Weekly GHG Monitoring	12	Month	\$6,000	\$72,000
Task 2 – Reporting	12	Month	\$2,160	\$25,920
Task 3 – Liquid Level Monitoring and Reporting	2	Semi-Annual	\$2,750	\$5,500
Task 4 – Condensate Sump and Dewatering Pump Maintenance	4	Quarters	\$9,000	\$36,000
Task 5 - Flare Station Blower Lubrication/Check Valve Inspection/Flow Straightener Inspection	2	Semi-Annual	\$2,500	\$5,000
Task 6 - Air Compressor Preventative Maintenance	4	Quarters	\$4,025	\$16,100
Task 7 – Flow Meter Calibration	2	Ea.	\$3,250	\$6,500
Task 8 – Landfill Gas Lab Analysis	4	Quarters	\$1,550	\$6,200
<b>Total Updated 2024 O&amp;M Cost:</b>				<b>\$173,220</b>

Table 3. Non-Routine Services and Maintenance	Cost Estimate
<b>Replacement Parts and Materials (Time and Materials)</b>	
Flare Parts and Components	\$10,000
Landfill Gas Extraction Well Parts	\$5,000
Condensate Sump and Vertical Well Pumps and Parts	\$25,000
<b>Total Non-Routine Cost Estimate:</b>	<b>\$40,000</b>

## CLOSING

SCS-FS appreciates the opportunity to provide our proposal to Republic Services. If you have any questions or require any additional information, please contact Brian Basconi at 401-486-4897.

Sincerely,



Brian Basconi  
Project Manager  
SCS Field Services

BB/GAC



Garold (Tony) A. Cartee  
Regional Manager/Vice President  
SCS Field Services

## **APPENDIX A – MAINTENANCE DOCUMENTS AND CHECKLISTS**

This Form to be replaced by site-specific maintenance checklist. Reference only.

# LFG SPECIALTIES *A WORLD LEADER IN LANDFILL GAS MANAGEMENT*

## Flare Station Routine Operation & Maintenance Schedule

Components	Frequency of Service							
	Daily	Weekly	Bi-Weekly	Monthly	Bi-Monthly	Semi-annually	Annually	As Needed
<b>Schedule</b>								
<b>Condensate Knock-out pot (see Section V)</b>								
➤ Check liquid level	√							
➤ Drain KOP								√
➤ Inspect Internal Coating, cover gasket and clean demister pad							√	
➤ Retighten cover bolts							√	
<b>Pneumatic Header, if applicable (see Section V)</b>								
➤ Check Nitrogen supply		√						
➤ Check Supply Pressure (25 psig)		√						
➤ Check valve performance		√						
➤ Check supply lines for leakage					√			
<b>LFG Blower (see Section V)</b>								
➤ Inspect Foundation & correct deficiencies							√	
➤ Check Conditions of isolation pads							√	
➤ Check blower motor alignment							√	
➤ Check bearing temperature		√						
➤ Check vibration levels				√				
➤ Re-lubricate bearings per specification				√				
➤ Inspect drive belts and flex coupling					√			
➤ Clean ventilation openings of blower motor								√
➤ Re-lubricate motor bearings					√			
➤ Check wire connection for corrosion & tightness							√	
➤ Drain any Condensate from housing			√					
<b>Piping (see Section V)</b>								
➤ Check all valves for proper operation				√				
➤ Retighten all flange bolt connections							√	
➤ Check all flange gaskets for leakage						√		
➤ Check rubber expansion joints for wear						√		
➤ Check piping alignment							√	
<b>Flow Meter (See Section V)</b>								
➤ Clean flow meter probe						√		
➤ Calibrate flow meter							√	

16406 U.S. Route 224 East Findlay, Ohio 45840 • Phone (419)424-4999 • Fax (419)424-4991



**A WORLD LEADER IN LANDFILL GAS MANAGEMENT**

### Flare Station Routine Operation & Maintenance Schedule

[illegible]

16406 U.S. Route 224 East Findlay, Ohio 45840 • Phone (419)424-4999 • Fax (419)424-4991



## B. Grease Lubrication

The greatest cause of bearing failure is over greasing rather than under greasing. For this reason, HSI does not recommend use of permanently installed grease fittings as they invite overgreasing.

A special high speed grease is required in grease-lubricated machines. Use of any other type of grease without explicit approval of HSI Service Department will automatically **VOID THE MACHINERY WARRANTY**.

### GREASE SPECIFICATIONS

NGLI GRADE .....	NO. 2
THICKENER TYPE .....	POLYUREA
THICKENER % .....	8.0
VISCOSITY .....	CST @ 40° CELCIUS
VISCOSITY INDEX .....	97
DROPPING POINT (ASTM D2265) .....	470°F(243°C)
ADDITIVES .....	OXIDATION & RUST INHIBITORS
TEMPERATURE RANGE .....	-22°F(-20°C) TO 350°F(177°C)
TEXTURE .....	SMOOTH, BUTTERY
COLOR .....	DARK GREEN

Prior to shipment, blower/exhauster bearings are adequately lubricated for 1500 hours of operation under normal operating conditions. If three months or more have elapsed since shipment from the factory, remove bearing housing covers and inspect for moisture due to condensation.



To add grease during operation:

- i. Remove plugs from top and bottom of bearing housing  
(see diagram on page 30)
- ii. Bring blower/exhauster up to a stabilized operating temperature.
- iii. Add grease through the top opening in the specified amount  
(see diagram on page 30)
- iv. Reinsert plug in top opening
- v. After thirty minutes wipe off expelled grease and reinstall bottom plug.

#### Alternate Greasing Procedures:

Recommended ~~every two years of normal operation~~ or six months of abnormal operating conditions such as high speed operation (V-belt), dirty environment, high pressure and temperature.

- i. With the machine fully stopped, remove bearing cover and plugs.
- ii. Remove all old grease from bearings, housing and cover by flushing with a clean solvent.
- iii. Repack face of bearing by hand and add remainder of specified amount to bottom half of bearing cover.
- iv. Reinstall plugs and bearing cover and start unit.

**Table 3: Grease Quantities**

Series	Full Replacement	Periodic Addition
031	1.6 oz. (45g)	1 oz. (28g)
051, 052	3.1 oz. (87g)	2 oz. (56g)
081, 082, 086	5.5 oz. (154g)	3 oz. (84g)

## **X. MAINTENANCE**

Some simple maintenance procedures will help prolong the life of your blower:

1. Periodically inspect foundation and correct if deficiencies are found. Check for level condition and correct as necessary.
2. Check condition of isolation pads and replace as necessary.
3. Make sure lubrication maintenance schedule is established and adhered to.
4. Periodically check all valves in system. A stuck or broken valve can cause severe damage to equipment.
5. Alignment should be checked and corrected twice yearly.
6. Check pipe supports and adjust if necessary.
7. Keep equipment clean. If machine is oil lubricated, be sure to keep oiler bottle clean so oil, or lack of, can be seen. Keep oil breather cleaned to prevent leaks.
8. Follow motor manufacturer's recommendations for motor maintenance.
9. Vibration readings and bearing temperature readings should be taken periodically to monitor the condition of the machine bearings which are the most critical component in your machine. If equipment to do this is not available, consult HSI.

Indian River Landfill LFG Control Systems Preventative Maintenance Schedules  
Updated for Device: LFG Specialties Candlestick Flare Unit #1865

		Month Completed			
		Weekly Check List			
Operator Name					
Component	Date	Date	Date	Date	Date
<b>Knock Out Pits</b>					
Check Liquid Level					
Check Differential Pressure	(\"w.c.)	(\"w.c.)	(\"w.c.)	(\"w.c.)	(\"w.c.)
Drain Liquid (As Needed)					
<b>Electric Header Valve</b>					
Valve Position					
<b>LFG Blower</b>					
Check Bearing Temperature	(deg. F)	(deg. F)	(deg. F)	(deg. F)	(deg. F)
Check Vibration					
Rotate Blower (Every 30 days)					
Inspect Blower During Startup or every 60 days					
Drain Condensate from Housing					
Check Blower discharge Pressure	(\"w.c.)	(\"w.c.)	(\"w.c.)	(\"w.c.)	(\"w.c.)
<b>Flame Arrestor</b>					
Check Differential Pressure	(\"w.c.)	(\"w.c.)	(\"w.c.)	(\"w.c.)	(\"w.c.)
Clean Element (As Needed)					
<b>Flow Meters</b>					
Record Flare Flow	(cfm)	(cfm)	(cfm)	(cfm)	(cfm)
<b>Propane Pilot System</b>					
Check Propane Supply					
Check Propane Supply Pressure	(psi)	(psi)	(psi)	(psi)	(psi)
Replace Propane Tank (As Needed)					
<b>Control Panel</b>					
Verify Chart Recorder Operation					
Check enclosure for moisture					
Test Panel Lights					
Verify Auto-Stop Operation					
Verify PLC/Touchscreen Operation					
<b>Air Compressor</b>					
Air Compressor Operation					
Air Supply Pressure	(psi)	(psi)	(psi)	(psi)	(psi)
Hours					
Drain Tank (As Needed)					
Check Air Dryer Operation					
Check Oil Level, Top Off As Needed					
Check Emergency Shutdown Switch					

SCS FIELD SERVICES

Indian River Landfill LFG Control Systems Preventative Maintenance Schedules  
Updated for Device: LFG Specialties Candlestick Flare Unit #1865

Semi-Annual (January/July)

Operator Name:		
<b>Components</b>	Date:	Date:
<b>Piping</b>		
Check All Flange Gaskets for Leaks		
Check Rubber Expansion Joints for Wear		
Remove and Clean Flow Straightener		
<b>Blowers</b>		
Remove and Clean Check Valves		
Remove and Repack Grease		
<b>Flow Meters</b>		
Clean Total Flow Meter Probe		
Clean GCS Flow Meter Probe		
<b>Propane Pilot System</b>		
Check Solenoid Manual Override		
Clean Pressure Regulator Vent		
Check All Connections for Leaks		
Clean Solenoid Valve per Specifications		
<b>Control Panel</b>		
Check Wire Connections for Corrosion		
Check Wire Connections for tightness		

Annual (January)

Operator Name:		
<b>Components</b>	Date:	
<b>Knock Out Pot</b>		
Inspect Internal Coating, Cover Gasket and Clean Demister Pad		
Retighten Cover Bolts		
<b>LFG Blower</b>		
Inspect Foundation and Correct Deficiencies		
Check Condition of Isolation Pads		
Check Blower Motor Alignment		
Check Wire Connection for Corrosion & Tightness		
<b>Flame Arrester</b>		
Check Differential Pressure		
Clean Element (As Needed)		
<b>Piping</b>		
Retighten All Flange Bolt Connections		
Inspect Piping for Chipped Paint and Rust		
Check Piping Alignment		
<b>Flow Meter</b>		
Calibrate Flow Meter		
<b>Flare Control Panel</b>		
Clean and Maintain Instruments per Specifications		
Prove Out Alarm Shutdown Permissives		

## **APPENDIX B – AIR COMPRESSOR PREVENTATIVE MAINTENANCE QUOTE**



**AIR  
COMPRESSOR  
WORKS, Inc.**

**Quotation**

**Quote #:** Q-13414-1  
**Date:** 11/17/2023  
**Expires On:** 12/17/2023  
**Terms:** Net 60  
**Written By:** Thai Van

1956 West 9th Street  
Riviera Beach, FL 33404  
Phone: (561) 844-4559  
[www.AirCompressorWorks.com](http://www.AirCompressorWorks.com)

*Air Compressor Works, Inc designated as "ACW" and :*

**Indian River County Landfill  
1325 SW 74th Ave,  
Vero Beach, Florida 32968**

Attention:

**Brian Basconi  
bbasconi@scsengineers.com  
4014864897**

*Designated herein as "Customer" jointly agree to the following:*

1. "ACW" agrees to perform Preventative Maintenance & Inspection of customer's equipment listed on the following page of this Preventative Maintenance Agreement.
2. This Preventative Maintenance Agreement is based on **24** hours per day, **7** days per week, for approximately **8,736** total run hours per year for a **Term of 1 year**.
3. Upon completion of each visit, our service technician will provide a copy of their report to the customer's representative.
4. Under this Agreement, ACW technicians shall perform the following:
  - a. **1** MINOR PM visit(s): change air filter, oil filter, filter mats, plus inspection per section 4e, if applicable.
  - b. **1** MAJOR PM visit(s): change air filter, oil filter, filter mats, belts, oil, separator, inline filters, dryer kit, plus inspection per section 4e, if applicable.
  - c. **2** INSPECTION visit(s): check overall operation of equipment.
  - d. All service intervals per manufacturer's recommended specifications.
  - e. Technicians will monitor compressors operation for control issues, top off compressor oil if necessary, tighten and inspect electrical fittings, tighten bolts and control line fittings, clean air / fluid cooler fins, inspect control lines for leaks or wear, tension belt or inspect drive couplings, monitor all gauges and indicators for normal operation, observe for fluid leaks, observe for unusual noise or vibration, measure and record motor amp draw, drain water from receiver tanks, test all drains in compressed air system, clean heat exchanger on dryers and test dryer drains, drainline filter housings if applicable, wipe down exterior of all units to maintain appearance, discuss work performed with customer prior to leaving site.
  - f. All PM visits, unless otherwise stated are scheduled Monday through Friday, 8:00am to 5:00pm.
  - g. No additional work to be performed without prior authorization from the Customer.
  - h. To minimize downtime, a towable diesel compressor may be available for scheduled maintenance at current rate. If an existing connection is not present, ACW can install one for an additional charge separate from this agreement.
5. Customer is responsible for performing the daily, weekly and monthly compressed air service that is recommended by the manufacturer during times which ACW is not scheduled.

1956 West 9th Street Riviera Beach, FL 33404  
(800) 345-4364  
Mechanical Contractors  
- License #CMC1249580  
Page 1 of 3

### **Preventative Maintenance Packages**

\_\_\_ **Premier:** Prepayment of Parts and Labor

One simple, prepaid invoice of **\$11,916.18** plus applicable sales tax

1. 1 Business day response time on emergency calls. No Emergency Service Fees.
2. Service scheduled for you based on the requirements of your equipment and environment.
3. ACW will record, monitor and trend equipment operations and readings.
4. Parts will be delivered to customer for onsite inventory.
5. Service includes basic parts and labor for annual operation.
6. Additional parts, if needed, will be quoted at time of service.

\_\_\_ **Standard:** Pay-As-You-Go

Price estimate: **\$13,107.80** plus applicable sales tax

1. 3 Business day maximum response on any emergency calls. An Emergency Service Fee of \$250 applies for same day response.
2. Service scheduled for you based on the requirements of your equipment and environment.
3. Price will be based on actual time and material at prevailing rates.

\_\_\_ **Decline Preventative Maintenance Package**

Reason \_\_\_\_\_

Prices are valid for until 12/17/2023.

A convenience fee of 3% will be included on credit card charges and delinquent payments.

Please allow a minimum of 4 weeks from signature date for first service.

Customer agrees that should it become necessary for ACW to seek the services of an attorney to collect any amounts due hereunder, that Customer is responsible for the payment of all of ACW's reasonable attorneys' fees whether or not it is necessary to file an action to collect the amounts due hereunder. Customer shall be responsible for all of ACW's reasonable attorneys' fees and costs involving any litigation to collect any amounts due to ACW including any appeals, bankruptcies, or other liquidation proceedings.

**Air Compressor Works, Inc.**

**Indian River County Landfill**

Name \_\_\_\_\_

Name **Brian Basconi**

Signature \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Date \_\_\_\_\_

### **Order Acceptance**

Purchase Order # \_\_\_\_\_

Check # \_\_\_\_\_

**INVOICE TO FOLLOW**

1956 West 9th Street Riviera Beach, FL 33404  
(800) 345-4364  
Mechanical Contractors  
- License #CMC1249580  
Page 2 of 3



**Agreement Summary**

Visits per Year: 4  
Agreement Term: 1 year

**Equipment Summary**

**Kaeser M#ASD-25 SN#1022**  
**Kaeser M#ASD-25 SN#1024**  
**Kaeser M#ASD-25 SN#1021**  
**(2) Kaeser M#TD-26 SN#2624 & 2625**  
**(2) Drains M#AMD6650**  
**Kaeser Inline Filters**

1956 West 9th Street Riviera Beach, FL 33404  
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Mechanical Contractors  
- License #CMC1249580  
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February 13, 2024

Brian Lewis  
Landfill Operations Manager  
Republic Services  
1327 74<sup>th</sup> Ave SE  
Vero Beach, FL 32968

Subject: Proposal to Extend Vertical Wells and Side Slope Collectors Event Three  
Indian River Landfill, Vero Beach, Florida

Dear Mr. Lewis:

SCS Field Services (SCS-FS) is pleased to provide this proposal to you for the subject work based on discussions between SCS-FS and Republic Services (Republic). SCS-FS is prepared to schedule the work following approval by Republic. A summary of the scope of work and cost is outlined below.

#### SCOPE OF WORK

There are three vertical wells and three side slope collectors located on the north slope and in the south east portion of segment three cell one that will need to be excavated and extended due to filing activities by operations. Each vertical well consists of a 6-inch schedule 80 PVC well casing, 4-inch HDPE vacuum riser and 2-inch HDPE air and force main riser pipes that will be extended ten feet. Each side slope collector consists of one 6-inch HDPE well riser and one 4-inch HDPE vacuum riser pipe that will be extended ten feet. After each pipe is extended it will be hard capped until after filling activities are completed. Once filling is completed each wellhead will be re-installed.

#### COMPENSATION

Segment Three Cell One Well Extensions (Unit Rates)	
Vertical Well Extensions (Three at \$1,320 each)	\$3,960
Side Slope Collector Extensions (Three at \$800 each)	\$2,400
Excavator & Fuel	\$2,200
Mobilization	\$1,550
<b>Total:</b>	<b>\$10,110</b>



Mr. Brian Lewis  
February 13, 2024  
Page 2

## CLOSING

SCS-FS appreciates the opportunity to provide our proposal to Republic. If you have any questions or require any additional information, please contact Brian Basconi at 401-486-4897.

Sincerely,

A handwritten signature in blue ink that reads "Brian Basconi". The signature is written in a cursive style with a large initial "B".

Brian Basconi  
Project Manager  
SCS Field Services  
BB/GAC

A handwritten signature in blue ink that reads "Garold (Tony) A. Cartee". The signature is written in a cursive style with a large initial "G".

Garold (Tony) A. Cartee  
Regional Manager  
SCS Field Services

February 13, 2024

Brian Lewis  
Landfill Operations Manager  
Republic Services  
1327 74<sup>th</sup> Ave SE  
Vero Beach, FL 32968

Subject: Proposal to Repair and Install Flare Station Blower Three  
Indian River Landfill, Vero Beach, Florida

Dear Mr. Lewis:

SCS Field Services (SCS-FS) is pleased to provide this proposal to you for the subject work. SCS-FS is prepared to schedule the work upon receipt of your approval. A summary of the scope of work and cost is outlined below.

#### SCOPE OF WORK

In December of 2023 SCS-FS and Xpert Blower Repair (Xpert) attempted to make a field repair to blower three that had become seized. The blower could not be freed in the field so the blower was removed from the flare station and taken back to Xpert's shop. With approval to proceed Xpert will disassemble, inspect the blower for defects and reassemble. Xpert will also paint and test the blower before transporting it back to the site. SCS-FS and Xpert will install and test the blower in the field once repairs are completed.

#### COMPENSATION

The cost to perform the work described can be completed for a lump sum of \$13,250.

#### CLOSING

SCS-FS appreciates the opportunity to provide our proposal to Republic Services. If you have any questions or require any additional information, please contact Brian Basconi at 401-486-4897.

Sincerely,



Brian Basconi  
Project Manager  
SCS Field Services



Garold (Tony) A. Cartee  
Regional Manager  
SCS Field Services

BB/GAC



## **2024 Hurricane Preparedness Plan**

*Indian River County Landfill and Customer Convenience Centers*

*Managed by Republic Services of Florida, Limited Partnership (Republic Services)*

This hurricane preparedness operation plan for the operation of the Indian River County Landfill (Landfill) and Customer Convenience Centers (CCCs) by Republic Services pursuant to that certain Contract Agreement with Indian River County Solid Waste Disposal District, Indian River County, Florida Solid Waste Operations and Maintenance, as amended, is intended to allow for the seamless disposal of storm debris with the least amount of effect on residents of Indian River County.

1. Once a named storm is tracked to the Central Coast of Florida in the proximity of Indian River County, Republic Services will have all of the material at the CCCs emptied by hauling the waste to the Indian River County Landfill. Republic Services will continue the operations of both the Landfill and the CCCs until a decision for closure is made. Republic Services and Indian River County will communicate in good faith and with the intent to come to a mutually agreeable decision with respect to the closure of the Landfill and the CCCs that takes into account the safety and protection of personnel and property.

2. Republic Services will develop a "Timeline for Closing" plan with Indian River County, which will take into account Republic Services' corporate requirements (including the safety of personnel, property, and assets) and Indian River County's cleanup needs. A conceptual closing and opening plan is provided below; the conceptual plan remains subject to change, depending on the requirements of the situation.

3. Republic Services will return to the Landfill and the CCCs as soon as it is safe to do so after the storm (i.e., upon issuance of an "all clear" to travel on county roads by IRC Emergency Services). Republic Services' first priority with respect to services provided to Indian River County will be to assess and document damages at the Landfill and the CCCs and assist in reopening all facilities as soon as possible.

4. There may be additional costs to Indian River County to operate the Landfill and CCCs before or after the storm, as detailed below. In order to facilitate the inflow of additional storm debris material, the operation of the Landfill may result in additional costs in order to effectively manage the material and comply with all state and federal statutes. Republic Services will provide Indian River County with all documentation associated with the additional services provided to return the Landfill and the CCCs to normal operations. Such documentation will include time sheets, truck counts including container sizes, and any additional information reasonably requested by Indian River County to verify the costs and shall include information related to pre-storm services and operations. Baseline information, including the number of employees for services and operations prior to the storm, shall be provided with the documentation.

### **A) CCC Personnel Costs:**

The personnel costs consist of the costs to bring employees in for hours in addition to usual and customary hours. Further, if cleanup efforts require additional man-hours to perform proper operation of the CCCs, this will require employees to work beyond usual and customary hours and will require Republic Services to recoup the extra costs. The below amount covers the cost per man-hour to open for additional days/times and/or the additional time required to effectively operate the CCC post-hurricane. In order to provide for an expedited cleanup, Republic Services may employ additional employees from traffic control in order to safely navigate hauling trucks into and out of the CCCs. This will require additional employees and will require Republic Services to recoup the extra costs. If pre-storm cleanup of the CCCs is required in order to handle the additional materials from the storm, this will require additional employees and will require Republic Services to recoup the extra costs.

**Cost for CCC laborer man-hour: \$49.59/hour/man**

**B) CCC Operating Costs:**

Republic Services will make commercially reasonable efforts to clean up all storm debris at the CCCs in a timely manner. If Indian River County requests expedited clean-up, Republic Services will hire third-party personnel and clam truck services to perform duties.

**The cost for CCC operations pre or post-hurricane is based on the cost of hauling additional tonnage from CCC to the Indian River County Landfill, as detailed below.**

**C) CCC Hauling Costs:**

In order to segregate the tonnage of storm debris from normal waste at the CCCs, the average yard waste and average garbage hauled to the Indian River County Landfill for the previous 6 months for all of the CCC's will be the basis for determining the impact of the storm debris. Any additional tonnage over the monthly average in the 2 months following the storm that is hauled to the Indian River County Landfill from the CCCs, shall be considered storm debris and shall be charged at the incremental rate stated below.

In order to convert the tonnage hauled to a yardage measurement, the appropriate conversion rate shall be:  
1 cubic yard = 300 lbs.

**Cost for hauling additional tonnage from CCC to Indian River County Landfill: \$26.50/cubic yard (This rate is subject to negotiation to a mutually agreeable rate if market conditions have drastically been impacted by the storm)**

**D) Landfill Equipment Costs:**

Republic Services will use commercially reasonable efforts to effectively and efficiently use all current equipment to manage excessive storm debris. Republic Services shall keep all current equipment in working order. SWDD is not responsible for additional equipment needed as a replacement for the failure of equipment needed for normal operations. Notwithstanding the foregoing, renting equipment to provide incremental assistance may be required, but such equipment may not be available in the immediate aftermath of a storm. If additional equipment is required and becomes available, Republic Services will rent such required additional equipment, and Indian River County will reimburse Republic Services for Republic Services' cost of rental of such additional equipment without markup. Republic Services will also attempt to mobilize equipment from other Republic Services operating divisions, and Indian River County will reimburse Republic Services for any additional costs incurred by Republic Services for such mobilization and usage of equipment from other Republic Services operating divisions without markup. Republic Services will notify and obtain written approval from Indian River County of any rental or mobilization of such additional equipment.

**Cost for Landfill Equipment mobilization and usage: to be determined by Republic Services, based on availability**

**E) Landfill Additional Costs:**

In case of catastrophic damage, Republic Services may incur additional costs to operate the Indian River County Landfill, and such additional costs shall be reimbursed by Indian River County provided there is sufficient documentation and that Republic Services has notified and obtained written approval for these additional costs. Examples of such costs are additional rock to shore up access roads to allow traffic flow to the Landfill waste reception area and additional costs to pump excessive leachate to not overwhelm the current system. In preparation for any catastrophic storm event, Republic Services can accumulate rock and cover at the Indian River County Landfill. If Indian River County elects to absorb costs for the accumulation of rock and cover, the associated costs will be provided to the County for approval prior to purchase and accumulation.

**Landfill Additional Costs: to be determined by Republic Services, based on necessity.**

5. Conceptual Closing / Opening Plan. The conceptual plan and timeline noted below are by way of example only and are subject to change depending upon storm size/scope/severity and upon input from Republic Services and Indian River County. The safety of personnel, property, and equipment is Republic Services' top priority, and Republic Services acknowledges that Indian River County desires to reopen the Landfill and the CCCs as soon as possible after a storm.

A) Pre-Storm. Upon the approach of a named storm, Republic Services and Indian River County will conduct daily conference calls as part of planning and preparation. These calls will take place at 3pm or a mutually agreed upon time.

I) Between 48-72 Hours Out

- a. Close Oslo and Fellsmere.
- b. Redeploy Oslo and Fellsmere staff to other CCCs to assist as necessary, allowing Republic Services employees to rotate out to prepare their families and homes. In addition, it allows Republic Services equipment to be used at other CCCs in preparation after Oslo and Fellsmere are cleaned and ready for post storm.
- c. Conduct PSA to inform residents and businesses.

II) Between 24-48 Hours Out

- a. Suspend all garbage and recycle collection.
- b. All haulers advised of anticipated Landfill closure so they can have their trucks dumped and ready for post storm clean up.

III) Between 12-24 Hours Out

- a. All CCCs and Landfill closed to public.
- b. Haulers contacted.
- c. Begin shut down of Landfill operations and prepare road base for post storm.

B) Post-Storm. Following the removal of any restrictions/travel bans, Republic Services and SWDD will conduct an inspection of the Landfill and equipment, and an inspection of the CCCs, as soon as possible, and report its findings to Indian River County.

I) A staggered opening of CCCs will occur, with Oslo and Fellsmere being first, allowing the other 3 CCCs to be cleaned and prepped for opening.

II) Additional resources will be contacted and in place to deploy at Republic Services' direction.

III) Between 24-72 Hours Post-Storm (depending on severity)

- a. Resume normal garbage and recycle collection.
- b. Alternate sites identified, if necessary, for storm debris.