



2022 Landfill Gas System Operations and Maintenance at the Indian River Landfill Indian River County, Florida

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

SCS FIELD SERVICES

07221123.00 | December 30, 2021

Brian Basconi
5850 S. Semoran Blvd.
Orlando, FL 32822
401-486-4897

Table of Contents

Section	Page
Introduction.....	2
Routine Scope of Services.....	2
Task 1 – Flare and Wellfield Operation and Maintenance.....	2
Task 2 - Reporting	3
Task 3 - Liquid Level Monitoring and Reporting.....	4
Task 4 – Quarterly Condensate Sump and Dewatering Pump Maintenance.....	4
Task 5 – Flare Station Blower Lubrication/Check Valve Inspection/Flow Straightener Inspection.....	4
TASK 6 – Air Compressor Preventative Maintenance.....	4
TASK 7 – Weekly GHG Flare Readings	5
TASK 8 – Flow Meter Calibration	5
TASK 9 – Landfill Gas Lab Analysis	5
Non-routine Services and Maintenance.....	5
Assumptions and Conditions.....	6
Fee Estimate	7
Appendix A – Maintenance Documents and Checklists	10
Appendix B – Air Compressor Preventative Maintenance Quote	18

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 Straightner Inspection;
- Task 6 – Air Compressor Preventative Maintenance
- Task 7 – Weekly GHG Monitoring and Reporting
- Task 8 – Flow Meter Calibration
- Task 9 – 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 twice per month 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

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 flow to maintain gas quality and provide vacuum to the gas collection system.

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 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;
- Bi-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 in the Republic formatted liquid level table in the monthly O&M report that coincides with each completed round of measurements. SCS-FS will also provide a list of wells that may require pumps based on historical field measurement data.

TASK 4 – QUARTERLY CONDENSATE SUMP AND DEWATERING PUMP MAINTENANCE

For the 2022 O&M scope of work, SCS-FS is recommending increasing the frequency of pump maintenance for all pumps (not just condensate sump pumps) from semi-annual to quarterly. This is to ensure that all pumps remain functional to maintain gas quality and flow rates at the flare station.

SCS-FS will remove each of the 44 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 2022 will be performed by Air Compressor Works. Additional information on air compressor maintenance is referenced in *Appendix B*.

TASK 7 – WEEKLY GHG FLARE READINGS

Currently, SCS-FS performs scheduled flare readings twice per month. Additional weekly flare readings will be performed as needed on weeks that are not scheduled for a flat fee. 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 calibration mix and 11% oxygen.

TASK 8 – 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.

TASK 9 – 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.

Based on discussions with Republic and Indian River County Solid Waste Disposal District, the following items are included in this proposal as non-routine maintenance for the first quarter of 2022:

- Spare 10-inch flame arrester element to keep on site as a backup to the existing element and replacement gaskets to be installed during the next cleaning event.
- During the fourth quarter, dewatering pump maintenance one short pump was replaced in condensate sump CS-1 and the long pump was replaced in well EW-42. SCS-FS recommends purchasing one QED AP-4 Plus short pump and long pump to maintain current inventory of spare pumps.
- SCS-FS recommends purchasing the following spare sample ports to have on site so they can replace broken ports as needed:
 - 32 QED easy ports for the temp probe on the segment two and three wellheads;
 - 50 quick connect sample ports for segment one and two wellheads;
 - 100 barb dusk caps for segment one and two wellheads.
- Abandon well EW-105. Segment three vertical wells have replaced EW-105 and it is no longer an efficient gas collector.
- There are seven wells located in segment two that are in need of wellhead upgrades to increase gas collection efficiency. SCS-FS recommends installing QED 2-inch orifice plate style wellheads with precision flow control valves on the following wells: C-5, E-5, GW-15, EW-15, EW-13, EW-14 and EW-36.
- There are three wells located in segment two that are equipped with dewatering pumps. The hardware and pipe fittings are significantly deteriorated and are in need of replacement. SCS-FS recommends installing new hardware for the air and force main connections, replacing the existing well cap, discharge hose, air hose, air regulator, cycle counter and wellheads (with QED 2-inch orifice plate style wellhead) for the following wells: EW-11, EW-12 and EW-35.

Costs for the recommended non-routine services are summarized 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 2022 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 2021 there was an addendum issued to reflect an increased O&M cost of \$31,740 based on the proposal dated January 22, 2021. There will be an increase of \$34,480 for 2022 O&M services from the 2021 proposal amount. Table 1. summarizes the cost increases per cost from 2021 to 2022. Table 2 summarizes the total cost per task for 2022.

Table 1. 2021/2022 Annual O&M Cost Comparison	2021 Cost	2022 Cost	Annual Adjustment
Task 1 – Flare Operation, Wellfield Operation (2021 incl. segment three task 10 for 5 months)	\$30,620	\$42,000	\$11,380
Task 2 – Reporting	\$18,000	\$18,000	\$0
Task 3 – Liquid Level Monitoring and Reporting	\$4,400	\$5,500	\$1,100
Task 4 – Condensate Sump and Dewatering Pump Maintenance (2021 all pump maint. combined)	\$17,000*	\$36,000	\$19,000
Task 5 – Flare Station Blower Lubrication/Check Valve Inspection/Flow Straightener Inspection	\$5,000	\$5,000	\$0
Task 6 - Air Compressor Preventative Maintenance (2021 April through December)	\$7,500	\$10,000	\$2,500
Task 7 - Weekly GHG Monitoring	\$23,800	\$23,800	\$0
Task 8 – Flow Meter Calibration	\$6,000	\$6,500	\$500
Task 9 – Landfill Gas Lab Analysis	\$6,200	\$6,200	\$0
Total 2022 Increase:			\$34,480

*Task 4 in 2021 was performed semi-annually. Task 4 in 2022 will be performed quarterly.

Table 2. 2022 O&M Costs	Quantity	Units	Unit Cost	Total
Task 1 – Flare Operation, Wellfield Operation	12	Month	\$3,500	\$42,000
Task 2 – Reporting	12	Month	\$1,500	\$18,000
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	\$2,500	\$10,000
Task 8 – Weekly GHG Monitoring	28	Weeks	\$850	\$23,800
Task 9 – Flow Meter Calibration	2	Ea.	\$3,250	\$6,500
Task 10 – Landfill Gas Lab Analysis	4	Quarters	\$1,550	\$6,200
Total Updated 2022 O&M Cost:				\$153,000

Table 3. Non-Routine Services and Materials	Quantity	Units	Unit Cost	Total
Spare 10-inch Flame Arrester Element & Gasket	1	LS	\$7,750	\$7,750
Replacement Pneumatic Pumps	1	LS	\$5,000	\$5,000
Spare Sample Ports	1	LS	\$1,100	\$1,100
Well EW-105 Abandonment	1	LS	\$950	\$950
New Wellhead Installations	7	Ea.	\$500	\$3,500
Replacement Pump Hardware, Caps & Wellheads	3	Ea.	\$2,350	\$7,050
Combined Non-Routine Services and Materials Costs:				\$25,350

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/Vice President
SCS Field Services

BB/GAC

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
Schedule								
Condensate Knock-out pot (see Section V)								
➤ Check liquid level	√							
➤ Drain KOP								√
➤ Inspect Internal Coating, cover gasket and clean demister pad							√	
➤ Retighten cover bolts							√	
Pneumatic Header, if applicable (see Section V)								
➤ Check Nitrogen supply		√						
➤ Check Supply Pressure (25 psig)		√						
➤ Check valve performance		√						
➤ Check supply lines for leakage					√			
LFG Blower (see Section V)								
➤ 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			√					
Piping (see Section V)								
➤ 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							√	
Flow Meter (See Section V)								
➤ Clean flow meter probe						√		
➤ Calibrate flow meter							√	

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 Candelstick Flare Unit #1865

Operator Name	Month Completed				
	Weekly Check List				
Component	Date	Date	Date	Date	Date
Knock Out Pot:					
Check Liquid Level					
Check Differential Pressure	(\"w.c.)	(\"w.c.)	(\"w.c.)	(\"w.c.)	(\"w.c.)
Drain Liquid (As Needed)					
Electric Header Valve					
Valve Position					
LFG Blower					
Check Bearing Temperature	(deg. F)	(deg. F)	(deg. F)	(deg. F)	(deg. F)
Check Vibration					
Rotate Blower (Every 30 mins)					
Grass Blower During Startup or every 30 days					
Drain Condensate from Housing					
Check Blower discharge Pressure	(\"w.c.)	(\"w.c.)	(\"w.c.)	(\"w.c.)	(\"w.c.)
Flare Arrestor					
Check Differential Pressure	(\"w.c.)	(\"w.c.)	(\"w.c.)	(\"w.c.)	(\"w.c.)
Clean Element (As Needed)					
Flow Meters					
Record Flare Flow	(cfm)	(cfm)	(cfm)	(cfm)	(cfm)
Propane Pilot System					
Check Propane Supply					
Check Propane Supply Pressure	(ps)	(ps)	(ps)	(ps)	(ps)
Replace Propane Tank (As Needed)					
Control Panel					
Verify Chart Recorder Operation					
Check enclosure for moisture					
Test Panel Light					
Verify Auto-Stop Operation					
Verify PLC/Touchscreen Operation					
Air Compressor					
Air Compressor Operation					
Air Supply Pressure	(ps)	(ps)	(ps)	(ps)	(ps)
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:		
Components	Date:	Date:
Piping		
Check All Flange Gaskets for Leaks		
Check Rubber Expansion Joints for Wear		
Remove and Clean Flow Straightener		
Blowers		
Remove and Clean Check Valves		
Remove and Repack Grease		
Flow Meters		
Clean Total Flow Meter Probe		
Clean GCS Flow Meter Probe		
Propane Pilot System		
Check Solenoid Manual Override		
Clean Pressure Regulator Vent		
Check All Connections for Leaks		
Clean Solenoid Valve per Specifications		
Control Panel		
Check Wire Connections for Corrosion		
Check Wire Connections for tightness		

Annual (January)

Operator Name:		
Components	Date:	Date:
Knock Out Pot		
Inspect Internal Coating, Cover Gasket and Clean Demister Pad		
Retighten Cover Bolts		
LFG Blower		
Inspect Foundation and Correct Deficiencies		
Check Condition of Isolation Pads		
Check Blower Motor Alignment		
Check Wire Connection for Corrosion & Tightness		
Flame Arrester		
Check Differential Pressure		
Clean Element (As Needed)		
Piping		
Retighten All Flange Bolt Connections		
Inspect Piping for Chipped Paint and Rust		
Check Piping Alignment		
Flow Meter		
Calibrate Flow Meter		
Flare Control Panel		
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-03557-1
Date: 12/22/2021
Expires On: 1/28/2021
Terms: Net 60
Written By: Thai Van

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

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

**Indian River County Landfill
1325 SW74th Ave.,.....
Vero Beach, FL 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 an additional rate of \$120 per visit. 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 **\$8,181.64**

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

___ **Standard:** Pay-As-You-Go

Price estimate: **\$8,703.87**

1. 3 Business day maximum response on any emergency calls. Emergency Service Fees apply 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.
4. This contract will automatically renew on the anniversary date unless the customer provides written notification to Air Compressor Works.

___ **Decline Preventative Maintenance Package**

Reason _____

Tax will be added to the invoice.

Prices are valid for 30 days.

A convenience fee of 3% will be included on credit card charges exceeding \$3000.00 and delinquent payments.

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

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
(800) 345-4364
Mechanical Contractors
- License #CMC1249580
Page 3 of 3