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

THIS THIRTEENTH AMENDMENT TO CONTRACT AGREEMENT INDIAN RIVER COUNTY, SOLID WASTE DISPOSAL DISTRICT, INDIAN RIVER COUNTY, FLORIDA SOLID WASTE OPERATIONS AND MAINTENANCE ("Thirteenth Amendment") is entered into as of the ____ day of March, 2020 by and between Indian River County Solid Waste Disposal District, a dependent special district of Indian River County, Florida, whose address is 1801 27th 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 Eight 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 18, 2018; and the Twelfth Amendment to Contract Agreement, dated September 10, 2019 (the "Contract") for the Contractor to operate and maintain the SWDD landfill and customer convenience centers ("CCCs"); and

WHEREAS, under the terms of the Contract, the Contractor, at SWDD's request and subject to mutually satisfactory negotiated terms and acceptable compensation, shall provide additional services in connection with the Indian River County Landfill and the customer convenience centers not included above and as required by SWDD; 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.
- 3. The existing Article 3 COMPENSATION of the Contract is modified to include the following:
 - iii) Annual Payment to Contractor for Landfill Gas System O&M shall be increased by \$41,404 per year, which includes a 10% management fee to Contractor. The overall payment for Calendar Year 2020 Non-Class 1 Landfill services shall be adjusted from the current \$3,063,181.94 per year to \$3,104,585.94 per year or \$258,715.50 per month.
 - iv) A lump-sum payment of \$45,320, which includes a 10% management fee to Contractor, for the Non-Routine Services and Maintenance of the Landfill Gas System.
- 4. **Ratification**. Except as specifically provided in this Thirteenth 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 Thirteenth Amendment to be executed by their respective duly authorized officers as of the day and year first written above.

Attest:	(Owner)			
Jeffrey R. Smith, 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:			
Jason E. Brown, County Administrator	Dylan Reingold, 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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Landfill Gas System Operations and Maintenance at the Indian River Landfill Indian River County, Florida (Revision #4)

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

SCS FIELD SERVICES

07218099.00 | January 21, 2020

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

Table of Contents

Section Pa	age
Introduction	2
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 and semi-annual pump maintenance	4
Task 5 – Flare station blower lubrication/check valve inspection/flow straightener inspection	
Task 6 – Air compressor preventative maintenance	4
Non-routine services and maintenance	5
Assumptions and Conditions	5
Fee Estimate	6

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. Part of this closure was to expand the GCCS into the upper segments one and two, which previously did not have any landfill gas (LFG) collection. In addition to the GCCS expansion, several repairs were made to the landfill gas flare station, which include but are not limited to control panel upgrades, centrifugal blower maintenance and repair, moisture separator and flame arrester replacement and the installation of a new air compression station. This proposal outlines an updated scope of work that includes expanded services based on recent site changes and conversations between SCS-FS, Republic and Indian River County (County).

SCOPE OF SERVICES

- Task 1 Flare System and Wellfield Operation and Preventative Maintenance
- Task 2 Monthly Reporting
- Task 3 Semi-Annual Liquid Level and Preventative Pump Maintenance
- Task 4 Additional Services and Maintenance

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

System components will be observed for proper operation. Minor problems such as damaged or deteriorated monitoring ports 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.
- Well head 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 0&M report summarizing routine and non-routine, if applicable, activities that were performed during the preceding month. The 0&M report will contain the following monitoring and maintenance records:

- Wellfield monitoring results (two rounds of data per month);
- Six month rolling wellfield monitoring results;
- Bi-weekly GCCS checklist;
- Flare Station preventative maintenance checklist;
- Rolling twelve month condensate sump pump counter data;
- Recommended GCCS Repairs:
- Semi-annual 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 every six-months. In wells that contain pumps the liquid temperature will also be recorded. 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 AND SEMI-ANNUAL PUMP MAINTENANCE

Task 4A - SCS-FS will remove each of the 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 every six-months. 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 4B - SCS-FS recommends that the pumps located in the condensate sumps be serviced at a quarterly frequency. Due to the corrosive nature of landfill gas condensate and the important function of the condensate sumps to keep the collection system fully operation, removing the pumps once each quarter will allow for components prone to failure due to corrosion to be identified and replaced before the pump fails.

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:

- Removal and repacking lubrication of bearings and housing following alternative greasing plan;
- o Blower Outlet check valve inspection and cleaning;
- Flow Straightener inspection.

TASK 6 – AIR COMPRESSOR PREVENTATIVE MAINTENANCE

Once per quarter SCS-FS and Air Compressor works 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. Additional information on air compressor maintenance is referenced in *Appendix B*.

NON-ROUTINE SERVICES AND MAINTENANCE

Based on discussions with Republic and Indian River County Solid Waste Disposal District the following services are included in this proposal as non-routine maintenance:

- Flare Skid Painting (Appendix C)
 - o (Per Manufacturers Specifications): Prime with Direct to Rust Epoxy/Coat of Pitthane Aliphatic Urethane. Recoat after 5 years;
- Wellfield Repairs per most recent observations and recommended spare parts (Table 1);
- Flare blower three motor replacement, electric connection and field alignment;
- Header and Sump Cleaning between flare station and condensate sump one (Appendix D);
- Blower inspections and maintenance due to blower two seizure (Appendix E).

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 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 Friday during regular working hours (8:00 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 2020 or is subject for adjustment if the work scope changes based on increased quantities or frequency of services.
- 10. Air Compressor services are based on a 1-year startup service and maintenance program. At the end of the first year, SCS-FS will obtain quotes from the service provider and submit to Republic. Pricing increases or decreases will be adjusted to the O&M contract accordingly.
- 11. 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 tasks that encompass current O&M cost and revised O&M cost based on the system expansion and expanded services. The total revised O&M cost is \$76,580. This is a \$37,640 increase.

Routine Tasks Based on Indian River Landfill Contract	Quantity	Units	Unit Cost	Total
Task 1 – Flare Operation, Wellfield Operation, Liquid Levels (55 EWs, 32 HCs)	12	Month	\$2,255	\$27,060
Task 2 – Reporting	12	Month	\$990	\$11,880
Current O&M Cost:				\$38,940

New Routine Task Cost to Include System Expansion	Quantity	Units	Unit Cost	Total
Task 1 – Flare Operation, Wellfield Operation and Liquid Levels (29 New EWs, 13 abandoned HCs, 8 New HCs)	12	Month	\$2,385	\$28,620
Task 2 – Reporting	12	Month	\$1,350	\$16,200
Task 3 – Liquid Level Monitoring and Reporting	2	Semi- Annual	\$2,200	\$4,400
Task 4A – Condensate Sump and Dewatering Pump Maintenance	2	Semi- Annual	\$3,880	\$7,760
Task 4B – Condensate Pump Maintenance	2	Semi- Annual	\$1,500	\$3,000
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	Quarter	NA	\$11,600
Total Updated Yearly O&M Cost:				\$76,580

Non-Routine Services and Maintenance	Quantity	Units	Unit Cost	Total
Flare Skid Painting (5 Years)	1	LS	\$11,850	\$11,850
Wellfield Repairs as of January 2020	1	LS	\$6,200	\$6,200
Wellfield Spare Parts per quantities shown	1	LS	\$3,400	\$3,400
Flare Blower Three Motor Replacement	1	LS	\$7,500	\$7,500
Header Pipe and Condensate Sump Cleaning	1	LS	\$7,900	\$7,900
Blower Inspection	1	LS	\$4,350	\$4,350
Total Non-Routine Services and Maintenance Budgetary Estimate:				\$41,200