

## Change Order Request (COR)

### BOD Change - Add Gas Chromatograph and Controls Hardware for Balance of Plant

**Contractor:** BIOGAS ENGINEERING  
**COR Originator:** Ryan Rueve  
**Address:** 2321 E. 28TH STREET, SIGNAL HILL, CA-90755  
**Email Address:** [rrueve@biogaseng.com](mailto:rrueve@biogaseng.com)

**COR No.:** CO#2  
**COR Date:** 9/1/2022  
**Project #:** USH2211.200  
**PO:** \_\_\_\_\_

### Change Request Definition

#### Change

**Recommended by:** Indian River County Solid Waste Disposal District

#### Description of Change/SOW Description:

Indian River County Solid Waste Disposal District (client) wants to be able to analyze the landfill gas (LFG) for its components and percent of the components present in the LFG. Therefore, a Gas Chromatograph (GC) device is needed to analyze the LFG. To meet the operating conditions for the GC, the GC needs to be furnished with a chiller and a pump. The chiller will reduce the LFG temperature and moisture and the pump will increase the pressure. Included in this change order is equipment that has been requested by the IRC SWDD's controls specialist so that the PLC at the blower skid will be used as the balance of plant for the evaporator and the main SWDD main system. This requirement will add secure router, optic fiber switch, optic fiber rack and optic fiber cable in the blower skid panel.

#### Reason for Change:

Client wants to monitor LFG quality at the blower skid area. Controls equipment is required to enable the PLC panel on the skid to act as the balance of plant between the evaporator and IRC SWDD control center, as requested by IRC controls lead.

### Change Request Impact

**Cost Impact:** ☐ No Change ☒ Cost Increase ☐ Cost Decrease

**\$112,980**

Cost increase is Lump Sum of \$112,980 and is additional to the original approved amount for the PO and CO#1 as of \$1,063,570. The revised total will be \$1,194,550 (including \$18k estimate for shipping). Upon approval, BGE will invoice for 45% of the change order amount. The remaining payments will be included in the payment schedule that was provided for the high pressure blower skid. The above breakdown between the GC and the controls additions is \$102,581 and \$10,399 respectively.

**Schedule Impact:** ☐ No Change ☒ Delay ☐ No Delay

**5 - 11 weeks**

Currently the GC lead time is 26 - 32 weeks. The blower skid can be installed even though the GC is not available, however it will require installation and commissioning of equipment which BGE can do on a T&M basis when the GC is available for installation.

### Contractor Request:

**Authorized Signature:** \_\_\_\_\_

**Date Signed:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_



August 30, 2022

Ryan Rueve

Operations Manager

### Company Review

**Recommendation:** ☐ Approve ☐ Reject ☐ Hold

**Reviewer Signature:** \_\_\_\_\_ see signature block on following page

**Date Signed:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_



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**ATTEST:** Jeffrey R. Smith, Clerk

**INDIAN RIVER COUNTY SOLID  
WASTE DISPOSAL DISTRICT**

By: \_\_\_\_\_  
Deputy Clerk

By: \_\_\_\_\_  
Peter D. O'Bryan, Chairman

**District Approved:** \_\_\_\_\_

**APPROVED AS TO LEGAL  
FORM AND SUFFICIENCY:**

**APPROVED:**

By: \_\_\_\_\_  
Dylan Reingold  
County Attorney

By: \_\_\_\_\_  
Jason E. Brown  
County Administrator