

VIENNA JUNCTION INDUSTRIAL PARK SANITARY LANDFILL  
PREVENTATIVE MAINTENANCE/MALFUNCTION ABATEMENT PLAN

A letter submitted to the facility on August 2, 2022, requested the facility develop a Malfunction Abatement Plan (MAP) for the landfill gas flare at the facility. The underlying applicable requirement in State Rule 911 that specifies minimum requirements for a MAP. The following paragraphs document Vienna Junction Industrial Park Sanitary Landfill (Vienna Junction) for the enclosed flare in accordance with the provisions of Rule 911.

**R911(2)(a)**

Vienna Junction identifies the following Supervisory personnel for the responsibilities of overseeing inspection, maintenance, and repairs of the flare.

Heather Brown – General Manager  
Ryan Baisden – Environmental Manager

The attached MAP identifies the equipment covered by this MAP along with the inspection/service frequency and replacement parts maintained in inventory. Inspection records are maintained electronically and saved. In addition, hardcopy records are maintained in a log book stored on-site.

**R911(2)(b)**

The attached MAP identifies operating variable to be monitored to detect equipment malfunction along with the normal operating range of these operating variables and the method of inspection.

**R911(2)(c)**

Vienna Junctions' flare operate as the main control device at the facility. Flare capacity is currently sufficient to extract landfill gas and maintain compliance.

Flare Operating Parameters

Equipment	Operating Parameter	Range
Blower	Motor Amperage Draw	13-30 amps
Blower	Bearing Temperature	145 °F
Flare	Condensate KOP Differential Pressure	0-3 in H <sub>2</sub> O
Flare	Condensate KOP Liquid Level	Visible in site glass
Flare	Flame Arrestor's Differential Pressure	0-3 in H <sub>2</sub> O
Flare	Fleetzoom	Verify connection
Flare	Visual Check of Flare Stack and Burner	No visible emissions for more than 6 minutes in a 2 hour time period
Flare	Combustion Temp F, enclosed flare)	1526 F -1686 °F
Flare	Gas Flow Rate (cfm at 50% CH <sub>4</sub> )	300-3,000 scfm
Flare	Inlet Vacuum	-48 to -52
Flare	Inlet Temperature	40 – 100 °F

Spare Parts Maintained in Inventory

Thermocouple (main and pilot), spark plug igniter, UV detector, flow meter, panel indicator bulbs, grease, bearing oil, bearing and seal kits, mesh filter for KOPs, flare damper motor

### MALFUNCTION ABATEMENT PLAN

Equipment Inspected/Service	Equipment	Weekly	Monthly	3 months	6 months	Yearly
Check and Record Motor Amperage Draw	Blowers		X			
Landfill Gas Blower Lubrication	Blowers			X		
Check Blower Bearing Temperatures	Blowers			X		
Lubricate Blower Motor Bearings	Blowers				X	
Test all Blower Shutdowns	Blowers				X	
Check Condition of Motor Isolation Pads	Blowers				X	
Check Blower Motor Alignment	Blowers					X
Record Line Current and Voltage on Blower Motors	Blowers		X			
Perform Vibration Analysis	Blowers					X
Check Condensate KOP Differential Pressure	Flare		X			
Check Condensate KOP Liquid Level	Flare		X			
Check Flame Arrestor's Differential Pressure	Flare		X			
Check Propane Supply Tank Pressure	Flare		X			
Check Fleetzoom	Flare		X			
Check Combustion Temperature	Flare		X			
Check Gas Flow Rate	Flare		X			
Check Inlet Vacuum	Flare		X			
Check Inlet Temperature	Flare		X			
Complete Inspection Checklist	Flare		X			
Download Data	Flare		X			
Visual Check of Flare Stack and Burner	Flare					
Check Pipe Supports	Flare			X		
Check Flare Flame Detection Equipment	Flare			X		
Check/Clean Flame Arrestor	Flare			X		
Inspect/Clean Flame Scanner View and Vent Port	Flare				X	
Inspect/Clean Flare Ignitor	Flare					X
Verify Operation of Flare Pilot	Flare					X
Calibrate Flow Meter	Flare					X