Facility Name: XYZ Corporation  
Facility Identification No. (FID): 555555550  

Permit No. and Condition(s) Affected: Permit 555555550-P30 conditions I.C.1.b.(1) and I.C.4.b.(1)  

Start/Stop Time(s) of Deviation/Malfunction: 07/07/2020 from 3:12 am to 3:29 am [17 minutes]  

Pollutants Affected (and estimate of excess emissions emitted with basis/calculations of estimate): VOC Emissions (8.7 lbs., see calc. below)  

Description of Deviation/Malfunction:  
The permit requires 95% overall control of VOC emissions using a Regenerative Thermal Oxidizer when process P30 is in operation. At 3:12 am a power surge tripped the RTO to shutdown and emissions were vented to bypass for 17 minutes. The circuits were reset, and the RTO returned to operating temperature with emissions being controlled at 3:29 am. From our compliance emission test dated 11/22/2018, pre-controlled VOC emissions were 32.6 lbs per hour (at inlet to RTO). Estimated emissions were (32.6 lbs/hr)(17 min)(1 hr/60 min) = 9.2 lbs/event. Estimated controlled emissions would have been (32.6 lbs/hr)(17 min)(1 hr/60 min)(1 - 0.95) = 0.5 lbs/event. Therefore, the difference is the reported excess emissions (9.2 lbs – 0.5 lbs) = 8.7 lbs  

Cause(s) of Deviation/Malfunction: Power outage/interruption to process control system.  

Method Used to Determine Deviation/Malfunction: Process control alarms and power distribution alarm and start-up of emergency back-up generator.  

Corrective Action(s) taken during the period of deviation/malfunction to address problem and minimize emissions (including when they were taken and the period of time necessary to correct the deviation/malfunction): Production operations were curtailed at the time the diversion occurred. Facility initiated safe practices process shutdown during this event.  

Status of Operation: The RTO was reset and returned to service. The bypass stack was closed and process emissions were routed to the RTO.  

Measures Taken During and After Deviation/Malfunction To Prevent Re-Occurrence: The source of the power surge was investigated and was tracked to an off-site source. The facility is evaluating the feasibility of including the RTO control system in the uninterruptable emergency power supply.  

Was the facility’s Malfunction Prevention and Abatement Plan revised (please provide if revised)? ☐ Yes ☐ No  

Certification  
Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate and complete.  
Report prepared by: John Doe, Environmental Manager  
Signature of Responsible Official (E-Signature through Switchboard 07/07/2020)  
Title Plant Manager  
Date 07/07/2020