



**MICHIGAN AIR NATIONAL GUARD
HEADQUARTERS 127TH WING (ACC)
SELFRIDGE ANGB BASE, MICHIGAN**

December 20, 2021

Brigadier General Rolf E. Mammen, USAF
127 Wing Commander
29553 George Ave., Bldg. 303
Selfridge ANGB MI 48045

Ms. Kerry Kelly
Senior Environmental Quality Analyst
Department of Environment, Great Lakes, and Energy (EGLE)
27700 Donald Court
Warren MI 48092-2793

Dear Ms. Kelly

SANGB has reviewed the violation notice issued on November 29, 2021, pertaining to air permit exceedances associated with an extended electrical outage and emergency generator use occurring in August and September of 2021. SANGB took immediate action in coordination with DTE Energy to restore power to our facilities.

Attached is a detailed response explaining the cause and duration of the power loss event, as well as actions taken to re-establish power and planned actions to prevent similar events. Also steps for moving forward with EGLE to engage in updating the existing 2005 permit for SANG are discussed for CY 2022.

We look forward to working with the EGLE in resolving this matter to each parties' satisfaction. Questions regarding this letter and attachment can be addressed to Mr. Kenneth Baker, of my staff, at 586-239-5741, kenneth.baker.22@us.af.mil.

Sincerely

ROLF E. MAMMEN, Brigadier General, MI ANG
Commander

Attachment:
Response Action Plan addressing all Notice of Violation inquiries, 15 December 2021

cc:
Ms. Jenine Camilleri

Response Action Plan addressing all Notice of Violation inquiries
15 December 2021

At approximately 1300 on August 26, 2021, Selfridge Air National Guard Base (SANGB) experienced a base-wide electrical outage. SANGB personnel, in conjunction with DTE Energy and contractor personnel, began an immediate investigation and response of SANGB’s main switch gear, feeder lines, and other electrical equipment. It was determined that a catastrophic failure of one of the feeders caused a direct fault resulting in catastrophic loss of power. The majority of SANGB facilities impacted were back on the electrical grid by September 2, 2021. However, power could not be restored to some facilities until September 17, 2021. Temporary field cross connects are in place to supply power to the affected facilities, and emergency contracts are pending to accomplish permanent repairs. A separate project is concurrently being planned to assess our primary and secondary distribution line capabilities to handle load demands.

The significant power loss resulted in the extended use of many of SANGB’s diesel emergency generators. This usage caused SANGB to exceed the 12-month rolling kilowatt-hour (kW-h) limit in SC 4.1 of the installation’s air permit, as demonstrated in the table below. This exceedance will continue for 12-month rolling calculations through September 2022.

Monthly Kilowatt Hour Use For Emergency Generators (Oct 2020 through Sept 2021)												
Oct 20	Nov 20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Total
8,067	71,750	39,784	12,065	5,748	6,663	11,694	5,729	6,318	12,522	189,722	249,310	619,370
											kW-h Permit Limit	450,000

This exceedance was not a result of any abnormal condition, startup, shutdown or malfunction of generator equipment. All emergency generators operated as expected during this period of prolonged power loss. As demonstrated below, SANGB remains well below facility emission limits established under our existing permit, and conditions that resulted in the event which occurred in August and September 2021 have been resolved.

Comparison Of Criteria Pollutant Emissions To Limits Established Under Permit 523-96A						
Criteria Pollutants	HAPs 12-Month Rolling Tons	NOx 12-Month Rolling Tons	CO 12-Month Rolling Tons	SO2 12-Month Rolling Tons	PM10 12-Month Rolling Tons	VOC 12-Month Rolling Tons
Actual Emissions Oct 20 - Sept 21	1.78	24.70	11.92	0.05	1.54	5.90
Permit Limits	22.5	83.9	80.6	4.2	19.5	44.2

SANGB currently has a contracted comprehensive Air Emissions Inventory (AEI) to be accomplished in calendar year 2022. Following completion of the contracted AEI, SANGB will collaborate with EGLE to update and revise our existing permit. SANGB will request the kW-h limit established under the permit to either be removed or raised appropriately based upon supporting data.