RECIPROCATING INTERNAL COMBUSTION ENGINE (RICE) INVENTORY and NESHAP 40 CFR 63 SUBPART ZZZZ APPLICABLE REQUIREMENTS FOR MAJOR SOURCES OF HAPS

(Mosaic Fertilizer LLC - Bartow Facility, Facility ID: 1050046)

Reciprocating Internal Combustion Engine (RICE) Information										40 CFR 63 Subpart ZZZZ Applicable Requirements *(list all applicable* ***subsections*** *)*					
Engine Description / Location	**Owned or Rented?**	**Engine Serial Number**	**Engine Manufacturer**	**Model Number**	**Date of Construction / Reconstruction**	**Power (bhp)**	**Fuel**	**CI or SI**	**Indicate if Emergency or Limited Use***	**Emission Standards** (from 63.6600, 63.6602, 63.6604, & Tables 2b & 2c)	**Operation / Maintenance Standards** (from 63.6600, 63.6602, 63.6604, 63.6640 & Table 2c)	**Performance Testing** (from 63.6612, 63.6615,Table 3 & Table 4)	**Monitoring** (from 63.6625)	**Recordkeeping** (from 63.6655)	**Reporting** (from 63.6650, & Table 7)
Generator Power Plant	Owned	33129642	Cummins	KTTA50-G2	February 1995; Existing RICE	2,220	diesel	CI	Emergency	N/A	Operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine, limited to 100 hours; upto 50 hours non-emergency allowed but counted towards the limitted 100 hours. [40 CFR 63.6640(f)]	N/A	Safely and appropriately minimize idle & startup time; not to exceed 30 min. [40 CFR 63.6625(h)]	Work or Management practices by operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63 Subpart ZZZZ Table 6, item 9]	N/A
No. 4 SAP Generator	Owned	46058215	Cummins	6CTAA8.3-21	Prior to June 12, 2006; Existing RICE	288	diesel	CI	Emergency	N/A	Replace oil and oil filter and inspect all hoses and belts every 500 hours, air filter every 1,000 hours, or annually (whichever comes first). Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ Table 2c] Operate for the purpose of maintenance checks and readiness testing no more than 100 hours per year. Operate up to 50 hours per year in non-emergency situations (these hours counted towards the 100 hours per year). [40 CFR 63.6640(f)]	N/A	Install non-resettable hour meter. [40 CFR 63.6625(f)] Proper maintenance. Safetly and appropriately minimize idle & startup time; not to exceed 30 min. [40 CFR 63.6625(h)]		Per 63.6640(b)(e)
R1 Canal Emergency Pump	Owned	9ZR02217	Caterpiller	3126	Prior to June 12, 2006; Existing RICE	220	diesel	CI	Emergency						
No. 5 SAP Generator	Owned	4B10773	Caterpiller	3304 PC	Prior to June 12, 2006; Existing RICE	155	diesel	CI	Emergency						
No. 6 SAP Generator	Owned	4B10765	Caterpiller	3304 PC	Prior to June 12, 2006; Existing RICE	155	diesel	CI	Emergency						
Safety Building Gen No. 3	Owned	46103363	Cummins	6BT5.9-G6	Prior to June 12, 2006; Existing RICE	155	diesel	CI	Emergency						
SAP Fire Pump	Owned	FP952	Cummins	V378F2	Prior to June 12, 2006; Existing RICE	132	diesel	CI	Emergency						
Foam Building Gen No. 4	Owned	46103839	Cummins	4BT3.9-G4	Prior to June 12, 2006; Existing RICE	102	diesel	CI	Emergency						
II-C MCC Genertor	Owned	CD4039T402 970	John Deer	GENB-S2	1999; Existing RICE	70	diesel	CI	Emergency						
East Gate Generator	Owned	GENB-444	Cummins	--	Prior to June 12, 2006; Existing RICE	--	diesel	CI	Emergency						
II-C Center Pump	Owned	P805B	Detroit	60 , 12.7L	September 2000; Existing RICE	500	diesel	CI	Non-Emergency	Limit CO to 49 ppmvd or less at 15% O_2 or reduce CO emissions by 70% or more [40 CFR 63 Subpart ZZZZ Table 2c]	Must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel [40 CFR 63.6604]	Conduct Initial Testing per Table 4 to Subpart ZZZZ [40 CFR 63.6612]	Install closed crankcase ventilation system, or open crankcase filtration system. [40 CFR 63.6625(g)] Follow manufacturer's or better maintenance procedures. [40 CFR 63.6625(e)] Safely and appropriately minimize idle & startup time; not to exceed 30 min. [40 CFR 63.6625(h)]	A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv). Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii). Records of all required maintenance performed on the air pollution control and monitoring equipment. Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)]	63.6650 and Compliance Report [40 CFR 63 Subpart ZZZZ Table 7]
Deep Well Left Diesel Engine	Owned	12A2161LA-671A62	Detroit	6V-671	Prior to June 12, 2006; Existing RICE	180	diesel	CI	Non-Emergency	Limit CO to 230 ppmvd or less at 15% O_2 [40 CFR 63 Subpart ZZZZ Table 2c]	N/A		Follow manufacturer's or better maintenance procedures. [40 CFR 63.6625(e)] Safely and appropriately minimize idle & startup time; not to exceed 30 min. [40 CFR 63.6625(h)]		
Deep Well Right Diesel Engine	Owned	12A2161LC-671LC62	Detroit	6V-671	Prior to June 12, 2006; Existing RICE	180	diesel	CI	Non-Emergency						
South Stack Seepage	Rented	PG10	Detroit	06VF221121	Prior to June 12, 2006; Existing RICE	250	diesel	CI	Non-Emergency						
Pump Collection Area into II-C Pump	Rented	616-08-8002	Deutz	D914L06	Prior to June 12, 2006; Existing RICE	116	diesel	CI	Non-Emergency						
G-2 Pump	Rented	616-62-8009	John Deere	--	Prior to June 12, 2006; Existing RICE	99.2	diesel	CI	Non-Emergency	N/A	Replace oil, oil filter, and air filter every 1,000 hours or annually, and inspect hoses and belts every 500 hours of operation or annually (whichever comes first). [40 CFR 63 Subpart ZZZZ Table 2c]	N/A		Work or Management practices by operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63 Subpart ZZZZ Table 6, item 9]	N/A
Pump Seepage to R-2 Canal Pump	Rented	--	--	F4I914	Prior to June 12, 2006; Existing RICE	76	diesel	CI	Non-Emergency						
Creek SR Seepage Return Pump	Rented	616-62-3004	--	F41913	Prior to June 12, 2006; Existing RICE	75	diesel	CI	Non-Emergency						
30% Clarifier Area Pump	Rented	626-20-5010	Perkins	--	Prior to June 12, 2006; Existing RICE	51	diesel	CI	Non-Emergency						

NOTES:
CI = Compression Ignition; SI = Spark Ignition
Compliance Date for all existing CI engines at area sources is 05/03/10
Startup or Malfunction Requirements for all existing CI engines: Minimize idle & startup time to <30 min.
* See 40 CFR 63.6675 for definitions of Emergency Stationary RICE, and Limited Use Stationary RICE (operates < 100hours/year)