APPENDIX NESHAP 40 CFR 63 - Subpart ZZZZ APPLICABLE REQUIREMENTS

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

(Mosaic Fertilizer LLC - South Pierce Facility, Facility ID: 1050055)

Reciprocating Internal Combustion Engine (RICE) Information									40 CFR 63 Subpart ZZZZ Applicable Requirements *(list all applicable* ***subsections****)*					
Engine Description / Location	**Owned or Rented?**	**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)
TG2	Owned	Kohler	10 ROZ	Prior to June 12, 2006; Existing RICE	220	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)]	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]	Per 63.6640(b)(e)
S/P Secondary Lime	Owned	Cummins	CD300	Prior to June 12, 2006; Existing RICE	228	diesel	CI	Non-Emergency	Limit CO to 230 ppmvd or less at 15% O_2 [40 CFR 63 Subpart ZZZZ Table 2c]	N/A	Conduct Initial Testing per Table 4 to Subpart ZZZZ(40CFR63.6612)	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]
Orange Pump	Owned	Caterpillar	C-9	2005	275	diesel	CI	Non-Emergency	Limit CO to 230 ppmvd or less at 15% O_2 [40 CFR 63 Subpart ZZZZ Table 2c]	N/A	Conduct Initial Testing per Table 4 to Subpart ZZZZ(40CFR63.6612)	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]
Side of hill pump	Rental	Deutz	FAL914	Prior to June 12, 2006; Existing RICE	75	diesel	CI	Non-Emergency	Limit CO to 230 ppmvd or less at 15% O [40 CFR 63 Subpart ZZZZ Table 2c]	N/A	Conduct Initial Testing per Table 4 to Subpart ZZZZ(40CFR63.6612)	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]
Outside plant pump	Rental	Deutz	FAL914	2005	75	diesel	CI	Non-Emergency	Limit CO to 230 ppmvd or less at 15% O [40 CFR 63 Subpart ZZZZ Table 2c]	N/A	Conduct Initial Testing per Table 4 to Subpart ZZZZ(40CFR63.6612)	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]

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)