COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM
NORTHWEST REGION

TITLE V OPERATING PERMIT

AK STEEL CORPORATION – BUTLER WORKS
PERMIT #10-00001

Re-Issuance Effective: September 4, 2013

Based upon Pennsylvania's Operating Permit Program
25 Pa. Code Chapter 127
Effective November 25, 1994

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection
September 4, 2013
814/332-6940
Fax: 814/332-6117

SUBJECT: Re-Issuance of Title V Permit
AK Steel Corporation – Butler Works
Butler Township, Butler County

TO: TV 10-00001 Auth. ID: 805258 Site ID: 462685 PF ID: 549775

FROM: Jeffrey D. Fuller
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Air Quality Program
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Introduction-

This memo deals with the re-issuance of the Title V Permit for AK Steel Corporation – Butler Works. This facility produces flat rolled electrical and stainless steels, as well as semi-finished stainless slabs.

This operating permit was originally prepared for re-issuance in 2010 but was put on hold pending the resolution of an appeal of Plan Approval Number 10-001M. That plan approval was for the upgrades to the Melt Shop which included the installation of Electric Arc Furnace 5 and removal of Electric Arc Furnace 3 and Electric Arc Furnace 4. Even though the appeal of Plan Approval 10-001M (now referred to as Plan Approval 10-001O) has now been resolved, it will take two or three years for the terms and conditions from that plan approval to be satisfied to the point where they can be incorporated into the operating permit. For this reason, this re-issuance will not include the terms and conditions of Plan Approval Number 10-001O. The operation of Electric Arc Furnace 5 will continue to be authorized under Plan Approval Number 10-001O. Since Electric Arc Furnaces 3 & 4 (Source IDs: 103 & 104) have been removed from service, these source and all related conditions have been deleted from the operating permit.

Source Changes-

Removed Sources:

The following is a list of sources and control devices that have been removed from service at the facility and will not be reactivated. The associated stacks have also been eliminated.

Source ID: 031 – Boilers #15 (MTS)
Source ID: 032 – Boilers #13/14 (SS)

Source ID: 033 – Boiler #9 (MP)
Source ID: 035 – Boiler #11 (MP)
Source ID: 016 – #2 Pickle Line
Source ID: 103 – Electric Arc Furnace 3
Source ID: 104 – Electric Arc Furnace 4
Source ID: 121 – #43 Sendzimer Cold Mill
Source ID: 124 – #22 Pickle/Kolene Line
Source ID: 126 – #36 Temper Mill
Source ID: 142 – Vacuum Degas
Source ID: 147 – #6 Grinder
Source ID: 155 – Anneal Furnace 2
Source ID: 159 – Anneal Furnace 22
Source ID: C13 – #22 Pickle/Kolene Line Scrubber
Source ID: C30 – #43 Sendzimer Cold Mill Centrifugal Separator
Source ID: C31 – #6 C Grinder Demister

Renamed Sources:

The following is a list of sources, control devices, and emission points that are being renamed to more accurately identify the source.

Source ID	Old Name	New Name
132	Decarb Furnace 11	Preheat Furnace 11
134	Decarb Furnace 19	Preheat Furnace 19
304	Standby Generators (Natural Gas)	Standby Generators (Natural Gas/Propane)
S037A	Boiler 201A Stack	Boiler 21 Stack
S10	#19 Decarb Furnace Stack	#19 Preheat Furnace Stack
S18	#7 Anneal Furn Stack	#7 Anneal Furn Stacks
S23	CRNO LN Annl Furn Stack	CRNO LN Annl Furn Stacks

Other Permit Changes:

- The following sources have had their **Capacity/Throughput** adjusted to more accurately reflect the operations.

Source ID/Name	Old Throughput/Capacity	New Throughput/Capacity
037A – Boiler 21(HTP)	16.4 MMBtu/Hr	11.5 MMBtu/Hr
131 – Silicon Drying Furnace 6	13.0 MMBtu/Hr	9.95 MMBtu/Hr

- For **Source ID: 110 - #3 Tandem Cold Mill** the permittee has requested that the Capacity/Throughput listed in the permit be corrected from 60 Tons/Hour to 120 Tons/Hour. A review of Plan Approval Number 10-302-040A shows the source was permitted at an average rated capacity of 60 Tons/Hour and a maximum capacity of 120 Tons/Hour. Based on the plan approval capacities, the capacity listed in the operating permit is being corrected to 120 Tons/Hour.

- For **Source ID: 122 - #23 Pickle Line** there are extended periods of time when no pickling solution is used. The permittee has requested the authority to not operate the control device (C11- #23 Pickle Line Scrubber) when no pickling solution is used. Because the control device is used only for the control of acid fumes from the pickling operation, this request is being granted. The permittee shall maintain a log of when pickling operations are taking place.

- For **Source ID: 125 - #20 Carlite Acid Clean** there are extended periods of time when no acid cleaning takes place. The permittee has requested the authority to not operate the control device (C14- #20 Carlite Acid Fume Scrubber) when no acid based solution is used. Because the control device is used only for the control of acid fumes from the acid cleaning operation, this request is being granted. The permittee shall maintain a log of when acid cleaning operations are taking place.

- **Source ID: 130 – Decarb Furnace 6** had always been treated as a single source to simplify permitting. In reality, the equipment consists of a Perheat Furnace and a Decarb Furnace. When the Decarb Furnace underwent a burner upgrade, each of the more than two dozen burners wound up with a slight increase in Btu rating. The Preheat Furnace is rated at 9.0 MMBtu/Hr and the Decarb Furnace is now rated at 13.015MMBtu/Hr. If the furnaces continue to be permitted as a single source, the combined rated gross heat input would exceed the 20 MMBtu/Hr threshold and would no longer qualify for presumptive RACT. Since these furnaces are truly two different combustion sources, a separate **Source ID: 130A – Preheat Furnace 6** has been created. All of the standard requirements for process heaters have been attached to both sources.

- **Source ID: 136 – AOD Reactor** had an 18.6 MCF/Hr natural gas throughput listed in the Capacity/Throughput column. This natural gas was used for the preheating of the reactor prior to beginning the process. Since no natural gas is used in the AOD Reactor process, a new source has been created to account for the natural gas used in the preheating process. **Source ID: 136A – AOD Preheater** is now listed in the permit and has had the 18.6 MCF/Hr natural gas throughput attached. The standard requirements for process heaters have been listed for this source.

- The source map for **Source ID: 136 – AOD Reactor** has been adjusted to include **Z136 – Fugitive Emissions – Source 136.** While the vast majority of emissions are captured by the collection system and sent to the control devices, there is always the possibility that a small amount of particulate matter can bypass the system. In order to document this possibility, the permittee has requested that fugitive emissions be listed on the source map. These emissions are estimated to be well below 1% of the total effluent stream but the AIMS computer software will not allow any entries less than 1%. For this reason, 1% has been mapped as fugitive and 99% has been mapped as being collected and controlled. This approach is similar to that used in the recently issued plan approval for the Melt Shop upgrades.

- **Source IDs: 101, 102, and 103 – Electric Arc Furnaces 2, 3, and 4** each had a 36.0 MCF/Hr natural gas throughput listed in the Capacity/Throughput column. Since no natural gas is used in these melt furnaces, these throughputs have been removed.

- **Source ID: 304 – Standby Generators** has had propane listed as an additional fuel source. The throughput/Capacity of natural gas has also been adjusted from 99 MCF/Hr to 15 MCF/Hr. Since the SCC for propane usage requires that it be listed in gallons, the 15 MCF/Hr was converted to 419 gallons/hr using the conversion factor of 1 gallon of propane = 35.79 cubic feet of LPG.

- The designation of the exhaust stack for **Source ID: 158 – Anneal Furnace 12** has been changed from 457357 – Boiler 15 (MTS) to **S158 – Anneal Furnace 12 - Stack.**

- A source map for **Source ID: 160A – MGO Drying Furnace** has been created. It was not included in the previous permit.

- For Source ID: **037A – Boiler 21(HTP)** the permittee has discontinued the use of #2 fuel oil. Natural gas is now the only fuel used by this source. The elimination of #2 fuel oil allows sections of General Permit GP-1 to be removed. Sections of the NSPS – Subpart Dc have likewise been deleted from the permit.

The permittee had requested that the following requirement be removed from the recordkeeping requirements

for this source.

> "The permittee shall maintain daily fuel consumption records of the amounts of each fuel combusted during each day."

The fuel monitoring for **Source ID: 037A – Boiler 21 (HTP)** has been updated to match the requirements of 40 CFR 60.48c(g). The recordkeeping requirement from GP-1, Section 16(c), specify that "The permittee shall maintain daily fuel consumption records in accordance with 40 CFR §60.48c(g)." The following language from that subsection allows for monthly rather than daily recordkeeping.

> (g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.
>
> (2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO_2 standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

- The source map for **Source ID: 102 – Electric Arc Furnace 2** has been updated. The permittee has requested that fugitive emissions be accounted for in addition to the emissions controlled by the existing baghouses. Upon consultation with NSR permit Engineer, Cary Cooper, the source map has been changed to indicate 97% of the exhaust stream is directed to C01B - #3 Baghouse, 2% is directed to C17 - #1 & #2 Baghouse (the actual volume is 1.8% but the AIMS system rounds to the nearest percentage), and 1% is lost as fugitive emissions (Z102).

- The source map for **Source ID: 149 – Argon Stirring Station (East)** has been updated. The permittee has requested that fugitive emissions be accounted for in addition to the emissions controlled by the existing baghouse. Upon consultation with NSR permit Engineer, Cary Cooper, the source map has been changed to indicate 99% of the exhaust stream is directed to C01B - #3 Baghouse and 1% is lost as fugitive emissions (Z149).

- The source map for **Source ID: 247 – Ladle Preheater 1** has been updated. The permittee has requested that fugitive emissions be accounted for in addition to the emissions controlled by the existing baghouse. Upon consultation with NSR permit Engineer, Cary Cooper, the source map has been changed to indicate 99% of the exhaust stream is directed to C17 - #1 & 2 Baghouse and 1% is lost as fugitive emissions (Z247).

- The source map for **Source ID: 248 – Ladle Preheater 2** has been updated. The permittee has requested that fugitive emissions be accounted for in addition to the emissions controlled by the existing baghouse. Upon consultation with NSR permit Engineer, Cary Cooper, the source map has been changed to indicate 99% of the exhaust stream is directed to C17 - #1 & 2 Baghouse and 1% is lost as fugitive emissions (Z248).

- The source map for **Source ID: 249 – Ladle Preheater 3** has been updated. The permittee has requested that fugitive emissions be accounted for in addition to the emissions controlled by the existing baghouse. Upon consultation with NSR permit Engineer, Cary Cooper, the source map has been changed to indicate 99% of the exhaust stream is directed to C17 - #1 & 2 Baghouse and 1% is lost as fugitive emissions (Z249).

- The source map for **Source ID: 250 – Ladle Preheater 4** has been updated. The permittee has requested that fugitive emissions be accounted for in addition to the emissions controlled by the existing baghouse. Upon

consultation with NSR permit Engineer, Cary Cooper, the source map has been changed to indicate 99% of the exhaust stream is directed to C17 - #1 & 2 Baghouse and 1% is lost as fugitive emissions (Z250).

- The source map for **Source ID: 251 – Ladle Preheater 5** has been updated. The permittee has requested that fugitive emissions be accounted for in addition to the emissions controlled by the existing baghouse. Upon consultation with NSR permit Engineer, Cary Cooper, the source map has been changed to indicate 99% of the exhaust stream is directed to C17 - #1 & 2 Baghouse and 1% is lost as fugitive emissions (Z251).

- The source map for **Source ID: 252 – Ladle Preheater 6** has been updated. The permittee has requested that fugitive emissions be accounted for in addition to the emissions controlled by the existing baghouse. Upon consultation with NSR permit Engineer, Cary Cooper, the source map has been changed to indicate 99% of the exhaust stream is directed to C17 - #1 & 2 Baghouse and 1% is lost as fugitive emissions (Z252).

- An AOD Vessel Heater has been added to **Source ID: 303 – Misc. Process Heaters.** This oxy-fuel heater is used to keep the on-line AOD vessel warm during extended periods of time when the AOD is not processing steel. Authorization for this heater was granted via an RFD dated May 29, 2009. The 9.1 MCF/hour natural gas usage for this heater has been added to the Capacity/Throughput for Source ID: 303, bring the total to 81.8 MCF/hour.

- **Source ID: 320 – West End Hopper House** has been added to the source list. In a revised AIMS statement, the permittee has reported emissions of greater than one half ton from this source. For this reason, this operation has been deleted from the list of trivial activities listed in "Section G" and is now a listed source in the operating permit.

- In the previous versions of this permit, Cooling Towers were listed in Section G as sources of minor significance. During this review, it was determined that the existing Cooling Towers were contributing approximately 24.2 tons per year of particulate matter to the atmosphere. A new **Source ID: 325 – Existing Cooling Towers (11)** has been created to account for the emissions from these cooling towers. Nine (9) of the cooling towers are non-contact and use some form of heat exchangers to remove heat from the processes. Two (2) of the cooling towers are treating process contact water. The cooling towers for the Continuous Casters and the Hot Mill handle process contact water that has been treated and clarified before reaching the cooling towers.

  Water for the cooling towers is supplied by the municipal water supply and the Connoquenessing Creek intake. The majority of the particulate matter emitted by the cooling towers is received in the supply water in the form of dissolved and suspended solids. The standard requirements for particulate matter emissions from a process have been attached to this source.

- The **Steel Ladle Slag Skimming Station** approved via an RFD dated January 4, 2009, has been added to the permit as **Source ID: 351.** Emissions from this operation are captured and controlled by the existing **#1 & 2 Baghouse (C17).** The standard requirements for particulate matter emissions from a process have been attached to this source.

- **Source ID: 353 – Alloy Handling Bins** has been added to the source list. In a revised AIMS statement, the permittee has reported emissions of greater than one half ton from this source. For this reason, this operation has been deleted from the list of trivial activities listed in "Section G" and is now a listed source in the operating permit. When the Melt Shop modernization project is completed, new dump stations will be used but the permittee intends to retain the existing Alloy Handling Bins in the event that there is a major problem at one of the new dump stations that would make it unusable.

- **Source ID: 354 - Slag Handling** has been added to the source list. In a revised AIMS statement, the permittee has reported emissions of greater than one half ton from this source. For this reason, this operation has been

deleted from the list of trivial activities listed in "Section G" and is now a listed source in the operating permit.

- For **Source ID: 102 – Electric Arc Furnace 2** the permittee has indicated that the CAM Plan listed in the permit should apply only to Baghouse #3 (C01B). After review, it appears that the listed CAM Plan does most accurately apply to Baghouse #3 (C01B) rather than both control devices associated with this source. The question then becomes, are the limited emissions directed to Baghouse #1 & 2 (C17) sufficient to make this control device subject to a CAM Plan when only this source is operated.

  Based on the estimated pre-control emissions of 25 pounds of PM-10 per ton of steel produced and the throughput limit of 400,000 tons of steel production per 12-month period, the total potential pre-control emissions of PM-10 are 5000 tons per year. With 5% of the exhaust from Source ID: 102 directed to Baghouse #1 & 2 (C17), that means that the potential pre-control emissions going to this control device are 5% of 5000 or 250 tons per year. Based on this, there is no doubt that CAM will apply to both control devices. For this reason, the CAM Plan for Baghouse #1 & 2 (C17) is now included for this source.

- For the CAM Plans associated with Baghouse #1 & 2 (C17) and Baghouse #3 (C01B) the permittee has requested that observations for visible emissions only be required when the associated source is operated during daylight hours. This request is being granted based on conversations with NSR permit Engineer, Cary Cooper.

- For the CAM Plans associated with Baghouse #1 & 2 (C17) and Baghouse #3 (C01B) the permittee has requested that inlet pressure be maintained within the parameter range only when the associated source is in operation. This request is being granted.

- For the CAM Plans associated with Baghouse #1 & 2 (C17) and Baghouse #3 (C01B) the permittee has requested a change in the QA/QC requirement; "The pressure transducer is to be replaced with a calibrated or certified unit annually." The requirement now reads; "The pressure transducer is to be calibrated or replaced with a certified unit annually."

- For the CAM Plan associated with Baghouse #1 & 2 (C17) and Baghouse #3 (C01B) the permittee has requested a change in the QA/QC requirement; "Operators are to be trained for Reference Method 22." The requirement now reads; "Operators or qualified personnel are to be trained for Reference Method 22."

- For the CAM Plan associated with Baghouse #1 & 2 (C17) and Baghouse #3 (C01B) the permittee has requested a change in the QA/QC requirement; "Pressure taps are to be checked monthly for plugging, during outages." The requirement now reads; "Pressure taps are to be checked monthly for plugging."

- The permittee has requested that the exceptions granted by 25 Pa. Code 123.42 be included for the visible emission monitoring contained in the CAM Plans for Baghouse #1 & 2 (C17) and Baghouse #3 (C01B). The CAM monitoring language has been appended to include these exceptions.

- The monitoring requirement from Plan Approval Number 10-001B, Condition #12, states that "The company shall install and maintain at a conveniently readable location a magnehelic gauge or equivalent to indicate the pressure drop across the control device." The permittee has requested that the condition specify that it only applies to Baghouse #3 (C01B). Because Plan Approval Number 10-001B dealt with emissions ducted to Baghouse #3, this is a valid request. The monitoring requirement for the three Electric Arc Furnaces has been appended to include this specification.

- The recordkeeping requirement from Plan Approval Number 10-001B, Condition #13, states that "The company shall record, daily, the pressure drop across the control device." The permittee has requested that the condition specify that it only applies to Baghouse #3 (C01B). Because Plan Approval Number 10-001B dealt with emissions ducted to Baghouse #3, this is a valid request. The recordkeeping requirement for the three

Electric Arc Furnaces has been appended to include this specification.

- The recordkeeping requirement from Plan Approval Number 10-001B, Condition #14, states that "The company shall maintain a log of all preventative maintenance inspections of the control device." The permittee has requested that the condition specify that it only applies to Baghouse #3 (C01B). Because Plan Approval Number 10-001B dealt with emissions ducted to Baghouse #3, this is a valid request. The recordkeeping requirement for the three Electric Arc Furnaces has been appended to include this specification.

- For **Source ID: 110 - #3 Tandem Cold Mill** the permittee suggested including the requirement; "The control devices associated with this source are to be operated at all times the source is in operation." The suggested language has been added to the Work Practice Standards for the source.

- For **Source ID: 110 - #3 Tandem Cold Mill** the permittee requested that the daily, weekly and/or monthly monitoring be required only when the source has operated during that time span. This request has been granted and the conditions have been adjusted to reflect these changes.

- For **Source ID: 110 - #3 Tandem Cold Mill** the CAM Plan had required the pressure reading "be measured at the inlet of the control device". In this case, the pressure drop readings are actually "measured across the control device". The language has been changed to correct this situation.

- For the CAM Plans associated with **Source ID: 110 - #3 Tandem Cold Mill** the permittee has requested a change in the QA/QC requirement; "The pressure gauges is to be replaced with a calibrated or certified unit annually." The requirement now reads; "The pressure gauges are to be calibrated or replaced with certified units annually."

- For **Source ID: 118 - #4 Pickle Line** the permittee requested that the weekly monitoring and recordkeeping of the pressure drop across and the fluid flow rate through the control device be required only when the source has operated during that time span. This request has been granted and the conditions have been adjusted to reflect these changes.

- For **Source ID: 119 - #7 Pickle Line** the permittee requested that the weekly monitoring and recordkeeping of the pressure drop across and the fluid flow rate through the control device be required only when the source has operated during that time span. This request has been granted and the conditions have been adjusted to reflect these changes.

- The NOx emissions testing requirements for **Source ID: 122 - #23 Pickle Line** have been removed from the permit. The facility discontinued use of nitric acid in their pickling operations in 2002. On August 29, 2002, the Department waived the requirement for annual NOx emission testing. The reporting requirements associated with the testing have also been removed from the permit. The following work practice restriction has been added to the permit. "No nitric acid is to be used in the pickling operations at this facility."

- For **Source ID: 122 - #23 Pickle Line** the permittee requested that the weekly monitoring and recordkeeping of the pressure drop across and the fluid flow rate through the control device be required only when the source has operated during that time span. This request has been granted and the conditions have been adjusted to reflect these changes.

- For **Source ID: 123E – Shotblast 23 East** the permittee requested that the weekly monitoring and recordkeeping of the pressure drop across the control device be required only when the source has operated during that time span. This request has been granted and the conditions have been adjusted to reflect these changes.

- For **Source ID: 123W – Shotblast 23 West** the permittee requested that the weekly monitoring and recordkeeping of the pressure drop across the control device be required only when the source has operated during that time span. This request has been granted and the conditions have been adjusted to reflect these changes.

- For **Source ID: 125 – #20 Carlite Acid Clean** the permittee requested that the weekly monitoring and recordkeeping of the pressure drop across the control device be required only when the source has operated during that time span. This request has been granted and the conditions have been adjusted to reflect these changes.

- For **Source ID: 127 – #26 Carlite Acid Clean** the permittee requested that the weekly monitoring and recordkeeping of the pressure drop across the control device be required only when the source has operated during that time span. This request has been granted and the conditions have been adjusted to reflect these changes.

- For **Source ID: 136 – AOD Reactor** the CAM Plan requirements have been adjusted to indicate that the monitoring and recordkeeping requirements apply only when the associated source is operated.

- For the CAM Plan associated with **Source ID: 136 – AOD Reactor,** Baghouse #1 & 2 (C17) the permittee has requested that observations for visible emissions only be required when the associated source is operated during daylight hours. This request is being granted based on conversations with NSR permit Engineer, Cary Cooper.

- For **Source IDs: 140 and 141 - #2 Continuous Caster and #3 Continuous Caster,** the previous version of the permit listed the CAM requirements that apply to Baghouse #3 (C01B). While it is true that the #3 Baghouse is subject to the enhanced monitoring requirements of CAM, that determination is based on emissions generated by other sources in the melt shop (EAF's #2, #3, and #4, and the AOD). The combined total potential particulate matter emissions from the Continuous Casters is estimated to be 72.133 tons per year. Since the potential pre-control emissions are well below the 250 ton per year threshold, CAM does not apply to these sources. For that reason the CAM requirements have been removed for these sources. This will have no effect on the CAM requirements for the #3 Baghouse. It continues to be subject to the CAM requirements attached to the Electric Arc Furnaces and the AOD Reactor.

- In Section G. Miscellaneous, Paragraph b), the incorrect reference to Source ID: 101 has been changed to Source ID: 305 – Standby Generators/Pumps (Diesel).

- In Section G, the composition and horsepower ratings of the diesel engines used for the three (3) emergency water pumps and one (1) emergency power generator included in **Source ID: 305** has changed as follows.

  1. The Sawmill Run Pump House has a confirmed horsepower rating of 472 rather than 600.
  2. The Hilltop Mill Water Supply has a confirmed horsepower rating of 120 rather than 300.
  3. The #17 Cooling Tower has a confirmed horsepower rating of 310 rather than 275.
  4. The permittee has identified a fourth diesel engine to be included in this source. An 830 horsepower diesel engine is used for emergency power generation at the Wastewater Treatment Plant. This engine was installed in 1996 when the treatment plant was constructed but has never been included in the operating permit.

  Each of these engines is used only when there is an interruption of the power supply grid and on a periodic basis to confirm operational status. In order to assure qualification for presumptive RACT status, a condition is being added to this source which limits operation of each engine to no more than 500 hours per 12-month rolling period. A log of the hours of operation will be maintained for each diesel engine.

- In Section G, a note has been added for Source ID: 304 – Standby Generators (Natural Gas/Propane) that identifies approximately 28 units at various locations plant-wide, each rated at 100 HP or less.

- In Section G. Miscellaneous, Paragraph e) listing emission factors has been deleted. Source ID:124 - #22 Pickle Line has been removed from service and has been taken out of the permit.

- In Section G. Miscellaneous, Paragraph f), the following activities/equipment have been removed from the list of sources for which there minor emissions and no applicable emission limits, testing, monitoring, recordkeeping or reporting requirements:

  5. Above Ground Storage Tanks
     n) Oil (STP #6 C-Grinder) (28,000 gallons)
     p) Oil (#43 Z Mill @ STP) (6500 gallons)
     x) Hydrofluoric Acid (Stain Processing) (11,000 gallons)
     y) Sulfuric Acid (Stain Processing) (10,000 gallons)
     pp) #43 Z Mill Basement Oil Storage
  7. Wastewater Treatment (Stainless Plant)

- In Section G. Miscellaneous, Paragraph f), five (5) tanks have been added as item 5., ss) Indoor Open Top Carlite Mix Tanks. These tanks have been in existence for years but were not accounted for in the previous versions of the operating permit. Two of the tanks are associated with the #20 Carlite Acid Clean (Source ID: 125) and three are associated with the #26 Carlite Acid Clean (Source ID: 127). The combined total CrO3 emissions from these tanks, due to evaporation losses, are estimated to be 15.19 pounds per year.

- In Section G. Miscellaneous, I have removed the references to the #22 Pickle Line, since the source has been removed.

- In Section G. Miscellaneous, I have removed the references to the #2 AP Pickle Line, since the source has been removed.

Administrative Amendment to Change Responsible Official

The Responsible Official for this facility has changed from Keith J. Howell to Mark Gordon. His title is General Manager of Operations.

Minor Modification Changes approved on January 28, 2013

The NOx and CO stack testing interval for **Source ID: 039 – Main Plant Boiler #22** has been changed from annually to every five (5) years.

For **Source ID: 037A – Boiler 21 (HTP)** the following changes have been made.

- The fuel throughput has been corrected to 11.5 mcf/hr.

- References to #2 fuel oil have been removed since this source uses only natural gas as a fuel source.

Administrative Amendment Changes From Plan Approval Number 10-001L:

Plan Approval Number 10-001L authorized the installation of a new high-efficiency natural gas-fired boiler. The new unit, Source ID: 039 – Main Plant Boiler #22, has a maximum firing capacity of 60 million Btu/hr. The prescribed initial stack testing requirements have been met. The initial operating inspection was performed by Cary Cooper and Larry Vogel on September 9, 2009. No problems were noted during that inspection. With the exception of the requirement for initial testing, all of the source level requirements from this plan approval have been incorporated into the operating permit.

40 CFR 63 – Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

There are several internal combustion engines at this facility that are subject to the requirements of Subpart ZZZZ. Because the HAP emissions from this facility are above the major source levels, the requirements for major sources rather than area sources are applicable. All of the RICE sources were installed prior to June 12, 2006, and are thus classified as existing. The RICE sources at this facility are divided into three categories.

Source ID: 304 - Standby Generators (Natural Gas/Propane) consists of approximately 28 units at various locations plant-wide, each rated at 100 HP or less. These engines are classified as spark ignition (SI) engines.

Source ID: 305 - Standby Generators (Diesel) <500 HP covers the following compression ignition (CI) engines and includes the following equipment.

1. Sawmill Run Pump House (472 horsepower diesel pump)
2. Hilltop Mill Water Supply (120 horsepower diesel pump)
3. #17 Cooling Tower (310 horsepower diesel pump)

Source ID: 305B - Standby Generators (Diesel) >500 HP covers the large compression ignition (CI) engine and includes the following equipment.

Wastewater Treatment Plant (830 horsepower diesel generator)

The RICE rule requirements for each source have been applied as follows.

For Source ID: 304 – Standby Generators (Natural Gas/Propane)

The language from **40 CFR 63.6580 – "What is the purpose of subpart ZZZZ"** applies to this source and has been placed under "Additional Requirements" for the source.

The language from **40 CFR 63.6585 – "Am I subject to this subpart"** applies to this source and has been placed under "Additional Requirements" for the source.

The language from **40 CFR 63.6590 – "What parts of my plant does this subpart cover"** applies to this source and has been placed under "Additional Requirements" for the source.

The language from **40 CFR 63.6595 – "When do I have to comply with this subpart"** applies to the source and has been placed under "Additional Requirements". Because the engines are existing, use

spark ignition, and are located at an area source of HAP emissions, the compliance date for Subpart ZZZZ will be October 19, 2013.

The language from **40 CFR 63.6600 – "What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?"** applies only to engines rated at greater than 500 HP and is not applicable to this source.

The language from **40 CFR 63.6601 – "What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?"** applies only to 4SLB RICE source and is not applicable to this source.

The language from **40 CFR 63.6602 – "What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?**

These engines must meet the maintenance requirements outlined in Table 2C (paragraph 6) of Subpart ZZZZ. This includes oil and filter changes every 500 hours of operation or annually, whichever comes first, unless the permittee elects to utilize an oil analysis program in order to extend the specified oil change requirements. The spark plugs are to be inspected every 1000 hours of operation or annually whichever comes first. All hoses and belts are required to be inspected every 500 hours of operation or annually whichever comes first and replaced as necessary. These maintenance requirements have been attached under "Work Practice Standards".

Based on 40 CFR 63.6645(a)(5), since there are no numeric emissions standards for these engines, the notification requirements listed in 63.6645(a) do not apply.

In order to maintain their classification as emergency stationary reciprocating internal combustion engines, the following requirements from 40 CFR 63.6640(f)(1)-(4) must be met at all times. These requirements have been added as restrictions to the operation time for these engines.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in nonemergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by

paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) [Does not apply]

The language from **40 CFR 63.6603 – "What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?"** is not applicable since this facility is a major source of HAP emission.

The requirements of **40 CFR 63.6604** relate to CI (compression ignition) engines. Since these engines does not use compression ignition, this subsection does not apply.

40 CFR 63.6605 addresses general requirements for complying with Subpart ZZZZ. These general requirements have been attached to the "Work Practice Requirements" for the RICE source.

40 CFR 63.6610 and 63.6611 relate to source testing of engines located at major sources of HAP emissions. Since these sources are not subject to any source testing requirements, these subsections do not apply.

40 CFR 63.6612 addresses by what date the initial performance tests or other initial compliance demonstrations must be met. Because this RICE source does not have an actual emission limit from this subpart, this section does not apply.

40 CFR 63.6615 references Table 3 of Subpart ZZZZ and stipulates when subsequent performance tests must be performed. Since no stack testing is required for this RICE source, this section does not apply.

40 CFR 63.6620 spells out what performance tests and other procedures must be used. These requirements do not apply to the RICE sources at this facility.

40 CFR 63.6625 deals with the monitoring system requirements and has been broken down as follows.

Paragraph (a) lists the requirements for continuous emissions monitoring systems (CEMS). Since this engine does not require this type of monitoring system, this section does not apply.

Paragraph (b) gives the requirements for a continuous parameter monitoring system (CPMS). Since this engine does not require this type of monitoring system, this section does not apply.

Paragraph (c) has been omitted since it only applies to engines that are fueled by landfill gas or digester gas.

Paragraph (d) only applies to engines between 250 and 500 HP, located at a major source of HAP emissions. Since this source consists only of engines rated at less than 100 HP, this subsection does not apply.

Paragraph (e) deals with operation and maintenance plans for select engines. The RICE sources at this facility fall under the listed types of engines subject to this section.

Paragraph (f) requires the installation of a non-resettable hour meter on each emergency RICE if one is not already installed. This requirement applies to Source ID: 304.

Paragraph (g) deals with compression ignition (CI) engines only and has been omitted.

Paragraph (h) stipulates the time limits for engine startups. This restriction applies to the RICE source at this facility.

Paragraph (i) deals with compression ignition (CI) engines only and has been omitted.

Paragraph (j) allows for an engine oil analysis as an alternative to the oil change requirements contained in Table 2c. This option applies to the RICE sources and has been included in the "Monitoring Requirements" for this source.

40 CFR 63.6630 deals with demonstrating initial compliance with the emission limitations and operating limitations.

Paragraph (a) refers to the emission and operating limitations contained in Table 5 of Subpart ZZZZ. Since the RICE source at this facility does not have any of the requirements listed in Table 5, this section does not apply.

Paragraph (b) refers to Tables 1b and 2b of Subpart ZZZZ. These tables deal with operating limitations for engines that are required to have catalytic emission control devices. The RICE sources at this facility are not subject to this section.

40 CFR 63.6635 deals with data collection for monitoring systems. Since these engines do not require this type of monitoring system, this section does not apply.

40 CFR 63.6640 deals with demonstrating continuous compliance with emission limitations, operating limitations and other requirements. These requirements have been applied to this RICE source as follows.

Paragraph (a) specifies the methods used to demonstrate compliance with emission limitations, operating limitations, and other requirements by referring to Table 6 of Subpart ZZZZ.

Section 9 of Table 6 applies to existing emergency stationary engines located at a major source. The following language from section 9 of Table 6 has been added to the "Work Practice Requirements" section for this RICE source.

> 9. Existing emergency and black start stationary RICE sources less than 500 HP, located at a major source of HAP complying with work or Management practices must demonstrate continuous compliance by performing the following.
>
> > i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
> >
> > ii. 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.

The first part of paragraph (b) from 40 CFR 63.6640 specifies the reporting requirements for deviations from emission limitations or operating limitations contained in Table 2d. These requirements apply to the RICE source and have been added to the reporting requirements for the source.

The second part of paragraph (b) from 40 CFR 63.6640 deals with re-establishing the operating parameters for a control device if the catalyst is changed. Since these engines do not require this type of monitoring system, this section does not apply.

Paragraph (c) applies only to non-emergency engines and has been omitted from the operating permit.

Paragraph (d) deals with new, reconstructed, and rebuilt stationary RICE sources and has been excluded from this permit since these engines are existing.

Paragraph (e) states that "You must also report each instance in which you did not meet the requirements in Table 8 of this subpart that apply to you". Table 8 lists the "Applicability of General Provisions to Subpart ZZZZ". This condition has been added to the "Reporting Requirements" for this RICE source.

Paragraph (f) lists the operating limitations for an emergency stationary RICE. These limits have been attached to the "Restrictions" section for Source ID: 304.

40 CFR 63.6645 identifies what notifications must be submitted and when. The following is an explanation of how this subsection was applied to this RICE source.

Paragraph (a) refers to the testing and CEM notifications contained in 40 CFR 63.7 and 40 CFR 63.8. Because the RICE source is not required to use stack testing or a CEM system to demonstrate compliance, the notices from 40 CFR 63.7 and 63.8 do not apply to this source.

Paragraphs (b) through (f) apply to large (>500 HP) RICE sources at a major source of HAP emissions. Since this source consists of small (<100 HP) engines, none of these paragraphs are applicable.

Paragraph (g) identifies when a Notification of Intent to conduct a performance test must be submitted. Because the RICE source is not required to use stack testing to demonstrate compliance, this requirement does not apply.

Paragraph (h) refers to 40 CFR 63.9(h)(2)(ii) which deals with the Notification of Compliance Status report. This requirement is only applicable to RICE sources that must demonstrate compliance as specified in Tables 4 and 5 of Subpart ZZZZ. Since this RICE source is not subject to the emissions restrictions contained in those tables, this section does not apply.

Paragraph (i) deals with non-emergency CI engines and is not applicable.

40 CFR 63.6650 identifies what reports must be submitted and when. This section refers to Table 7 of Subpart ZZZZ for applicability. This RICE source is not subject to the reporting requirements from Table 7. Paragraph (h) is not applicable since this source is used only for onsite energy generation.

40 CFR 63.6655 identifies what records must be kept. The following is an explanation of how this subsection was applied to the RICE sources at this facility.

Paragraph (a) applies to sources that are subject to emission or operating limitations. These requirements apply to the RICE source at this facility.

Paragraph (b) applies to sources required to install a CEMS or CPMS. These requirements do not apply to this RICE source.

Paragraph (c) is only applicable to RICE sources that combust landfill gas or digester gas and has been omitted.

Paragraph (d) identifies records in Table 6 that must be kept to demonstrate continuous compliance with each emission of operating limitation. These requirements apply to the RICE source at this facility.

Paragraph (e) identifies the maintenance records that must be maintained for each RICE source. This paragraph applies to this RICE source since periodic maintenance is required to be performed on the engine.

Paragraph (f) requires records of the hours of operation and purpose of operation for an emergency stationary RICE. This paragraph applies to Source ID: 304.

40 CFR 63.6660 specifies in what form and for how long records must be kept. This section has been added to this RICE source.

40 CFR 63.6665 identifies what parts of the general provisions apply to the RICE sources. Table 8 shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply and are included by reference only.

40 CFR 63.6670 specifies who implements and enforces Subpart ZZZZ. This section has been added to the source under "Additional Requirements".

40 CFR 63.6675 provides definitions that apply to Subpart ZZZZ. These definitions are included by reference.

For Source ID: 305 - Standby Generators (Diesel) <500 HP

As compression ignition engines which are used only for emergency power and periodic operational checks, there are limited requirements from Subpart ZZZZ that apply.

The language from **40 CFR 63.6580 – "What is the purpose of subpart ZZZZ"** applies to these engines and has been listed under "Additional Requirements" for the source.

The language from **40 CFR 63.6585 – "Am I subject to this subpart"** applies to these engines and has been listed under "Additional Requirements" for the source.

The language from **40 CFR 63.6590 – "What parts of my plant does this subpart cover"** applies to these engines and has been listed under "Additional Requirements" for the source.

The language from **40 CFR 63.6595 – "When do I have to comply with this subpart"** applies to these engines and has been listed under "Additional Requirements" for the source.

40 CFR 63.6600 applies only to large engines (>500 HP) located at a major source of HAP emissions. Since this source consists on engines rated at <500 HP, this section does not apply.

40 CFR 63.6601 applies only to new and reconstructed 4SLB stationary RICE sources. Because this source includes existing compression ignition engines, this section does not apply.

40 CFR 63.6602 – "What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?" is applicable to the engines associated with this source. This subsection specifies that this source must comply with the requirements of Table 2c to this subpart that apply to you. Based on Paragraph (1) of Table 2c, in Subpart ZZZZ, these compression ignition (CI) engines must be maintained according to the following.

Oil and filter changes every 500 hours of operation or annually, whichever comes first, unless the permittee elects to utilize an oil analysis program in order to extend the specified oil change requirements. The air cleaner is to be inspected every 1000 hours of operation or annually, whichever comes first. All hoses and belts are required to be inspected and replaced as necessary every 500 hours of operation or annually whichever comes first. These maintenance requirements have been attached to Source ID: 305 under "Work Practice Requirements".

Based on 40 CFR 63.6645(a)(5), since there are no numeric emissions standards for these engines, the notification requirements listed in 63.6645(a) do not apply and the paragraph preceding 63.6603(a) was likewise not included in the permit.

In order to maintain the classification as emergency stationary RICE sources, the following requirements from 40 CFR 63.6640(f) have been attached to this source.

(f) Requirements for emergency stationary RICE.

(1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 HP located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.

(i) There is no time limit on the use of emergency stationary RICE in emergency situations.

(ii) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.

(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.

40 CFR 63.6603 – "What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions" is not applicable since this facility is a major source.

The requirements of **40 CFR 63.6604** relate to existing non-emergency CI (compression ignition) engines with a site rating of more than 300 HP. Since these engines are for emergency use, this subsection does not apply.

40 CFR 63.6605 addresses general requirements for complying with Subpart ZZZZ. These general requirements have been attached to the "Work Practice Requirements" for this source.

40 CFR 63.6610 applies to RICE engines located at a major source of HAP emissions that are required to perform stack testing. Since this source is not required to perform any stack testing, this subsection does not apply.

40 CFR 63.6611 relate to 4SLB spark ignition engines located at major sources of HAP emissions. Since these engines use compression ignition, this subsection does not apply.

40 CFR 63.6612 addresses by what date the initial performance tests or other initial compliance demonstrations must be met. Because there are no actual emission limits, this section does not apply to this source.

40 CFR 63.6615 references Table 3 of Subpart ZZZZ and stipulates when subsequent performance tests must be performed. This section does not apply since there are no testing requirements for this source.

40 CFR 63.6620 spells out what performance tests and other procedures must be used. This section does not apply since there are no testing requirements for this source.

40 CFR 63.6625 deals with the monitoring system requirements and has been broken down as follows.

Paragraph (a) lists the requirements for continuous emissions monitoring systems (CEMS). Since these engines do not require this type of monitoring system, this section does not apply.

Paragraph (b) gives the requirements for a continuous parameter monitoring system (CPMS). Since these engines do not require this type of monitoring system, this section does not apply.

Paragraph (c) has been omitted since it only applies to engines that are fueled by landfill gas or digester gas.

Paragraph (d) only applies to 4SLB engines and has been excluded.

Paragraph (e) deals with operation and maintenance plans for select engines. This source falls under the listed types of engines subject to this section. The requirements of paragraph (e) have been included in the operating permit.

Paragraph (f) requires the installation of a non-resettable hour meter on each emergency RICE if one is not already installed. This requirement applies to each engine in this source.

Paragraph (g) deals with existing non-emergency compression ignition (CI) engines only and has been omitted.

Paragraph (h) stipulates the time limits for engine startups. This restriction applies to these RICE sources.

Paragraph (i) deals with compression ignition (CI) engines that are subject to the work, operation or management practices in items 1 or 2 of Table 2c of Subpart ZZZZ. This subsection provides for the option to utilize an engine oil analysis program in order to extend the frequency specified for changing the oil. This language has been included the "Monitoring Requirements" for this source.

Paragraph (j) allows for an engine oil analysis as an alternative to the oil change requirements for spark ignition engines and has been excluded.

40 CFR 63.6630 deals with demonstrating initial compliance with the emission limitations, operating limitations, and other requirements. Since this source has no numerical emission limitations from Subpart ZZZZ, paragraphs (a) and (b) are not applicable. Paragraph (c) deals with the Notification of Compliance Status report but based on an exclusion listed in 40 CFR 63.6645(a)(5), this section does not apply to this source. Paragraphs (d) and (e) apply to non-emergency engines and have been omitted form the operating permit.

40 CFR 63.6635 deals with data collection for monitoring systems. This section does not apply to this source.

40 CFR 63.6640 deals with demonstrating continuous compliance with emission limitations, operating limitations, and other requirements. These requirements have been applied to these RICE sources as follows.

Paragraph (a) specifies the methods used to demonstrate compliance with emission limitations, operating limitations, and other requirements by referring to Table 6 of Subpart ZZZZ.

Section 9 of Table 6 applies to existing emergency stationary engines located at an area source. The following language from section 9 of Table 6 has been added to the "Work Practice Requirements" section of this source.

> 9. Existing emergency and black start stationary RICE located at an area source of HAP, complying with work or Management practices, must demonstrate continuous compliance by performing the following.
>
> > i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
> >
> > ii. 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.

The first part of paragraph (b) from 40 CFR 63.6640 specifies the reporting requirements for deviations from emission limitations or operating limitations contained in Table 2c. These requirements apply to this RICE source and have been added to the reporting requirements for the source.

The second part of paragraph (b) from 40 CFR 63.6640 deals with re-establishing the operating parameters for a control device if the catalyst is changed. This requirement does not apply to this source.

Paragraph (c) applies only to non-emergency engines and has been omitted from the operating permit.

Paragraph (d) deals with new, reconstructed, and rebuilt stationary RICE sources and has been excluded from this permit since this is an existing engine.

Paragraph (e) states that "You must also report each instance in which you did not meet the requirements in Table 8 of this subpart that apply to you". Table 8 lists the "Applicability of

General Provisions to Subpart ZZZZ". This condition has been added to the "Reporting Requirements" for this RICE source.

Paragraph (f) lists the operating limitations for an emergency stationary RICE. These limits have been attached to the "Restrictions" section for this source.

40 CFR 63.6645 identifies what notifications must be submitted and when. The following is an explanation of how this subsection was applied to this RICE source.

Paragraph (a) refers to the testing and CEM notifications contained in 40 CFR 63.7, 40 CFR 63.8, and 40 CFR 63.9(b) through (e), and (g) and (h). Because this RICE source is not required to use a CEM to demonstrate compliance, the notices from 40 CFR 63.8 do not apply. Since there are no stack testing requirements, the notification requirements from 40 CFR 63.7 have been omitted. The requirements of 40 CFR 63.9(b) deal with Initial Notifications and are applicable to this source.

Paragraphs (b) and (c) apply to new and reconstructed RICE sources with a site rating of greater than 500 HP located at a major source of HAP emissions. Since these sources are existing, these paragraphs are not applicable.

Paragraph (d) requires submission of an Initial Notification if you start up your stationary RICE source with a site rating of less than 500 brake HP located at a major source of HAP emissions before the effective date of Subpart ZZZZ. This requirement has not been included in the operating permit.

Paragraph (e) applies to new and reconstructed stationary RICE sources and has been excluded.

Paragraph (f) discusses initial notification requirements for subject sources that are otherwise not affected by the requirements of this subpart. Since these engines are affected, this paragraph is not applicable.

Paragraph (g) identifies when a Notification of Intent to conduct a performance test must be submitted. This requirement is not applicable.

Paragraph (h) refers to 40 CFR 63.9(h)(2)(ii) which deals with the Notification of Compliance Status report. This requirement is only applicable to RICE sources that must demonstrate compliance as specified in Tables 4 and 5 of Subpart ZZZZ. Since this source is not subject to this type of compliance demonstration, this paragraph has been omitted.

40 CFR 63.6650 identifies what reports must be submitted and when. This section refers to Table 7 of Subpart ZZZZ for applicability. Table 7 excludes this type of source from these reporting requirements.

40 CFR 63.6655 identifies what records must be kept. The following is an explanation of how this subsection was applied to the RICE sources at this facility.

Paragraph (a) applies to sources that are subject to emission or operating limitations. These requirements do not apply since this source has no applicable emission limitations from this subpart.

Paragraph (b) applies to sources required to install a CEMS or CPMS. These requirements do not apply since this source has no CEMS of CPMS requirements.

Paragraph (c) is only applicable to RICE sources that combust landfill gas or digester gas and has been omitted.

Paragraph (d) identifies records in Table 6 that must be kept to demonstrate continuous compliance with each emission of operating limitation. These recordkeeping requirements do not apply to this source.

Paragraph (e) identifies the maintenance records that must be maintained for each RICE source. This paragraph applies since there are requirements to perform periodic maintenance on these engines.

Paragraph (f) requires records of the hours of operation and purpose of operation for an emergency stationary RICE. This paragraph applies to these engines.

40 CFR 63.6660 specifies in what form and for how long records must be kept. This section has been added to this RICE source.

40 CFR 63.6665 identifies what parts of the general provisions apply to the RICE sources. Table 8 shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply and are included by reference only.

40 CFR 63.6670 specifies who implements and enforces Subpart ZZZZ. This section has been added to the source under "Additional Requirements".

40 CFR 63.6675 provides definitions that apply to Subpart ZZZZ. This section has been added by reference to the source under "Additional Requirements".

For Source ID: 305B - Standby Generator (Diesel) >500 HP

This source consists of the following source: Wastewater Treatment Plant (830 horsepower diesel generator).

Based on the exclusion contained in 40 CFR 63.6590(b)(3), this "Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii)", does not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements. Because of this exclusion Subpart ZZZZ is not applicable to this source. The original emission restrictions from 25 Pa. Code 123.13 and 123.21 have been carried over to this newly segregated source.

40 CFR 63 – Subpart DDDDD, National Emissions Standards for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

There are several sources at this facility that will be subject to this newly promulgated regulation. In their initial notification for Subpart DDDDD, the permittee indicated that there are three large gas fired boilers and six process heaters that are subject to this NESHAP for Industrial Boilers and Process Heaters. The nine sources are:

Source ID	Source Name	Heat Input (MMBtu/hr)
034	Boiler 10 (MP)	65.0
037A	Boiler 21 (HTP)	11.5
039	Main Plant Boiler #22	60.0
128	Decarb Furnace 1	15.0
130	Decarb Furnace 6	20.8
148	CRNO Line Anneal Furnace	31.0
157	Anneal Furnace 7	33.0
160A	MGO Drying Furnace	17.0
162	Carlite Line Dry Furnace 26	32.0

All of the listed sources are fueled with natural gas and are rated at greater than 10 MMBtu/hour. Because natural gas is a "gas 1 fuel" there are no numeric emission limits that apply.

The remaining fuel consuming sources at this facility are direct fire process heaters. Based on the Subpart DDDDD definition of a "process heater", since the combustion gases of the direct fire process heaters come into direct contact with process materials, they are excluded from the requirements of this subpart.

The requirements from Subpart DDDDD have been added to the subject sources as follows.

The language from § 63.7480 **"What is the purpose of this subpart?"** is applicable and has been added to the permit under "Additional Requirements" in Section C. Placing the general conditions in Section C allows them to be printed only once in the operating permit.

The language from § 63.7485 **"Am I subject to this subpart?"** is applicable and has been added to the permit under "Additional Requirements" in Section C.

The language from § 63.7490 **"What is the affected source of this subpart?"** is applicable and has been added to the permit under "Additional Requirements" in Section C.

The language from § 63 .7491 **"Are any boilers or process heaters not subject to this subpart?"** is applicable and has been added to the permit under "Additional Requirements" in Section C.

The language from § 63 .7495 **"When do I have to comply with this subpart?"** is applicable and has been added to the permit under "Additional Requirements" in Section C.

The language from § 63 .7499 **"What are the subcategories of boilers and process heaters?"** is applicable and has been added to the permit under "Additional Requirements" in Section C.

The language from § 63.7500 **"What emission limitations, work practice standards, and operating limits must I meet?"** breaks down as follows.

Paragraphs (a)(1) through (3) specify the emission limits, work practice standards, and operating limits that must be met by referring to the Tables contained in Subpart DDDDD. An exclusion contained in Paragraph (e) states that "Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, or the operating limits in Table 4 to this subpart." Based on that exclusion, only the work practice standards contained in Table 3 are applicable to the subject sources. Table 3 contains the following applicable requirements based on the fact that none of the boilers or process heaters have a continuous oxygen trim system and all have a heat input capacity of greater than 10 million Btu per hour or greater.

If your unit is a new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of 10 million Btu per hour or greater, you must conduct a tune-up of the boiler or process heater annually as specified in § 63.7540. Units in either the Gas 1 or Metal Process Furnace subcategories will conduct this tune-up as a work practice for all regulated emissions under this subpart.

If your unit is an existing boiler or process heater located at a major source facility you must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in § 63.7575:

a. A visual inspection of the boiler or process heater system.

b. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.

c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.

d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.

e. A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified.

f. A list of cost-effective energy conservation measures that are within the facility's control.

g. A list of the energy savings potential of the energy conservation measures identified.

h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

Paragraph (b) allows for EPA to approve use of an alternative to the work practice standards in this section.

Paragraph (c) applies only to limited-use boilers and process heaters and has been excluded from the operating permit.

Paragraph (d) applies only to units that burn gas 2 (other) fuels and is not applicable.

The first parts of Paragraph (e) deal with units that are rated at less than 10 million Btu per hour and are not applicable. The final sentence provides the exclusions from the emission limits contained in Tables 1, 2, and 11 through 13 to this subpart, for these gas 1 fuel sources.

Paragraph (f) specifies that these standards apply at all times the affected unit is operating, except during periods of startup and shutdown during which time you must comply only with Table 3 to this subpart. As gas 1 fuel fired sources, that are only required to meet the requirements of Table 3, this paragraph has little significance but is included for completeness.

The language from **§ 63.7501 "Affirmative Defense for Violation of Emission Standards During a Malfunction"** does not apply since these sources are not subject to any emission standards.

The language from **§ 63.7505 "What are my general requirements for complying with this subpart?"** has been incorporated into the operating permit as follows.

Paragraph (a) states that "You must be in compliance with the emission limits, work practice standards, and operating limits in this subpart. These limits apply to you at all times the affected unit is operating except for the periods noted in § 63.7500(f). This paragraph has been included in the operating permit.

Paragraph (b) is [Reserved].

Paragraphs (c) and (d) deal with demonstrating compliance with emission limits and have been excluded from the operating permit since the subject sources have no new emission limits from Subpart DDDDD.

The language from **§ 63.7510 "What are my initial compliance requirements and by what date must I conduct them?"** has been incorporated into the operating permit as follows.

Paragraphs (a) through (d) deal with demonstrating compliance with emission limits and are not applicable to the subject sources.

Paragraph (e) deals with the timing of the initial compliance demonstrations, including the initial tune-up and the one-time energy assessment, and has been included in the operating permit.

Paragraphs (f) and (g) deal with new and reconstructed affected sources and is not applicable to these existing sources.

Paragraph (h) deals with sources that burn solid waste and is not applicable to the subject sources.

Paragraph (i) is only applicable to EGUs (Electric Utility Steam Generating Units) and has been excluded from the operating permit.

Paragraph (j) allows for a delay in the initial compliance demonstrations if the source is not in operation between the effective date of the rule and the compliance date. This paragraph has been added to the operating permit under each subject source.

The language from **§ 63.7515 "When must I conduct subsequent performance tests, fuel analyses, or tune-ups?"** has been applied to the operating permit as follows.

Paragraphs (a) through (c) deal with performance testing and are not applicable since none of the subject sources are required by Subpart DDDDD to conduct emission testing.

Paragraph (d) specifies the timing for each annual tune-up and has been included in the operating permit.

Paragraph (e) deals with fuel analysis requirements and has been excluded from the operating permit since this type of testing is not required for the subject sources.

Paragraph (f) deals with reporting the results of a performance test or fuel analysis. This paragraph has been excluded since this type of testing is not required for the subject sources.

Paragraph (g) allows for a delay in subsequent tune-ups if the source is not operating at the time it is due. This paragraph references § 63.7540(a)(13) which states that "If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup."

Paragraph (h) applies only to units that burn light liquid fuels and has been omitted from the operating permit.

Paragraph (i) applies only to sources that are required to have a CO CEMS and is not applicable to this group of sources.

The language from **§ 63.7520 "What stack tests and procedures must I use?"** is not applicable to any of the subject sources since performance testing is not required.

The language from **§ 63.7521 "What fuel analyses, fuel specification, and procedures must I use?"** is not applicable since solid and liquid fuels are not consumed by the subject sources.

The language from **§ 63.7522 "Can I use emissions averaging to comply with this subpart?"** is not applicable since none of the subject sources are subject to any emission limits from Subpart DDDDD.

The language from **§ 63.7525 "What are my monitoring, installation, operation, and maintenance requirements?"** includes no applicable requirements for the subject sources.

The language from **§ 63.7530 "How do I demonstrate initial compliance with the emission limitations, fuel specifications and work practice standards?"** has been incorporated into the operating permit as follows.

Paragraph (a) is not applicable since there are no new emission limits imposed on the subject sources by Subpart DDDDD.

Paragraph (b) is not applicable since there are no new performance testing requirements imposed on the subject sources by Subpart DDDDD.

Paragraph (c) is not applicable since there are no new fuel analysis requirements imposed on the subject sources by Subpart DDDDD.

Paragraphs (d), (e), and (f) discuss the Notification of Compliance Status reporting requirements and are applicable. These conditions have been attached to the reporting Requirements for each of the subject sources.

Paragraph (g) deals with demonstrating that a gaseous fuel meets the specifications of another gas 1 fuel. This paragraph has been omitted since all of the subject sources use natural gas as a fuel source.

Paragraph (h) is not applicable since there are no new emission limits imposed on the subject sources by Subpart DDDDD.

Paragraph (i) is not applicable since there are no new SO_2 emission limits imposed on the subject sources by Subpart DDDDD.

The language from § 63.7533 **"Can I use efficiency credits earned from implementation of energy conservation measures to comply with this subpart?"** is not applicable since there are no new emission limits imposed on the subject sources by Subpart DDDDD.

The language from § 63.7535 **"Is there a minimum amount of monitoring data I must obtain?"** is not applicable since no enhanced monitoring has been imposed on the subject sources by Subpart DDDDD.

The language from § 63.7540 **"How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?"** has been incorporated into the operating permit as follows.

Paragraph (a) prescribes the methods for demonstrating continuous compliance with the requirements of Subpart DDDDD. Table 8 is referenced but there are no applicable sections in that table for the subject sources. Paragraphs (a)(1) through (19) have been incorporated into the operating permit as follows.

Paragraph (a)(1) addresses deviations from the operating limits listed in Table 4 of this subpart. None of the subject sources have operating limits from Table 4 so this paragraph is not applicable and has been omitted from the operating permit.

Paragraph (a)(2) discusses fuel usage record keeping. Since the subject sources have no emission limits, this paragraph is not applicable.

Paragraphs (a)(3) and (4) are only applicable to sources with a HCl emission limit and is not applicable to the subject sources.

Paragraphs (a)(5) and (6) are only applicable to sources that are subject to a mercury emission limit and have been omitted.

Paragraph (a)(7) is only applicable to sources controlled by a fabric filter and is not applicable.

Paragraph (a)(8) is only applicable to sources with a CO emission limit and has been omitted.

Paragraph (a)(9) is only applicable to sources with a PM CPMS and has been omitted.

Paragraph (a)(10) prescribes the requirements for the annual tune-up that must be performed on each of the subject sources. These requirements have been attached to each subject source under Work Practice Requirements.

Paragraph (a)(11) is only applicable to source with a rated heat input capacity of less than 10 million Btu per hour. Since all of the subject sources are rated at greater than 10 million Btu per hour, this paragraph is not applicable.

Paragraph (a)(12) is only applicable to units equipped with a continuous oxygen trim system or a heat input capacity of less than 5 million Btu per hour. This paragraph is not applicable to the subject sources.

Paragraph (a)(13) allows for a delay of the annual tune-up if the source is not operating at the time the tune-up is required. The tune-up will be required to be conducted within 30 calendar days of startup. This condition has been attached to each subject source under Work Practice Requirements.

Paragraphs (a)(14) and (15) apply only to sources required to have CEMS and have been omitted from the operating permit.

Paragraphs (a)(16) and (17) apply only to sources with applicable TSM (Total Selected Metals) emission limits and have been omitted from the operating permit.

Paragraphs (a)(18) and (19) apply only to sources with applicable PM emission limits and have been omitted from the operating permit.

Paragraph (b) deals with reporting of deviations from the emission limits or operating limits in this subpart. Since the subject sources have no emission or operating limits, this paragraph is not applicable.

Paragraph (c) is applicable only to source required to conduct fuel sampling and analysis for mercury content and has been omitted from the operating permit.

Paragraph (d) refers to item 5 of Table 3 which applies only to sources subject to emission limits from this subpart and has been omitted from the operating permit.

The language from **§ 63.7541 "How do I demonstrate continuous compliance under the emissions averaging provision?"** is not applicable since emissions averaging is not utilized by the subject sources.

The language from **§ 63.7545 "What notifications must I submit and when?"** has been incorporated into the operating permit as follows.

Paragraph (a) says that "You must submit to the Administrator all of the notifications in §§ 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified."

§63.7(b) and (c) are only applicable to sources required to do performance testing and are not applicable.

§ 63.8(e) is only applicable to sources required to install continuous monitoring systems and is not applicable.

§ 63.8(f)(4) and (6) deal with alternative monitoring methods and are not applicable to the subject sources.

§ 63.9(b) includes the requirements for the Initial Notification that is to be submitted under Subpart DDDDD. This language has been included under the reporting requirements for each subject source.

§ 63.9(c) allows the owner or operator to request an extension of compliance if a relevant standard cannot be met by the compliance date.

§ 63.9(d) is only applicable to new sources subject to special compliance requirements and has been omitted.

§ 63.9(e) is only applicable to sources required to conduct performance tests and has been omitted.

§ 63.9(f) is only applicable to sources required to conduct opacity and visible emissions observations under Subpart DDDDD and has been omitted.

§ 63.9(g) is only applicable to sources required to install a CMS and has been omitted.

§ 63.9(h) deals with the Notification of Compliance Status Report and is applicable to each of the subject sources.

Paragraphs (b) and (c) apply only to new and reconstructed sources and have been omitted since the subject sources are all existing.

Paragraph (d) is only applicable to source required to conduct performance testing and has been omitted.

Paragraph (e) deals with the Notification of Compliance Status Report and is applicable to each subject source.

Paragraphs (f), (g), and (h) are not applicable since each of the subject sources is fueled exclusively by natural gas.

The language from **§ 63.7550 "What reports must I submit and when?"** has been incorporated into the operating permit as follows.

Paragraph (a) refers to Table 9 – Reporting Requirements, which includes the required content of each compliance report. The first area of Table 9 refers back to § 63.7550(c)(1) through (5) which is discussed below. The only other area of Table 9 that is applicable to the subject sources deals with the reporting of deviations from the work practice standards contained in Table 3. This language has been included in the reporting requirements for each subject source. The remainder of Table 9 addresses reporting of deviations from emission limitations or operating limitations which the these sources are not subject to.

Paragraph (b) prescribes the timing for the submission of compliance reports and is applicable to each subject source.

Paragraph (c) prescribes the required content of each compliance report. Based on (c)(1), a facility subject to a the requirements of a tune up must submit a compliance report with the information in paragraphs (c)(5)(i) through (iv) and (xiv) of this section. That includes the following:

(i) Company and Facility name and address.

(ii) Process unit information, emissions limitations, and operating parameter limitations.

(iii) Date of report and beginning and ending dates of the reporting period.

(iv) The total operating time during the reporting period.

(xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to § 63.7540(a)(10). Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.

Paragraphs (d) and (e) are not applicable since there are no emission limit, operating limit, and monitoring requirements for the subject sources.

Paragraphs (f) and (g) are [Reserved].

Paragraph (h) deals with electronic submission of performance and RATA testing results. These requirements are not applicable since this type of testing is not required for the subject sources.

The language from **§ 63.7555 "What records must I keep?"** has been incorporated into the operating permit as follows.

Paragraph (a) prescribes the requirements for keeping records of each notification, report, and compliance demonstration. This paragraph is applicable to each subject source.

Paragraph (b) deals with records of CEMS, COMS, and continuous monitoring systems which these sources are not required to maintain.

Paragraph (c) refers to records required by Table 8 which none of these sources are subject to.

Paragraph (d) is only applicable to sources subject to emission limits and has been omitted from the operating permit.

Paragraph (e) is only applicable to sources subject to emissions averaging and has been omitted from the operating permit.

Paragraph (f) deals with using efficiency credits from energy conservation measures to demonstrate compliance and is not applicable.

Paragraphs (g) and (h) are not applicable since the subject sources use only natural gas as a fuel source.

Paragraph (i) requires records of the calendar date, time, occurrence and duration of each startup and shutdown and has been included in the recordkeeping requirements section for each subject source.

Paragraph (j) requires records of the type and amount of fuel used during each startup and shutdown and has been included in the recordkeeping requirements section for each subject source.

The language from § 63.7560 **"In what form and how long must I keep my records?"** is applicable to each of the subject sources and has been included in the recordkeeping requirements section for each subject source.

The language from § 63.7565 **"What parts of the General Provisions apply to me?"** refers to Table 10 of Subpart DDDDD. This table is included in the operating permit by reference only, in Section C, under Additional Requirements.

The language from § 63.7570 **"Who implements and enforces this subpart?"** is applicable and has been included in the operating permit, in Section C, under Additional Requirements.

§ 63.7575 **"What definitions apply to this subpart?"** is applicable and is included in the operating permit by reference only, in Section C, under Additional Requirements.

40 CFR 63 – Subpart EEEEE, National Emissions Standards for Hazardous Air Pollutants for Iron and Steel Foundries

This facility does not meet the definition of an iron or steel foundry so the requirements of this subpart are not applicable.

40 CFR 63 – Subpart YYYYY, National Emissions Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities

Because this facility is a major source of HAP emissions, this subpart which applies only to "area sources" is not applicable.

Conclusion-

A site visit and meeting was conducted on March 30, 2010. The draft permit, trivial sources and new sources were discussed. A partial plant tour was performed. No violations or deviations were noted. Re-issuance of this permit is recommended.