

STATEMENT OF BASIS

To: Reviewers

Through: Lori Bocchino, Operating Permit Program Manager

From: William Tillman/Maggie Endres, Operating Permit Program

Subject: Draft Chapter 6, Section 3 Operating Permit 3-1-126, Solvay Soda Ash Joint Venture, Green River Soda Ash Plant

Date: October 22, 2012 (*Amended January 16, 2013*)

Introduction:

Attached for your review is the draft renewal Wyoming Air Quality Standards and Regulations (WAQSR) Chapter 6, Section 3 Operating Permit 3-1-126, for the Green River Soda Ash Plant. This facility mines and processes trona ore to produce various sodium products. Operations at the facility involve the use of crushers, screeners, rotary calciners, rotary dryers, separation and recrystallization equipment, enclosed bulk storage, product loading/ material handling equipment, boilers, and coal handling facilities. The Division initially issued permits to Tenneco Oil Company. Tenneco was later acquired by Solvay.

The company advised the Division by letter dated 4/24/2009 of the following changes:

Unit 28: DR-4 fluid bed dryer is no longer functional and should be removed from the operating permit.

Unit 45: Alkaten transloader baghouse has been removed. (Emissions are now routed to baghouse 102).

Unit 55: west recycle/reclaim baghouse has been removed in accordance with waiver AP-ZW2.

Units 83 and 85: product silo top and a gas fired boiler were never constructed

Unit 86: FCC dryer baghouse was removed from service. It was permitted as unit 98 under AP-Y92.

Permitting History: All permits/waivers are listed chronologically to document the permitting history.

Those listed in this first paragraph have no remaining applicable requirements:

Permits CT-234 (7/2/79)/CT-234A(12/22/81)/CT-234A2(9/26/84): allowed the Tenneco Oil Company to construct an underground trona ore mine and surface processing plant for the production of anhydrous soda ash. The two subsequent amendments addressed discrepancies between the original equipment design information and what was actually built (encompassing sources #1 through 24).

EPA Prevention of Significant Deterioration (PSD) Permit (10/5/79): Because the State of Wyoming did not yet have delegated authority to issue PSD permits in lieu of the U.S. Environmental Protection Agency (EPA), Region 8 of the agency reviewed Tenneco's original plans and issued a separate PSD permit. This permit contained a reiteration of the Division's continuous monitoring requirements and a slightly modified table of allowable emissions. Under January 30, 1992 cover, EPA rescinded condition #3 of their PSD permit requiring reporting of monitoring results to Region 8. This letter acknowledged Wyoming had assumed primary responsibility for implementing the PSD permitting program.

Permit OP-154 (1/20/86): allowed operation of the facility. Applicable requirements include: continued operation of the ambient monitoring network to record meteorological conditions and measure concentrations of particulate; continuous emissions monitoring for opacity, NO_x and SO₂ from the #1 and #2 coal fired boilers (units 18 and 19); continuous monitoring for opacity from the "A" and "B" calciners (unit 17); and CO emissions limits for boilers #18 and 19. Per the Division's 2/19/88 approval, the continuous SO₂/NO_x ambient monitoring network was discontinued on 3/1/88 because of consistently low values over the life of the operation (1981-1987).

Permits listed in this paragraph have no remaining applicable requirements. Permits CT-643 (9/16/85)/CT-634A (7/29/86): allowed construction of a facility to produce a rumen buffer in animal feed called Alkaten. No construction occurred under CT-643. Permit CT-643A was issued based on a revised process description, and included new units 25, 26 and 27. Permit OP-181 (2/25/88): allowed operation of the first phase of the Alkaten facility. Permit MD-117 (2/28/90): authorized modifications to the existing calciners in order to increase soda ash production from 1.0 to 1.25 MMTPY. The permit also included construction of a caustic soda and sodium sulfite facility, including new sources 28 - 44. Waiver (4/6/90): permitted construction of an Alkaten product transloading system to allow railcar loadout (unit 45). Emissions are now routed to baghouse 102 under permit MD-1078 listed below. Permit MD-132 (11/30/90): was issued for construction of a new "C" process line to increase soda ash production from 1.25 to 2.0 MMTPY. The permit addressed sources 45 - 53.

Waiver (2/14/92): allowed construction of a 200-ton storage bin to hold an Alkaten by-product, and a new baghouse (source 54) to control dust from the storage bin vents. The permit limits particulate emissions and opacity from this source.

Permits listed in this paragraph have no remaining applicable requirements. Permit CT-946 (3/17/92): authorized construction of an additional trona calciner and equipment to increase calcined trona ore production by 1.5 MMTPY. The only construction completed under this permit was a recycle/reclaim baghouse (unit 55). Unit 55 was removed under AP-ZW2 listed below. Waiver (8/30/93): was issued for the replacement of the Alkaten product dryer electric heater (unit 26) with a 2.6 MMBtu/hr gas fired burner. Waiver (2/15/95): allowed the construction of two baghouse controlled silos for storage of activated carbon and perlite (units 62 and 63). Permit MD-229 (6/13/95): allowed conversion of the A and B calciners from coal to natural gas fired burners, and increased plant production to 2.4 MMTPY. Sources 12, 23, 29 and 56-61 were removed.

Permits OP-257 (11/9/95): authorized operation of the caustic soda and sodium sulfite facility permitted under MD-117. The permit limits H₂S emissions from the sulfur tank storage vent (unit 43) to 10 lb/hr during tank loading (with estimated use of 259 hours per year).

Permit OP-258 (11/9/95): authorized operation of the "C" process line permitted under MD-132. The permittee was required to install continuous opacity monitors on the C calciner (unit 48) and the product dryer #5 (unit 51). Opacity of visible emissions is limited to 20 percent for these units.

Waiver AP-D76 (3/25/96): allowed the permittee to make additions to the dust control systems at the plant, including the installation/relocation of three baghouses (units 64, 65 and 67) and a carbon/perlite additive scrubber (unit 66).

Permit MD-282 (5/16/96): modified the existing sodium sulfite plant to produce sodium metabisulfite, and allowed construction of a new product bagging facility for various products, replacement of the C calciner burner, and installation of pre-heaters in the inlet ducts to the steam tube dryers. The permit requires minimization of CO emissions from the calciner burners (unit 48) according to the operating procedure submitted 6/13/95. The procedure was updated January 2006.

Waiver AP-J57 (5/2/97): allowed modification of a sulfur burner (unit 33). The waiver acknowledged the addition of four feet of additional ductwork. Eight feet was actually added.

Permit CT-1347 (2/6/98): authorized construction of a new "D" process line. Remaining requirements include: facility soda ash production and trona ore throughput limits; a feed rate limit on the C calciner; limits for particulate, SO₂ and NO_x for various sources at the facility; and continuous opacity monitors for the "D" calciner and DR-6 dryer (units 80 and 82). The permit required opacity limits to be established for units 80 and 82. By Division letter dated 7/28/03, the opacity limits are set at 15% for unit 80, and 10% for unit 82. Operating hour limits are placed on unit 44. Permit MD-995 listed below removed operating limits on units 10, 11 and 14. The facility removed units 2B, 40, 47 and 69.

Waivers (5/28/98): Two waivers were issued on 5/28/98. Both allowed an increase in NO_x emissions; one from source #15 and the other from source #73.

Permit CT-1416 (9/23/98): allowed construction of a facility to produce fine calcium carbonate (FCC). The FCC process, including units 86 and 87, has been removed. The permit specifies testing procedures (Method 5/202) for particulate emissions from trona and soda ash sources.

Waiver AP-P69 (1/4/99): authorized construction of a transloading system for conveying trona products from trucks to rail cars.

Waiver AP-K69 (1/12/99): allowed the installation of a wet scrubber to control SO₂ emissions at the caustic/sulfite loadout facility (unit 89), and sets an hourly SO₂ emission limit.

Waiver AP-B10 (9/10/99): allowed modification of the carbon bin, Perlite bin, and sulfite blending baghouses (units 62, 63 and 65), along with the installation of two additional housekeeping baghouses (units 90 and 91). The permit sets particulate limits for the five baghouses.

Permit MD-474 (6/1/00): eliminated the CO limit on the gas fired DR-5 dryer (unit 51) that had been set in permit OP-258.

Waiver AP-RG0 (6/27/00): allowed modifications to the plant loadout facilities to allow for the direct loading of trona products into railcars. The waiver removed the unit 39 bin vent and replaced it with a bag filter, now identified as the trona product bin (unit 92). The sulfite loadout system now utilizes the former FCC loadout (unit 87), which has been renamed as sulfite loadout (unit 94). The existing FCC loadout is modified to include a retractable loading spout for railcar loadout. Additionally, the sulfite loadout system (unit 41) is now used for trona products and is renamed as trona products rail loadout (unit 93). Particulate emission limits are set for units 92, 93, 94, and a new source, unit 95.

Permit MD-498 (7/18/00): increases and sets hourly production rate limits for product dryers DR-1 and DR-2 (unit 15) and DR-5 (unit 51), and sets an hourly production limit for dryer DR-6 (unit 82).

Waiver AP-GS1 (1/25/01): acknowledged a production rate for the Alkaten crusher and dryer (units 25 and 26), and sets particulate limits for these units. The waiver also corrects an error in NO_x emission limits from permit CT-1347, which mistakenly set NO_x limits for unit 27 instead of unit 26.

Waiver AP-Y92 (1/11/02): allowed expansion of the trona products facility. Particulate and opacity emission limits are set for three new baghouses (units 96, 97 and 98). (Unit 98 changed service under wv-10115 listed below.)

Waiver AP-ZW2 (4/24/02): approved removal of the recycle/reclaim baghouse (unit 55), and control of the existing dust pick-ups with existing baghouse unit 76.

Waiver AP-4H2 (9/11/02): allowed the installation of a new baghouse in the crusher building (unit 99), and establishes particulate and opacity emission limits for the unit.

Division letter (7/28/03): As required by CT-1347, opacity limits were established for unit 80 at 15%, and unit 82 at 10%.

MD-995 (4/6/04): allowed conversion of the A and B calciners (unit 17) from gas to coal fired operation, and removed the operating hour limitation set by permit CT-1347 on units 10, 11 and 14. Permit requirements include: an hourly feed rate limit to each calciner; NO_x emission limits for the calciners on a 30-day rolling average, and the use of a CEM for monitoring the NO_x emissions; particulate emission limits for units 10, 11, 14 and 100, which are also subject to 40 CFR 60, Subpart Y; and an opacity limit for unit 100.

Waiver AP-1916 (5/25/04): was issued for piping and fan speed modifications to unit 33. The permit sets NO_x and SO₂ emission limits for this source.

MD-1067 (9/28/04): allowed receipt of approximately 30 coal haul trucks per day on an existing haul road at the facility. The permit requires road maintenance, including treatment at least twice per year with a chemical dust suppressant and water to control fugitive dust emissions.

MD-1078 (11/2/04): allowed modifications to the trona products facility that included a new crusher, screens, dryer, product silo, loadout facility, and two new baghouses (units 101 and 102). NO_x, CO and particulate limits are established for source 101, as well as particulate limits for sources 102 and 25.

MD-1096 (12/10/04): allowed the feed rate to the "D" calciner (unit 80) to be increased from 275 tons per hour (TPH) to 325 TPH.

Waiver AP-2926 (2/7/05): allowed installation of SO₃ controls on the sulfur burner (#33).

Waiver AP-3658 (8/11/05): re-commissioned two baghouses that had been taken out of service to control dust in the crusher building. Particulate emission limits are set for units 103 and 104.

Waiver AP-3918 (10/14/05): superseded AP-2926 and removed the SO₃ emission limits for unit 33.

Waiver AP-4939 (6/30/06): allowed a temporary coal stockpile through 8/31/06.

Waiver AP-5172 (8/25/06): allowed the transport of crusher baghouse dust to the calciner circuit, and limits the hours of operation of the bisulfite loadout facility SO₂ scrubber (unit 89) to 2500 hours beginning 1/1/07. Due to a typographic error, the waiver failed to indicate that the 2500 hour limit is per year. The operating permit will administratively indicate the limit as per year. The company must maintain an hour's meter or equivalent device to log the hours of operation.

Waiver AP-5631 (12/8/06): allowed a temporary open stockpile of trona ore through 2/28/07.

Waiver AP-6603 (8/13/07): permitted temporary reprocessing of sodium carbonate decahydrate (DECA) into soda ash. The waiver expired November 30, 2007.

Waiver AP-7468 (3/25/08): allowed the construction of an additional T-200 pneumatic transport line to the existing T-200 loadout silos.

Waiver AP-7574 (4/22/08): allowed a temporary stockpile of DECA through 11/30/08. Records of the amount of material hauled to the mixing tank must be maintained for five years.

Waiver AP-7507 (4/24/08): allowed replacement of the B calciner drag conveyer with a bucket elevator.

Waiver AP-7556 (5/5/08): permitted the temporary shutdown of dryer DR-1(unit #15) to replace the steam tubes.

MD-7431 (9/2/08): allowed the installation of four new baghouses (units 105-108) for a new product line (SAS 300) at the facility, and reduced particulate emissions from the steam dryer (unit 15) and three calciners (units 17, 48 and 80). This permit was amended as MD-7431A and MD-7431A2 listed below.

Waiver AP-8430 (10/24/08): authorized the construction of second transloader (unit 88B), which is similar to unit 88. The permit sets opacity and particulate limits for unit 88B, limits annual product throughput of the systems, and indicates the units are not to be used simultaneously. Initial performance testing requirements are included in the draft operating permit.

MD-8929 (5/26/09): modified operations for the excavation and reclamation of DECA from the surface tailings ponds, including construction of a DECA melt tank. This permit is superseded by MD-13439 listed below.

MD-7431A (6/29/09): was issued because of modifications to the original permit. This permit was amended at MD-7431A2 listed below.

Waiver AP-9390 (7/10/09): allowed installation of two engines, E1 and E2, to remove methane gas from areas actively being mined. The engines were removed under permit MD-10561 listed below.

Waiver wv-10100 (11/6/09): allowed a temporary trona stockpile through 7/15/10.

Waiver wv-10115 (2/19/10): authorized a change in service for baghouses #88 and #98, and sets opacity and particulate limits for each source. Daily visual observations are required.

MD-10253 (3/24/10): allowed installation of a Gob vent borehole project and a third compressor engine (E3) to remove combustible gases liberated while mining trona ore. The permit was superseded by MD-11024 listed below.

MD-10561 (7/13/10): replaced engines E1 and E2, permitted under AP-9390, with engines E4 and E5. Units E4 and E5 are equipped with NSCR catalysts and have emission limits for NO_x, CO and VOC. The permit requires emissions testing every 12 months; notification and retesting if any engine tests outside the permitted limits; and maintaining the engines and air pollution equipment, and monitoring the control equipment. Equipment monitoring includes installation of a thermocouple to measure the inlet catalyst temperature, and installation of a device to measure pressure drop across the catalyst.

Waiver wv-10696 (8/31/10): allowed modification of the DECA melt tank with the addition of a Stamler system. The Stamler system crushes the DECA into smaller chunks to allow for faster melting and processing of the product. The DECA melt tank/Stamler system is to be maintained with wind walls, dust shield and a spray system such that no visible emissions are exhibited. The facility must comply with all applicable requirements of 40 CFR 60, Subpart OOO, which is discussed below.

Waiver AP-10381 (9/15/10): allowed the permittee to increase the operating rate of the sulfur burner to 85 tons per day, and the sulfur dryer to 12.5 tons per hour and 85,000 TPY. The application indicated that the operating rate increase would not result in a significant emissions increase. The permittee is required to monitor the annual steam usage in the sulfite dryer for five years after notification of startup.

MD-11024 (11/29/10): addressed the gob vent borehole (GVB) gas project initially permitted under MD-10253, and allows the facility to drill and vent additional GVBs without any controls on the mine gas vented. Permit requirements include: NO_x, CO and VOC emissions limits for engine E3 with testing to be conducted every 12 months; notification and retesting if the engine tests outside the permitted limits; maintaining the engine and air pollution equipment, and monitoring the control equipment. Equipment monitoring includes installation of a thermocouple to measure the inlet catalyst temperature, and installation of a device to measure pressure drop across the catalyst. The permit also has requirements for the GVB flare to address opacity, VOC combustion, and hours monitoring.

Permit MD-7431A2 (3/1/11): amends permitting initially allowed under MD-7431 and MD-71431A. Applicable requirements include: particulate emissions limits on units 15, 17, 48, 80, and 105-108; opacity limits for units 105-108 with daily visual observations; and an annual feed rate limit on the SAS 300 production line. Unit 106 and 108 are subject to 40 CFR 60 Subpart OOO requirements. Initial performance testing requirements are included in the draft operating permit for units 107 and 108.

Waiver wv-11853 (4/14/11): allowed installation of a triethylene glycol (TEG) dehydration unit with two 0.085 MMBtu/hr reboiler heaters for the GVB project.

Waiver wv-11822 (4/29/11): allowed temporary use of a Katolight natural gas fired generator engine through 10/15/12. The waiver was extended by six months under wv-13880 listed below.

Waiver wv-12090 (6/13/11): allowed temporary storage of trona ore outside through 11/1/11. The Division granted an extension 9/9/11, and the stockpile was removed 12/1/11.

MD-11835 (6/21/2011): permitted the installation of four emergency diesel engines (EG-3, EG-4a, EG-4b and EG-4c) to power two emergency backup generators. The engines have emission limits for NO_x and CO with testing to be performed every five years, and are limited to 500 hours of annual operation to be monitored with an hours meter. The permit also requires notification and retesting if any engine tests outside the permitted limits, and maintaining the engines and monitoring equipment.

Waiver wv-13221 (3/27/12): was issued to allow a temporary increase in the soda ash production rate set under MD-498 for dryer DR-6 (unit 82), while dryer DR-2 (unit 15) is shut down for repair, through 9/27/12. Required testing for unit 82 was completed in May 2012.

Waiver AP-13520 (6/15/12): allowed replacement of the two dehydration reboilers (authorized under wv-11853 listed above) with a 0.375 MMBtu/hr unit.

Permit MD-13439 (9/26/12): allows the DECA melt tank to be replaced with a concrete steel lined DECA dissolver basin. The permit limits the size of the DECA stockpile, limits visible emissions from the dissolver basin and requires weekly visual observations, requires treatment of the DECA unpaved roads and work area with magnesium chloride solution (MgCl) and water, and requires treatment of the DECA stockpile to control fugitive dust.

Waiver wv-13880 (10/12/12): extends operation of the Katolight engine permitted under wv-11822 until 5/1/13. The waiver sets NO_x, CO and VOC limits, with testing to be conducted within 90 days. The permittee must keep records of any corrective actions/maintenance for 5 years.

Other Applicable Requirements:

In addition to the permit requirements listed above, sources without opacity limits specified by permit condition, or under a 40 CFR Part 60 or Part 63 subpart, are subject to the visible emission limits set

forth in WAQSR Ch 3, Sec 2. The Pony boiler is subject to particulate limits from Ch 3, Sec 2 and NO_x limits from Ch 3, Sec 3; this boiler is currently not in operation. The dehydration unit is subject to the NO_x limit of 0.20 lb/MMBtu heat input from Ch 3, Sec 3.

In the previous operating permit for this facility, SO₂ emission limitations from WAQSR Ch 3, Sec 4 were included as state only permit requirements. The State has received approval from the Wyoming Environmental Council to remove these regulations, which will be completed by the time this permit is issued. As such, these requirements are not included in the draft operating permit.

The permittee must also comply with any applicable requirements from the following Ch 5, Sec 2 New Source Performance Standards, and 40 CFR Part 60:

Subpart D for *Fossil-Fuel-Fired Steam Generators For Which Construction Is Commenced After August 17, 1971* (the #1 and #2 coal fired boilers, units 18 and 19). At the time of permit issuance, units 18 and 19 are subject to the continuous opacity monitoring requirements of Subpart D, and WAQSR and Ch 7, Sec 2, which specify continuous opacity monitoring requirements for fossil fuel fired steam generators with heat inputs greater than 250 MMBtu/hr. The Division considers the Subpart D requirements to meet the intent of Ch 7, Sec 2. (Permit OP-154 listed above also requires continuous opacity monitoring of units 18 and 19.)

Subpart Y for *Coal Preparation & Processing Plants* (units 10, 11, 14 and 100).

Subpart OOO for *Nonmetallic Mineral Processing Plants* (units 2A, 6A, 6B, 7, 16, 25, 27, 30, 31, 36, 37, 38, 44, 46, 50, 52, 53, 54, 63, 64, 65, 68, 70, 71, 72, 76, 79, 81, 88, 88B, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 101, 102, 103, 104, 106, and 108).

Subpart IIII for *Stationary Compression Ignition Internal Combustion Engines* (affected engines are defined at §60.4200 of the subpart).

Subpart JJJJ for *Stationary Spark Ignition Internal Combustion Engines* (affected engines are defined at §60.4230 of the subpart).

and from the following Chapter 5, Section 3 National Emission Standards for Hazardous Air Pollutants, and 40 CFR Part 63:

Subpart ZZZZ for *Stationary Reciprocating Internal Combustion Engines* (unit E-3, E-4, E-5, PU-76, EG-1, EG-2, EG-301, EG-3, EG-4a, EG 4b, and EG-4c. All engines are subject to any applicable requirements from Subpart ZZZZ, which now includes requirements for existing, as well as new or reconstructed engines).

Subpart DDDDD for *Industrial, Commercial, And Institutional Boilers And Process Heaters* (the #1 and #2 coal fired boilers, units 18 and 19). The Division is in the process of removing Subpart DDDDD as published in the Federal Register September 13, 2004 from the state regulations. Upon completion of this process the state rule will no longer apply. However, the permittee is subject to the most recent 40 CFR Part 63 version of Subpart DDDDD.

Periodic Monitoring:

For the baghouse, bin vent, scrubber, and electrostatic precipitator (ESP) controlled equipment, particulate monitoring shall be achieved through the compliance assurance monitoring (CAM) plan for each source. The baghouse and bin vents sources will use daily Method-22 like observations, which will also serve as periodic monitoring for opacity; the scrubber sources will use pressure drop and liquor circulation rate, which will also serve as periodic monitoring for opacity; and the ESP sources will use

field power to verify compliance with CAM. The initial ranges in the scrubber CAM plans for sources 35 and 73 will be confirmed during the particulate testing required within no later than 120 days of issuance of the operating permit. Baghouse units 88, 88b, 106 and 108 are not subject to CAM, but shall conduct daily observations according to the CAM plan for baghouse sources.

The DECA melt tank/DECA dissolver basin/Stamler system will conduct monitoring as required by permit MD-8929. Each ESP source will measure opacity using the continuous monitoring systems required by the permits listed above. Each scrubber source not subject to CAM will use weekly measurements of each scrubber's pressure drop and liquor flow rate as an indicator of compliance with opacity limits. Visual observations will be performed on the diesel fired engines at least semiannually during periodic availability test. For visible emissions from the dehydration unit and engines E3, E4, E5, and E6, the permittee shall monitor the type of fuel used to ensure natural gas is the sole fuel source for these units. For the GVB flare, the permittee shall monitor and note the date, time and duration when the flare exhibits visible emissions for more than 5 minutes, and when borehole gas is being extracted and the pilot flame was not present on the flare.

NO_x emissions from the A and B calciners (unit 17) will be monitored using the CEM system required under permit MD-995, and from the #1 and #2 coal fired boilers (units 18 and 19) using the CEM system required under permit OP-154. Testing for NO_x emissions from unit 82 will be performed at least annually and at least every two years from unit 48, 51 and 80.

There are several small fuel burning sources with established NO_x emission limits at this facility, including the DR-1 and 2 steam tube dryers preheater (unit 15), trona products dryer (unit 26), sulfur burner (unit 33), metabisulfite dryer (unit 73), trona products dryer DR-7 (unit 101), and the dehydration unit reboiler. The sources are uncontrolled, but operate at steady levels making emission variations unlikely. The sources have emission limits at or above levels for these source types that appear in AP-42. AP-42 emission factors were developed by the EPA to help estimate the quantity of a pollutant from a given source type. In developing an AP-42 emission factor, emission data is averaged from sources of similar size and type, and is then assigned a reliability rating based on quality and quantity of the data used. The rating scale runs from A to E with an A rating providing the highest quality. The AP-42 emission factor for gaseous fuel burning sources, less than 100 MMBtu/hr is 0.1 lb/MMBtu with a B rating. The Division feels it is extremely unlikely these sources will operate out of compliance and considers further testing of these sources to be uneconomical.

Monitoring for SO₂ emissions for the #1 and #2 coal fired boilers (units 18 and 19) shall be done using the CEM system required under permit OP-154. Three small sources - a sulfur burner, metabisulfite dryer and bisulfite loadout facility (units 33, 73 and 89) - have emission limits that would be 1.8, 3.4 and 0.31 tons per year, respectively, if operated full time. The Division considers further testing of these sources to also be uneconomical.

The permit shall perform CO emissions testing at least once every five years for the #1 and #2 coal fired boilers (units 18 and 19). The Division will not require CO monitoring for the trona products dryer (unit 101) since the emissions are limited to less than one ton per year, and the Division considers further testing of this unit to also be uneconomical.

Engines E3, E4 and E5 will be tested for NO_x, CO and VOC emissions, and monitored as indicated under permits MD-11024 and MD-10561. Diesel-fired engines EG-3, EG-4a, EG-4b and EG-4c, will be tested for NO_x and CO emissions, and monitored as indicated under permit MD-11835.

Authorization to operate the Katolight SENL generator engine expires on May 1, 2013; the permittee is required to test this engine to demonstrate compliance with NO_x, CO, and VOC limits by January 12, 2013.

The Division will not require H₂S monitoring from sulfur storage tank (unit 43). The material specification for the sulfur loaded has an average H₂S concentration of 3-4 ppm. The loading of sulfur material occurs some distance from the sulfur storage tank and the facility has determined that employees are not in danger of inhaling H₂S emissions. The sulfur loading operation is estimated to be less than 260 hours per year. This combination of factors has led the Division to determine that monitoring H₂S from unit 43 is not an economical or practical use of limited resources.

The permittee will monitor operations to verify the operating hour limits, and feed and production rate limits, established in the previously listed permits and waivers are not exceeded.

The pony boiler is currently not operating and it appears unlikely to operate in the near future. The permittee is required to notify the Division within 15 days if the unit is restarted, and testing/monitoring for this unit will be decided at that time.

Addendum (Amended January 16, 2013)

While the permit was under EPA review, the Division was notified that the Responsible Official and Plant Manager/Contact changed from Ronald O. Hughes to Todd Brichecak. Additionally, condition S1 is updated to reflect the state's current ambient standards which were revised on December 19, 2012. As these changes are administrative in nature, no additional public notice period is warranted.

