KEEP PERMIT AT SITE AI # 3511 CONTROL NO. B - 06294

State of Maryland

Lawrence J. Hogan, Jr.
Governor

Boyd K. Rutherford
Lt. Governor

Ben Grumbles
Secretary

DEPARTMENT OF THE ENVIRONMENT

Air and Radiation Administration
1800 Washington Boulevard, Suite 720
Baltimore, MD 21230

[ ] Construction Permit [X] Part 70 Operating Permit

PERMIT NO. 24-023-0042 DATE ISSUED January 1, 2018

PERMIT FEE To be paid in accordance with COMAR 26.11.02.19B EXPIRATION DATE December 31, 2022

LEGAL OWNER & ADDRESS
Mettiki Coal, LLC
293 Table Rock Rd
Oakland, Maryland 21550

Attention: Mr. Aaron Miller,
Environmental Coordinator

SITE
Mettiki Coal, LLC
293 Table Rock Rd
Oakland, MD 21550
AI # 3511

SOURCE DESCRIPTION
One Bituminous Coal Processing Plant

This source is subject to the conditions described on the attached pages.

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Program Manager

Director, Air and Radiation Administration

MDE/ARMA/PER.009 (REV. 10-08-03) (NOT TRANSFERABLE)

METTIKI COAL, LLC
293 TABLE ROCK ROAD
OAKLAND, MARYLAND 21550
PART 70 OPERATING PERMIT NO. 24-023-0042

SECTION I SOURCE IDENTIFICATION

1. DESCRIPTION OF FACILITY

Mettiki operates a coal cleaning/preparation operation with a thermal dryer and a shipping/receiving operation at the Oakland location. Raw coal from the Mettiki mine located in West Virginia is trucked to the Oakland facility where it is off-loaded. The SIC code for this facility is 1241.

Mettiki has been in operation at this location since 1977, having originally produced a low-volatile metallurgical coal product for sale primarily to Japanese steel mills. Currently, the plant produces steam grade coal for sale primarily to domestic utilities in Maryland and West Virginia.

Mettiki was originally made up of four separate mine portals, all in Maryland: A Mine, B Mine, C Mine, and D Mine. The Maryland mines have ceased operations, running out of mineable reserves in the first quarter of 2007. Mettiki's A Mine closed prior to 1985. Mettiki's "B" and "C" Mines were closed in 1985 and 1987, respectively. Mettiki opened the "E" Mine in West Virginia in July 2005 in anticipation of the closure of the D Mine in 2007; coal from the E Mine is trucked to the Oakland Maryland plant for processing. Mettiki currently mines all of its coal from the E Mine in West Virginia.

2. FACILITY INVENTORY LIST

Emissions Unit Number	MDE Registration Number	Emissions Unit Name and Description	Date of Installation
EU 1	023-0042-9-0009	Thermal Dryer	1977
EU 2	023-0042-9-0009	Coal Handling System	1977 Mod. 9/2005 & 10/2006
EU 3	023-0042-9-0029	6000 Gallon Gasoline storage tank	1978

SECTION II GENERAL CONDITIONS

1. DEFINITIONS

[COMAR 26.11.01.01] and [COMAR 26.11.02.01]

The words or terms in this Part 70 permit shall have the meanings established under COMAR 26.11.01 and .02 unless otherwise stated in this permit.

2. ACRONYMS

ARA	Air and Radiation Administration
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEM	Continuous Emissions Monitor
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMAR	Code of Maryland Regulations
EPA	United States Environmental Protection Agency
FR	Federal Register
gr	grains
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
MDE	Maryland Department of the Environment
MVAC	Motor Vehicle Air Conditioner
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
OTR	Ozone Transport Region
PM	Particulate Matter
PM10	Particulate Matter with Nominal Aerodynamic Diameter of 10 micrometers or less
ppm	parts per million
ppb	parts per billion
PSD	Prevention of Significant Deterioration
PTC	Permit to construct
PTO	Permit to operate (State)
SIC	Standard Industrial Classification
SO_2	Sulfur Dioxide

TAP	Toxic Air Pollutant
tpy	tons per year
VE	Visible Emissions
VOC	Volatile Organic Compounds

3. EFFECTIVE DATE

The effective date of the conditions in this Part 70 permit is the date of permit issuance, unless otherwise stated in the permit.

4. PERMIT EXPIRATION

[COMAR 26.11.03.13B(2)]

Upon expiration of this permit, the terms of the permit will automatically continue to remain in effect until a new Part 70 permit is issued for this facility provided that the Permittee has submitted a timely and complete application and has paid applicable fees under COMAR 26.11.02.16.

Otherwise, upon expiration of this permit the right of the Permittee to operate this facility is terminated.

5. PERMIT RENEWAL

[COMAR 26.11.03.02B(3)] and [COMAR 26.11.03.02E]

The Permittee shall submit to the Department a completed application for renewal of this Part 70 permit at least 12 months before the expiration of the permit. Upon submitting a completed application, the Permittee may continue to operate this facility pending final action by the Department on the renewal.

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall submit such supplementary facts or corrected information no later than 10 days after becoming aware that this occurred. The Permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after the date a completed application was submitted, but prior to the release of a draft permit. This information shall be submitted to the Department no later than 20 days after a new requirement has been adopted.

6. CONFIDENTIAL INFORMATION

[COMAR 26.11.02.02G]

In accordance with the provisions of the State Government Article, Sec. 10-611 et seq., Annotated Code of Maryland, all information submitted in an application shall be considered part of the public record and available for inspection and copying, unless the Permittee claims that the information is confidential when it is submitted to the Department. At the time of the request for inspection or copying, the Department will make a determination with regard to the confidentiality of the information. The Permittee, when requesting confidentiality, shall identify the information in a manner specified by the Department and, when requested by the Department, promptly provide specific reasons supporting the claim of confidentiality. Information submitted to the Department without a request that the information be deemed confidential may be made available to the public. Subject to approval of the Department, the Permittee may provide a summary of confidential information that is suitable for public review. The content of this Part 70 permit is not subject to confidential treatment.

7. PERMIT ACTIONS

[COMAR 26.11.03.06E(3)] and [COMAR 26.11.03.20(A)]

This Part 70 permit may be revoked or reopened and revised for cause. The filing of an application by the Permittee for a permit revision or renewal; or a notification of termination, planned changes or anticipated noncompliance by the facility, does not stay a term or condition of this permit.

The Department shall reopen and revise, or revoke the Permittee's Part 70 permit under the following circumstances:

a. Additional requirements of the Clean Air Act become applicable to this facility and the remaining permit term is 3 years or more;

b. The Department or the EPA determines that this Part 70 permit contains a material mistake, or is based on false or inaccurate information supplied by or on behalf of the Permittee;

c. The Department or the EPA determines that this Part 70 permit must be revised or revoked to assure compliance with applicable requirements of the Clean Air Act; or

d. Additional requirements become applicable to an affected source under the Federal Acid Rain Program.

8. PERMIT AVAILABILITY

[COMAR 26.11.02.13G]

The Permittee shall maintain this Part 70 permit in the vicinity of the facility for which it was issued, unless it is not practical to do so, and make this permit immediately available to officials of the Department upon request.

9. REOPENING THE PART 70 PERMIT FOR CAUSE BY THE EPA

[COMAR 26.11.03.20B]

The EPA may terminate, modify, or revoke and reissue a permit for cause as prescribed in 40 CFR §70.7(g)

10. TRANSFER OF PERMIT

[COMAR 26.11.02.02E]

The Permittee shall not transfer this Part 70 permit except as provided in COMAR 26.11.03.15.

11. REVISION OF PART 70 PERMITS – GENERAL CONDITIONS

[COMAR 26.11.03.14] and [COMAR 26.11.03.06A(8)]

a. The Permittee shall submit an application to the Department to revise this Part 70 permit when required under COMAR 26.11.03.15 -.17.

b. When applying for a revision to a Part 70 permit, the Permittee shall comply with the requirements of COMAR 26.11.03.02 and .03 except that the application for a revision need include only information listed that is related to the proposed change to the source and revision to the permit. This information shall be sufficient to evaluate the proposed change and to determine whether it will comply with all applicable requirements of the Clean Air Act.

c. The Permittee may not change any provision of a compliance plan or schedule in a Part 70 permit as an administrative permit amendment or as a minor permit modification unless the change has been approved by the Department in writing.

d. A permit revision is not required for a change that is provided for in this permit relating to approved economic incentives, marketable permits, emissions trading, and other similar programs.

12. SIGNIFICANT PART 70 OPERATING PERMIT MODIFICATIONS

[COMAR 26.11.03.17]

The Permittee may apply to the Department to make a significant modification to its Part 70 Permit as provided in COMAR 26.11.03.17 and in accordance with the following conditions:

a. A significant modification is a revision to the federally enforceable provisions in the permit that does not qualify as an administrative permit amendment under COMAR 26.11.03.15 or a minor permit modification as defined under COMAR 26.11.03.16.

b. This permit does not preclude the Permittee from making changes, consistent with the provisions of COMAR 26.11.03, that would make the permit or particular terms and conditions of the permit irrelevant, such as by shutting down or reducing the level of operation of a source or of an emissions unit within the source. Air pollution control equipment shall not be shut down or its level of operation reduced if doing so would violate any term of this permit.

c. Significant permit modifications are subject to all requirements of COMAR 26.11.03 as they apply to permit issuance and renewal, including the requirements for applications, public participation, and review by affected states and EPA, except:

(1) An application need include only information pertaining to the proposed change to the source and modification of this permit, including a description of the change and modification, and any new applicable requirements of the Clean Air Act that will apply if the change occurs;

(2) Public participation, and review by affected states and EPA, is limited to only the application and those federally enforceable terms and conditions of the Part 70 permit that are affected by the significant permit modification.

d. As provided in COMAR 26.11.03.15B(5), an administrative permit amendment may be used to make a change that would otherwise require a significant permit modification if procedures for enhanced preconstruction review of the change are followed that satisfy the requirements of 40 CFR 70.7(d)(1)(v).

e. Before making a change that qualifies as a significant permit modification, the Permittee shall obtain all permits-to-construct and approvals required by COMAR 26.11.02.

f. The Permittee shall not make a significant permit modification that results in a violation of any applicable requirement of the Clean Air Act.

g. The permit shield in COMAR 26.11.03.23 applies to a final significant permit modification that has been issued by the Department, to the extent applicable under COMAR 26.11.03.23.

13. MINOR PERMIT MODIFICATIONS

[COMAR 26.11.03.16]

The Permittee may apply to the Department to make a minor modification to the federally enforceable provisions of this Part 70 permit as provided in COMAR 26.11.03.16 and in accordance with the following conditions:

a. A minor permit modification is a Part 70 permit revision that:

(1) Does not result in a violation of any applicable requirement of the Clean Air Act;

(2) Does not significantly revise existing federally enforceable monitoring, including test methods, reporting, record keeping, or compliance certification requirements except by:

(a) Adding new requirements,

(b) Eliminating the requirements if they are rendered meaningless because the emissions to which the requirements apply will no longer occur, or

(c) Changing from one approved test method for a pollutant and source category to another;

(3) Does not require or modify a:

(a) Case-by-case determination of a federally enforceable emissions standard,

(b) Source specific determination for temporary sources of ambient impacts, or

(c) Visibility or increment analysis;

(4) Does not seek to establish or modify a federally enforceable permit term or condition for which there is no corresponding underlying applicable requirement of the Clean Air Act, but that the Permittee has assumed to avoid an applicable requirement to which the source would otherwise be subject, including:

(a) A federally enforceable emissions standard applied to the source pursuant to COMAR 26.11.02.03 to avoid classification as a Title I modification; and

(b) An alternative emissions standard applied to an emissions unit pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act

(5) Is not a Title I modification; and

(6) Is not required under COMAR 26.11.03.17 to be processed as a significant modification to this Part 70 permit.

b. Application for a Minor Permit Modification

The Permittee shall submit to the Department an application for a minor permit modification that satisfies the requirements of COMAR 26.11.03.03 which includes the following:

(1) A description of the proposed change, the emissions resulting from the change, and any new applicable requirements that will apply if the change is made;

(2) The proposed minor permit modification;

(3) Certification by a responsible official, in accordance with COMAR 26.11.02.02F, that:

(a) The proposed change meets the criteria for a minor permit modification, and

(b) The Permittee has obtained or applied for all required permits-to-construct required by COMAR 26.11.03.16 with respect to the proposed change;

(4) Completed forms for the Department to use to notify the EPA and affected states, as required by COMAR 26.11.03.07-.12.

c. Permittee's Ability to Make Change

(1) For changes proposed as minor permit modifications to this permit that will require the applicant to obtain a permit to construct, the permit to construct must be issued prior to the new change.

(2) During the period of time after the Permittee applies for a minor modification but before the Department acts in accordance with COMAR 26.11.03.16F(2):

(a) The Permittee shall comply with applicable requirements of the Clean Air Act related to the change and the permit terms and conditions described in the application for the minor modification.

(b) The Permittee is not required to comply with the terms and conditions in the permit it seeks to modify. If the Permittee fails to comply with the terms and conditions in the application during this time, the terms and conditions of both this permit and the application for modification may be enforced against it.

d. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.16 is not within the scope of this regulation.

e. Minor permit modification procedures may be used for Part 70 permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, but only to the extent that the minor permit modification procedures are explicitly provided for in regulations approved by the EPA as part of the Maryland SIP or in other applicable requirements of the Clean Air Act.

14. ADMINISTRATIVE PART 70 OPERATING PERMIT AMENDMENTS

[COMAR 26.11.03.15]

The Permittee may apply to the department to make an administrative permit amendment as provided in COMAR 26.11.03.15 and in accordance with the following conditions:

a. An application for an administrative permit amendment shall:

(1) Be in writing;

(2) Include a statement certified by a responsible official that the proposed amendment meets the criteria in COMAR 26.11.03.15 for an administrative permit amendment, and

(3) Identify those provisions of this part 70 permit for which the amendment is requested, including the basis for the request.

b. An administrative permit amendment:

(1) Is a correction of a typographical error;
(2) Identifies a change in the name, address, or phone number of a person identified in this permit, or a similar administrative change involving the Permittee or other matters which are not directly related to the control of air pollution;

(3) requires more frequent monitoring or reporting by the Permittee;

(4) Allows for a change in ownership or operational control of a source for which the Department determines that no other

revision to the permit is necessary and is documented as per COMAR 26.11.03.15B(4);

(5) Incorporates into this permit the requirements from preconstruction review permits or approvals issued by the Department in accordance with COMAR 26.11.03.15B(5), but only if it satisfies 40 CFR 70.7(d)(1)(v);

(6) Incorporates any other type of change, as approved by the EPA, which is similar to those in COMAR 26.11.03.15B(1)—(4);

(7) Notwithstanding COMAR 26.11.03.15B(1)—(6), all modifications to acid rain control provisions included in this Part 70 permit are governed by applicable requirements promulgated under Title IV of the Clean Air Act; or

(8) Incorporates any change to a term or condition specified as State-only enforceable, if the Permittee has obtained all necessary permits-to-construct and approvals that apply to the change.

c. The Permittee may make the change addressed in the application for an administrative amendment upon receipt by the Department of the application, if all permits-to-construct or approvals otherwise required by COMAR 26.11.02 prior to making the change have first been obtained from the Department.

d. The permit shield in COMAR 26.11.03.23 applies to administrative permit amendments made under Section B(5) of COMAR 26.11.03.15 , but only after the Department takes final action to revise the permit.

e. The Permittee is subject to enforcement action if it is determined at any time that a change made under COMAR 26.11.03.15 is not within the scope of this regulation.

15. OFF-PERMIT CHANGES TO THIS SOURCE

[COMAR 26.11.03.19]

The Permittee may make off-permit changes to this facility as provided in COMAR 26.11.03.19 and in accordance with the following conditions:

a. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:

(1) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(2) The change is not subject to any requirements under Title IV of the Clean Air Act;

(3) The change is not a Title I modification; and

(4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of the permit.

b. For a change that qualifies under COMAR 26.11.03.19, the Permittee shall provide contemporaneous written notice to the Department and the EPA, except for a change to an emissions unit or activity that is exempt from the Part 70 permit application, as provided in COMAR 26.11.03.04. This written notice shall describe the change, including the date it was made, any change in emissions, including the pollutants emitted, and any new applicable requirements of the Clean Air Act that apply as a result of the change.

c. Upon satisfying the requirements of COMAR 26.11.03.19, the Permittee may make the proposed change.

d. The Permittee shall keep a record describing:

(1) Changes made at the facility that result in emissions of a regulated air pollutant subject to an applicable requirement of the Clean Air Act , but not otherwise regulated under this permit; and

(2) The emissions resulting from those changes.

e. Changes that qualify under COMAR 26.11.03.19 are not subject to the requirements for Part 70 revisions.

f. The Permittee shall include each off-permit change under COMAR 26.11.03.19 in the application for renewal of the part 70 permit.

g. The permit shield in COMAR 26.11.03.23 does not apply to off-permit changes made under COMAR 26.11.03.19.

h. The Permittee is subject to enforcement action if it is determined that an off-permit change made under COMAR 26.11.03.19 is not within the scope of this regulation.

16. ON-PERMIT CHANGES TO SOURCES

[COMAR 26.11.03.18]

The Permittee may make on-permit changes that are allowed under Section 502(b)(10) of the Clean Air Act as provided in COMAR 26.11.03.18 and in accordance with the following conditions:

a. The Permittee may make a change to this facility without obtaining a revision to this Part 70 permit if:

(1) The change is not a Title I modification;

(2) The change does not result in emissions in excess of those expressly allowed under the federally enforceable provisions of the Part 70 permit for the permitted facility or for an emissions unit within the facility, whether expressed as a rate of emissions or in terms of total emissions;

(3) The Permittee has obtained all permits and approvals required by COMAR 26.11.02 and .03;

(4) The change does not violate an applicable requirement of the Clean Air Act;

(5) The change does not violate a federally enforceable permit term or condition related to monitoring, including test methods, record keeping, reporting, or compliance certification requirements;

(6) The change does not violate a federally enforceable permit term or condition limiting hours of operation, work practices, fuel usage, raw material usage, or production levels if the term or condition has been established to limit emissions allowable under this permit;

(7) If applicable, the change does not modify a federally enforceable provision of a compliance plan or schedule in this Part 70 permit unless the Department has approved the change in writing; and

(8) This permit does not expressly prohibit the change under COMAR 26.11.03.18.

b. The Permittee shall notify the Department and the EPA in writing of a proposed on-permit change under COMAR 26.11.03.18 not later than 7 days before the change is made. The written information shall include the following information:

(1) A description of the proposed change;

(2) The date on which the change is proposed to be made;

(3) Any change in emissions resulting from the change, including the pollutants emitted;

(4) Any new applicable requirement of the Clean Air Act; and

(5) Any permit term or condition that would no longer apply.

c. The responsible official of this facility shall certify in accordance with COMAR 26.11.02.02F that the proposed change meets the criteria for the use of on-permit changes under COMAR 26.11.03.18.

d. The Permittee shall attach a copy of each notice required by condition b. above to this Part 70 permit.

e. On-permit changes that qualify under COMAR 26.11.03.18 are not subject to the requirements for part 70 permit revisions.

f. Upon satisfying the requirements under COMAR 26.11.03.18, the Permittee may make the proposed change.

g. The permit shield in COMAR 26.11.03.23 does not apply to on-permit changes under COMAR 26.11.03.18.

h. The Permittee is subject to enforcement action if it is determined that an on-permit change made under COMAR 26.11.03.18 is not within the scope of the regulation or violates any requirement of the State air pollution control law.

17. FEE PAYMENT

[COMAR 26.11.02.16A(2) & (5)(b)]

a. The fee for this Part 70 permit is as prescribed in Regulation .19 of COMAR 26.11.02.

b. The fee is due on and shall be paid on or before each 12-month anniversary date of the permit.

c. Failure to pay the annual permit fee constitutes cause for revocation of the permit by the Department.

18. REQUIREMENTS FOR PERMITS-TO-CONSTRUCT AND APPROVALS

[COMAR 26.11.02.09.]

The Permittee may not construct or modify or cause to be constructed or modified any of the following sources without first obtaining, and having in current effect, the specified permits-to-construct and approvals:

a. New Source Review source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

b. Prevention of Significant Deterioration source, as defined in COMAR 26.11.01.01, approval required, except for generating stations constructed by electric companies;

c. New Source Performance Standard source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

d. National Emission Standards for Hazardous Air Pollutants source, as defined in COMAR 26.11.01.01, permit to construct required, except for generating stations constructed by electric companies;

e. A stationary source of lead that discharges one ton per year or more of lead or lead compounds measured as elemental lead, permit to construct required, except for generating stations constructed by electric companies;

f. All stationary sources of air pollution, including installations and air pollution control equipment, except as listed in COMAR 26.11.02.10, permit to construct required;

g. In the event of a conflict between the applicability of (a.— e.) above and an exemption listed in COMAR 26.11.02.10, the provision that requires a permit applies.

h. Approval of a PSD or NSR source by the Department does not relieve the Permittee obtaining an approval from also obtaining all permits-to-construct required b y (c.— g.) above.

19. CONSOLIDATION OF PROCEDURES FOR PUBLIC PARTICIPATION

[COMAR 26.11.02.11C] and [COMAR 26.11.03.01K]

The Permittee may request the Department to authorize special procedures for the Permittee to apply simultaneously, to the extent possible, for a permit to construct and a revision to this permit.

These procedures may provide for combined public notices, informational meetings, and public hearings for both permits but shall not adversely affect the rights of a person, including EPA and affected states, to obtain information about the application for a permit, to comment on an application, or to challenge a permit that is issued.

These procedures shall not alter any existing permit procedures or time frames.

20. PROPERTY RIGHTS

[COMAR 26.11.03.06E(4)]

This Part 70 permit does not convey any property rights of any sort, or any exclusive privileges.

21. SEVERABILITY

[COMAR 26.11.03.06A(5)]

If any portion of this Part 70 permit is challenged, or any term or condition deemed unenforceable, the remainder of the requirements of the permit continues to be valid.

22. INSPECTION AND ENTRY

[COMAR 26.11.03.06G(3)]

The Permittee shall allow employees and authorized representatives of the Department, the EPA, and local environmental health agencies, upon presentation of credentials or other documents as may be required by law, to:

a. Enter at a reasonable time without delay and without prior notification the Permittee's property where a Part 70 source is located, emissions-related activity is conducted, or records required by this permit are kept;

b. Have access to and make copies of records required by the permit;

c. Inspect all emissions units within the facility subject to the permit and all related monitoring systems, air pollution control equipment, and practices or operations regulated or required by the permit; and

d. Sample or monitor any substances or parameters at or related to the emissions units at the facility for the purpose of determining compliance with the permit.

23. DUTY TO PROVIDE INFORMATION

[COMAR 26.11.03.06E(5)]

The Permittee shall furnish to the Department, within a reasonable time specified by the Department, information requested in writing by the Department in order to determine whether the Permittee is in compliance with the federally enforceable conditions of this Part 70 permit, or whether cause exists for revising or revoking the permit. Upon request, the

Permittee shall also furnish to the Department records required to be kept under the permit.

For information claimed by the Permittee to be confidential and therefore potentially not discloseable to the public, the Department may require the Permittee to provide a copy of the records directly to the EPA along with a claim of confidentiality.

The Permittee shall also furnish to the Department, within a reasonable time specified by the Department, information or records requested in writing by the Department in order to determine if the Permittee is in compliance with the State-only enforceable conditions of this permit.

24. COMPLIANCE REQUIREMENTS

[COMAR 26.11.03.06E(1)] and [COMAR 26.11.03.06A(11)] and [COMAR 26.11.02.05]

The Permittee shall comply with the conditions of this Part 70 permit. Noncompliance with the permit constitutes a violation of the Clean Air Act, and/or the Environment Article Title 2 of the Annotated Code of Maryland and may subject the Permittee to:

a. Enforcement action,

b. Permit revocation or revision,

c. Denial of the renewal of a Part 70 permit, or
d. Any combination of these actions.

The conditions in this Part 70 permit are enforceable by EPA and citizens under the Clean Air Act except for the State-only enforceable conditions.

Under Environment Article Section 2-609, Annotated Code of Maryland, the Department may seek immediate injunctive relief against a person who violates this permit in such a manner as to cause a threat to human health or the environment.

25. CREDIBLE EVIDENCE

Nothing in this permit shall be interpreted to preclude the use of credible evidence to demonstrate noncompliance with any term of this permit.

26. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

[COMAR 26.11.03.06E(2)]

The need to halt or reduce activity in order to comply with the conditions of this permit may not be used as a defense in an enforcement action.

27. CIRCUMVENTION

[COMAR 26.11.01.06]

The Permittee may not install or use any article, machine, equipment or other contrivance, the use of which, without resulting in a reduction in the total weight of emissions, conceals or dilutes emissions which would otherwise constitute a violation of any applicable air pollution control regulation.

28. PERMIT SHIELD

[COMAR 26.11.03.23]

A permit shield as described in COMAR 26.11.03.23 shall apply only to terms and conditions in this Part 70 permit that have been specifically identified as covered by the permit shield. Neither this permit nor COMAR 26.11.03.23 alters the following:

a. The emergency order provisions in Section 303 of the Clean Air Act, including the authority of EPA under that section;

b. The liability of the Permittee for a violation of an applicable requirement of the Clean Air Act before or when this permit is issued or for a violation that continues after issuance;

c. The requirements of the Acid Rain Program, consistent with Section 408(a) of the Clean Air Act;

d. The ability of the Department or EPA to obtain information from a source pursuant to Maryland law and Section 114 of the Clean Air Act; or

e. The authority of the Department to enforce an applicable requirement of the State air pollution control law that is not an applicable requirement of the Clean Air Act.

29. ALTERNATE OPERATING SCENARIOS

[COMAR 26.11.03.06A(9)]

For all alternate operating scenarios approved by the Department and contained within this permit, the Permittee, while changing from one approved scenario to another, shall contemporaneously record in a log maintained at the facility each scenario under which the emissions unit is operating and the date and time the scenario started and ended.

SECTION III PLANT WIDE CONDITIONS

1. PARTICULATE MATTER FROM CONSTRUCTION AND DEMOLITION

[COMAR 26.11.06.03D]

The Permittee shall not cause or permit any building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne.

2. OPEN BURNING

[COMAR 26.11.07]

Except as provided in COMAR 26.11.07.04, the Permittee shall not cause or permit an open fire from June 1 through August 31 of any calendar year. Prior to any open burning, the Permittee shall request and receive approval from the Department.

3. AIR POLLUTION EPISODE

[COMAR 26.11.05.04]

When requested by the Department, the Permittee shall prepare in writing standby emissions reduction plans, consistent with good industrial practice and safe operating procedures, for reducing emissions creating air pollution during periods of Alert, Warning, and Emergency of an air pollution episode.

4. REPORT OF EXCESS EMISSIONS AND DEVIATIONS

[COMAR 26.11.01.07] and [COMAR 26.11.03.06C(7)]

The Permittee shall comply with the following conditions for occurrences of excess emissions and deviations from requirements of this permit, including those in Section VI – State-only Enforceable Conditions:

a. Report any deviation from permit requirements that could endanger human health or the environment, by orally notifying the Department immediately upon discovery of the deviation;

b. Promptly report all occurrences of excess emissions that are expected to last for one hour or longer by orally notifying the Department of the onset and termination of the occurrence;

c. When requested by the Department the Permittee shall report all deviations from permit conditions, including those attributed to malfunctions as defined in COMAR 26.11.01.07A, within 5 days of the request by submitting a written description of the deviation to the Department. The written report shall include the cause, dates and times of the onset and termination of the deviation, and an account of all actions planned or taken to reduce, eliminate, and prevent recurrence of the deviation;

d. The Permittee shall submit to the Department semi-annual monitoring reports that confirm that all required monitoring was performed, and that provide accounts of all deviations from permit requirements that occurred during the reporting periods. Reporting periods shall be January 1 through June 30 and July 1 through December 31, and reports shall be submitted within 30 days of the end of each reporting period. Each account of deviation shall include a description of the deviation, the dates and times of onset and termination, identification of the person who observed or discovered the deviation, causes and corrective actions taken, and actions taken to prevent recurrence. If no deviations from permit conditions occurred during a reporting period, the Permittee shall submit a written report that so states.

e. When requested by the Department, the Permittee shall submit a written report to the Department within 10 days of receiving the request concerning an occurrence of excess emissions. The report shall contain the information required in COMAR 26.11.01.07D(2).

5. ACCIDENTAL RELEASE PROVISIONS

[COMAR 26.11.03.03B(23)] and [40 CFR 68]

Should the Permittee become subject to 40 CFR 68 during the term of this permit, the Permittee shall submit risk management plans by the date specified in 40 CFR 68.150 and shall certify compliance with the requirements of 40 CFR 68 as part of the annual compliance certification as required by 40 CFR 70.

The Permittee shall initiate a permit revision or reopening according to the procedures of 40 CFR 70.7 to incorporate appropriate permit conditions into the Permittee's Part 70 permit.

6. GENERAL TESTING REQUIREMENTS

[COMAR 26.11.01.04]

The Department may require the Permittee to conduct, or have conducted, testing to determine compliance with this Part 70 permit. The Department, at its option, may witness or conduct these tests. This testing shall be done at a reasonable time, and all information gathered during a testing operation shall be provided to the Department.

7. EMISSIONS TEST METHODS

[COMAR 26.11.01.04]

Compliance with the emissions standards and limitations in this Part 70 permit shall be determined by the test methods designated and described below or other test methods submitted to and approved by the Department.

Reference documents of the test methods approved by the Department include the following:

a. 40 CFR 60, appendix A

b. 40 CFR 51, appendix M

c. The Department's Technical Memorandum 91-01 "Test Methods and Equipment Specifications for Stationary Sources", (January 1991), as amended through Supplement 3, (October 1, 1997)

8. EMISSIONS CERTIFICATION REPORT

[COMAR 26.11.01.05-1] and [COMAR 26.11.02.19C] and [COMAR 26.11.02.19D]

The Permittee shall certify actual annual emissions of regulated pollutants from the facility on a calendar year basis.

a. The certification shall be on forms obtained from the Department and submitted to the Department not later than April 1 of the year following the year for which the certification is required;

b. The individual making the certification shall certify that the information is accurate to the individual's best knowledge. The individual shall be:

(1) Familiar with each source for which the certifications forms are submitted, and

(2) Responsible for the accuracy of the emissions information;

c. The Permittee shall maintain records necessary to support the emissions certification including the following information if applicable:

(1) The total amount of actual emissions of each regulated pollutant and the total of all regulated pollutants;

(2) An explanation of the methods used to quantify the emissions and the operating schedules and production data that were used to determine emissions, including significant assumptions made;

(3) Amounts, types and analyses of all fuels used;

(4) Emissions data from continuous emissions monitors that are required by this permit, including monitor calibration and malfunction information;

(5) Identification, description, and use records of all air pollution control equipment and compliance monitoring equipment including:

(a) Significant maintenance performed,

(b) Malfunctions and downtime, and
(c) Episodes of reduced efficiency of all equipment;

(6) Limitations on source operation or any work practice standards that significantly affect emissions; and

(7) Other relevant information as required by the Department.

9. COMPLIANCE CERTIFICATION REPORT

[COMAR 26.11.03.06G(6) and (7)]

The Permittee shall submit to the Department and EPA Region III a report certifying compliance with each term of this Part 70 permit including each applicable standard, emissions limitation, and work practice for the previous calendar year by April 1 of each year.

a. The compliance certification shall include:

(1) The identification of each term or condition of this permit which is the basis of the certification;

(2) The compliance status;

(3) Whether the compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of each source, currently and over the reporting period; and

(5) Any other information required to be reported to the Department that is necessary to determine the compliance status of the Permittee with this permit.

b. The Permittee shall submit the compliance certification reports to the Department and EPA simultaneously.

10. CERTIFICATION BY RESPONSIBLE OFFICIAL

[COMAR 26.11.02.02F]

All application forms, reports, and compliance certifications submitted pursuant to this permit shall be certified by a responsible official as to

truth, accuracy, and completeness. The Permittee shall expeditiously notify the Department of an appointment of a new responsible official.

The certification shall be in the following form:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

11. SAMPLING AND EMISSIONS TESTING RECORD KEEPING

[COMAR 26.11.03.06C(5)]

The Permittee shall gather and retain the following information when sampling and testing for compliance demonstrations:

a. The location as specified in this permit, and the date and time that samples and measurements are taken;

b. All pertinent operating conditions existing at the time that samples and measurements are taken;

c. The date that each analysis of a sample or emissions test is performed and the name of the person taking the sample or performing the emissions test;

d. The identity of the Permittee, individual, or other entity that performed the analysis;

e. The analytical techniques and methods used; and

f. The results of each analysis.

12. GENERAL RECORDKEEPING

[COMAR 26.11.03.06C(6)]

The Permittee shall retain records of all monitoring data and information that support the compliance certification for a period of five (5) years from the date that the monitoring, sample measurement, application, report or emissions test was completed or submitted to the Department.

These records and support information shall include:

a. All calibration and maintenance records;

b. All original data collected from continuous monitoring instrumentation;

c. Records which support the annual emissions certification; and

d. Copies of all reports required by this permit.

13. GENERAL CONFORMITY

[COMAR 26.11.26.09]

The Permittee shall comply with the general conformity requirements of 40 CFR 93, Subpart B and COMAR 26.11.26.09.

14. ASBESTOS PROVISIONS

[40 CFR 61, Subpart M]

The Permittee shall comply with 40 CFR 61, Subpart M when conducting any renovation or demolition activities at the facility.

15. OZONE DEPLETING REGULATIONS

[40 CFR 82, Subpart F]

The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the prohibitions and required practices pursuant to 40 CFR 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair or disposal of appliances shall comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repairs or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.

d. Persons performing maintenance, service, repairs or disposal of appliances shall certify with the Administrator pursuant to 40 CFR 82.162.

e. Persons disposing of small appliances, MVACS, and MVAC-like appliances as defined in 40 CFR 82.152, shall comply with record keeping requirements pursuant to 40 CFR 82.166.

f. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.

g. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

16. ACID RAIN PERMIT

Not applicable

SECTION IV PLANT SPECIFIC CONDITIONS

This section provides tables that include the emissions standards, emissions limitations, and work practices applicable to each emissions unit located at this facility. The Permittee shall comply with all applicable emissions standards, emissions limitations and work practices included herein.

The tables also include testing, monitoring, record keeping and reporting requirements specific to each emissions unit. In addition to the requirements included here in **Section IV**, the Permittee is also subject to the general testing, monitoring, record keeping and reporting requirements included in **Section III – Plant Wide Conditions** of this permit.

Unless otherwise provided in the specific requirements for an emissions unit, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required under this section to establish. [Authority: COMAR 26.11.03.06C(5)(g)]

Table IV – 1	
1.0	**Emissions Unit Number(s)** Facility Wide Operating Limitation
1.1	**Applicable Standards/Limits:** The coal preparation plant shall not be operated in excess of 16 hrs/day. **[PSD Approval Condition 2 Issued October 1, 1982 and revised May 6, 1983]**
1.2	**Testing Requirements:** See Record Keeping Requirement
1.3	**Monitoring Requirements:** See Record Keeping Requirement
1.4	**Record Keeping Requirements:** The Permittee shall maintain records of the facility daily operating hours. **[Reference: COMAR 26.11.03.06(C)]**

Table IV – 1	
1.5	**Reporting Requirements:** See Record Keeping Requirement

Table IV – 2	
2.0	**Emissions Unit Number(s): EU-1** Thermal Coal Dryer equipped with 267 MMBtu/hr pulverized coal-fired burners (Operation); and 40 MMBtu/hr, No. 2 fuel oil fired burners (Start-up)
2.1	**Applicable Standards/Limits:** A. Visible Emissions Limitations 1. **COMAR 26.11.06.02C –** Visible Emission Standards. In Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity. 2. **COMAR 26.11.06.02A(2) –** Exceptions. The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: a. The visible emissions are not greater than 40 percent opacity; and b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period. 3. On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, the Permittee shall not cause to be discharged into the atmosphere from the thermal dryer any gases which exhibit 20 percent opacity or greater. **[Reference: 40 CFR § 60.252(a)(2)]** B. Control of Particulate 1. Total plant emissions shall not exceed 760 lb/day (based on a 16 hour operating day) and 0.02 gr/scfd. **[Authority: PSD Approval Condition 2 Issued October 1, 1982 and revised May 6, 1983]**

Table IV – 2

2. On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, the Permittee shall not cause to be discharged into the atmosphere from the thermal dryer any gases which contain PM in excess of 0.070 g/dscm (0.031 grains per dry standard cubic feet (gr/dscf)). **[Reference: 40 CFR § 60.252(a)(2)]**

3. **COMAR 26.11.06.03B(1)(a) –** Particulate Matter from Confined Sources in Areas I, II, V and VI Constructed On or After January 17, 1972. A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/SCFD (115 mg/dscm).

Note: *Demonstration of compliance with the more stringent PSD particulate matter emission limit of 0.02 gr/dscf also demonstrates compliance with the NSPS and COMAR particulate matter emission limits.*

C. Control of Sulfur Oxides

1. Total plant emissions shall not exceed 78.6 lbs/hr and 1,258 lbs/day (based on a 16 hour operating day). **[PSD Approval Condition 2 Issued October 1, 1982 and revised May 6, 1983]**

2. **COMAR 26.11.09.07A(1)(a) & (c) –** Sulfur Content Limitation for Fuel Burning Equipment Located in Areas I, II, V, and VI. A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations:

   a. The combustion of all solid fuels on a premises where the sum total maximum rated heat input of all fuel burning equipment located on the premises is 100 million Btu (10^6 gigajoules) per hour or greater may not result in a total emission of oxides of sulfur in excess of 3.5 pounds per million Btu (1.50 kilograms per gigajoule) actual heat input per hour;

   b. Distillate fuel oils, 0.3 percent.

Table IV – 2	
	D. Control of Nitrogen Oxides 1. **COMAR 26.11.09.08(J) –** Requirements for Industrial Furnaces and Other Miscellaneous Installations that Cause Emissions of NO_x. A person who owns or operates any installation other than fuel-burning equipment that causes NO_x emissions shall: a. Maintain good operating practices as recommended by the equipment vendor to minimize NO_x emissions; b. Prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation; c. Maintain and make available to the Department, upon request, the written in-house operator training program; d. Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year; and e. Maintain operator training attendance records for each operator at the site for at least 2 years and make these records available to the Department upon request.
2.2	**Testing Requirements:** A. Visible Emissions Limitations The Permittee must conduct all performance tests required by 40 CFR §60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR §60.257. **[Authority: 40 CFR §60.255(a)]** B. Control of Particulate 1. The Permittee shall perform an annual stack test in accordance with EPA Reference Test Method 5. There must be at least a 5-month span between each stack test. **[Reference: COMAR 26.11.03.06C Periodic monitoring based on Consent Decree dated August 24, 2007]** 2. The Permittee must conduct all performance tests required by 40 CFR §60.8 to demonstrate compliance with the applicable emission

Table IV – 2	
	standards using the methods identified in 40 CFR §60.257. **[Authority: 40 CFR §60.255(a)]** C. Control of Sulfur Oxides The Permittee shall conduct annual Reference Method 6 stack tests. There must be at least a 5-month span between each stack test. **[Reference: COMAR 26.11.03.06C Periodic monitoring based on Consent Decree dated August 24, 2007]** D. Control of Nitrogen Oxides The Permittee shall conduct Reference Method 7 stack tests at least once during the term of the permit. **[Reference: COMAR 26.11.03.06C]**
2.3	**Monitoring Requirements:** A. Visible Emissions Limitations The Permittee shall demonstrate compliance with the visible emissions standard through compliance with the requirements of the Compliance Assurance Monitoring (CAM) Plan for control of PM (Ref. Table IV-7) **[Reference: COMAR 26.11.03.06C – Periodic monitoring based upon Consent Decree dated August 24, 2007]** B. Control of Particulate 1. The Permittee shall monitor continuously the temperature of the gas stream at the exit of the thermal dryer. The monitoring device is to be certified by the manufacturer to be accurate within ± 3º Fahrenheit. The Permittee shall recalibrate the monitoring device annually in accordance with the procedures under §60.13(b). **[Reference: 40 CFR §60.256(a)(1)(i) & (a)(2)]** 2. The Permittee shall monitor continuously the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 1 inch water gauge. The Permittee shall recalibrate the monitoring device annually in accordance with the procedures under §60.13(b). **[Reference: 40 CFR §60.256(a)(1)(ii)(A) & (a)(2)]** 2. The Permittee shall monitor continuously the water supply pressure to the control equipment. The monitoring device is to be certified by

Table IV – 2	
	the manufacturer to be accurate within ±5 % of design water supply pressure. The Permittee shall recalibrate the monitoring device annually in accordance with the procedures under §60.13(b). **[Reference: 40 CFR §60.256(a)(1)(ii)(B) & (a)(2)]** 3. The Permittee shall comply with requirements of the CAM Plan for PM. See Table IV–7. **[Reference: 40 CFR part 64]** C. Control of Sulfur Oxides 1. The Permittee shall comply with requirements of the CAM Plan for SO_2. See Table IV–6. **[Reference: 40 CFR part 64]** 2. The Permittee shall obtain a fuel oil certification or specification from the fuel supplier indicating that the oil complies with the limitation on sulfur content. **[Reference: COMAR 26.11.03.06C]** D. Control of Nitrogen Oxides The Permittee shall maintain good operating practices as recommended by the equipment vendor to minimize NO_X emissions." **[Reference: COMAR 26.11.09.08J(1)]**
2.4	**Record Keeping Requirements:** A. Visible Emissions Limitations The Permittee shall maintain records as required by the CAM plan for PM. See Table IV–7. **[Reference: COMAR 26.11.03.06C]** B. Control of Particulate The Permittee shall maintain the following records: 1. Stack tests results; 2. Venturi throat pressure differential; 3. Water supply pressure to the control equipment; 4. Gas stream temperature; and 5. Recalibration of all monitoring devices.

Table IV – 2	
	[Reference: COMAR 26.11.03.06C] C. Control of Sulfur Oxides The Permittee shall maintain the following records: 1. Stack tests results; and 2. Documents certifying the sulfur content of fuel oil received; **[Reference: COMAR 26.11.03.06C]** D. Control of Nitrogen Oxides 1. The Permittee shall maintain annual fuel use records on site. **[Reference: COMAR 26.11.09.08K(3)]** 2. The Permittee shall maintain records of operator training program and attendance by each operator. **[Reference: COMAR 26.11.03.06C]** 3. The Permittee shall maintain records of Stack test results. **[Reference: COMAR 26.11.03.06C]** **Note:** Additional record keeping requirements are contained in the CAM Plan: Table IV-6 for SO_2 emissions and Table IV–7 for particulate emissions.
2.5	**Reporting Requirements:** A. Visible Emissions Limitations The Permittee shall report incidents of visible emissions in accordance with Permit Condition 4, Section III, "Report of Excess Emissions and Deviations." B. Control of Particulate A test protocol shall be submitted to the Department for approval at least 30 days prior to the scheduled test date. The Permittee shall submit a copy of the results of compliance stack tests to the Department within 45 days after the date the test was completed. **[Reference: COMAR 26.11.03.06C. Periodic monitoring based on Consent Decree, dated August 24, 2007]**

Table IV – 2

C. Control of Sulfur Oxides

A test protocol shall be submitted to the Department for approval at least 30 days prior to the scheduled test date. The Permittee shall submit a copy of the results of compliance stack tests to the Department within 45 days after the date the test was completed.
[Reference: COMAR 26.11.03.06C. Periodic monitoring based on Consent Decree, dated August 24, 2007]

D. Control of Nitrogen Oxides

A test protocol shall be submitted to the Department for approval at least 30 days prior to the scheduled test date. The Permittee shall submit a copy of the results of compliance stack tests to the Department within 45 days after the date the test was completed.
[Reference: COMAR 26.11.03.06C and COMAR 26.11.09.08K(2)]

Note: Additional reporting requirements are contained in the CAM Plan: Table IV-6 for SO_2 emissions and Table IV–7 for particulate emissions.

Table IV – 3

3.0 **Emissions Unit Number(s): EU-2**

Coal Handling System

Reg. No. 023-0042-9-0009

Emission Unit No.	Description	Emission Type	Control
MCC02	Rotary Breaker & Screening	Fugitive	Enclosure, water sprays
MCC03	Raw Coal Temporary Stockout - Temporary	Fugitive	None
MCC04	Raw Coal Temporary Stockout Storage, Wind Erosion		None
MCC05	Raw Coal Silo	Fugitive	None
MCC06	Storage Pile Stockout – Middling from Thermal Dryer	Fugitive	None
MCC07	Clean Coal Storage Silos Stockout – from Thermal Dryer	Fugitive	None
MCC08	Clean Coal Storage Pile Stockout	Fugitive	None

Table IV – 3

MCC09	Storage Pile Maintenance	Fugitive	None
MCC10	Storage Pile Wind Erosion – Clean Coal	Fugitive	None
MCC11A/B	Railcar/Truck Loading	Fugitive	Enclosure,
MCC12	Coal Refuse Stockout	Fugitive	None
MCC13	Low BTU Coal Stockout	Fugitive	None
MCC14	Storage Pile Wind Erosion – Low Btu Coal	Fugitive	None
MCC15	Maintenance Vehicle Traffic	Fugitive	Water sprays
MCC17	1500-ton per hour (TPH) Double-bay Truck Dump-E Mine	Fugitive	Enclosure
MCC18	Scalped Rock Dump System	Fugitive	None

3.1 **Applicable Standards/Limits:**

A. Visible Emissions Limitations

1. The Permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater. **[Reference: 40 CFR § 60.254(a)]**

B. Control of Particulate Matter

1. **COMAR 26.11.06.03C(1) –** Particulate Matter from Unconfined Sources. A person may not cause or permit emissions from an unconfined source without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, when appropriate as determined by the Department, the installation and use of hoods, fans, and dust collectors to enclose, capture, and vent emissions. In making this determination, the Department shall consider technological feasibility, practicality, economic impact, and the environmental consequences of the decision.

2. **COMAR 26.11.06.03D –** Particulate Matter from Materials Handling and Construction. A person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter

Table IV – 3	
	from becoming airborne. These reasonable precautions shall include, but not be limited to, the following when appropriate as determined by the control officer: a. Use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land. b. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces, which can create airborne dusts. c. Installation and use of hoods, fans, and dust collectors to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting of buildings or other similar operations. d. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to create air pollution. Alternate means may be employed to achieve the same results as would covering the vehicles. e. The paving of roadways and their maintenance in clean condition. f. The prompt removal from paved streets of earth or other material which has been transported there by trucks or earth moving equipment or erosion by water.
3.2	**Testing Requirements:** A. Visible Emissions Limitations See monitoring requirements. B. Control of Particulate See monitoring requirements.
3.3	**Monitoring Requirements:** A. Visible Emissions Limitations The Permittee shall maintain and update as necessary a Best Management Practices Plan that outlines how the source shall monitor

Table IV – 3	
	and control visible and particulate emissions. The Plan shall include monthly visual emissions observations required to be conducted and a log of the results of the observations. **[Reference: COMAR 26.11.03.06C]** B. Control of Particulate The Permittee shall maintain and update as necessary a Best Management Practices Plan that outlines how the source shall control particulate emissions. **[Reference: COMAR 26.11.03.06C]**
3.4	**Record Keeping Requirements:** A. Visible Emissions Limitations The Permittee shall maintain a written copy of the Best Management Practices Plan and logs of the dates, time, and results of all visible emissions observations performed on site and shall make them available to the Department upon request. **[Reference: COMAR 26.11.03.06C]** B. Control of Particulate The Permittee shall maintain a copy of the Best Management Practices Plan and a record of the date and times when the reasonable control actions are completed. **[Reference: COMAR 26.11.03.06C]**
3.5	**Reporting Requirements:** A. Visible Emissions Limitations The Permittee shall submit an updated plan and the visible emissions logs to the Department upon request. **[Reference: COMAR 26.11.03.06C]** B. Control of Particulate The Permittee shall submit an updated plan and the records of actions completed to the Department upon request**. [Reference: COMAR 26.11.03.06C]**

Table IV – 4	
4.0	**Emissions Unit Number(s): EU-3** 6,000 Gasoline Storage Tank
4.1	**Applicable Standards/Limits** Control of VOC Emissions 1. **COMAR 26.11.13.04C(2)** – Small Storage Tanks – Stage I Recovery. An owner or operator of a gasoline tank truck or an owner or operator of a stationary storage tank subject to this regulation may not cause or permit gasoline to be loaded into a stationary tank unless the loading system is equipped with a vapor balance line that is properly installed, maintained and used. 2. **COMAR 26.11.13.04D** – Small Storage Tanks - General Standards. A person may not cause or permit gasoline or VOC having a TVP greater than 1.5 psia or greater be loaded into any tank truck, railroad tank car, or other contrivance unless: a. Loading connections on the vapor lines are equipped with fittings that have no leaks and that automatically and immediately close upon disconnection to prevent release of gasoline or VOC from these fittings; and b. The equipment is maintained and operated in a manner to prevent avoidable liquid leaks during loading or unloading operations.
4.2	**Testing Requirements** Control of VOC Emissions See Monitoring Requirements
4.3	**Monitoring Requirements** Control of VOC Emissions 1. The Permittee shall inspect at least one fuel drop once every six months to verify that: a. The Stage 1 vapor balance system is used;

Table IV – 4	
	b. No liquid spills occur; and c. The hose fittings and connections are operating properly and do not leak. 2. If leaks are detected, The Permittee shall take the following corrective actions: a. Take immediate action to repair all observed VOC leaks that can be repaired with 48 hours; and b. Repair all other leaking components no later than 15 days after the leak is discovered. If a replacement part is needed, the part shall be ordered within 3 days after discovery of the leak, and the leak shall be repaired within 48 hours after receiving the part. **[Reference: COMAR 26.11.03.06C Periodic Monitoring]**
4.4	**Record Keeping Requirements:** Control of VOC Emissions The Permittee shall maintain records of fuel drop inspection results and corrective actions as required. **[Reference: COMAR 26.11.03.06C]**
4.5	**Reporting Requirements:** Control of VOC Emissions The Permittee shall make records available to the Department upon request. **[Reference: COMAR 26.11.03.06C]**

Table IV – 6
Compliance Assurance Monitoring (CAM) [Reference: 40 CFR Part 64]
Thermal Dryer MDE Reg. No. 9-0009 – SO_2

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
I. Indicator Description	Scrubber liquid pH	Pressure in the scrubber pump line.	Work Practice	Performance test EPA Method 6
Measurement Approach	The scrubber effluent pH is measured	The pressure in the scrubber pump line is	Visual inspections of the thickness of	Conduct emissions test to demonstrate

Table IV – 6 **Compliance Assurance Monitoring (CAM) [Reference: 40 CFR Part 64]** **Thermal Dryer MDE Reg. No. 9-0009 – SO_2**				
	Indicator #1	**Indicator #2**	**Indicator #3**	**Indicator #4**
	using a pH sensor.	measured using a pressure transducer.	the scale buildup in the scrubber pipe.	compliance with permitted emission limits.
II. Indicator Range	An excursion is defined as a 1-hour average scrubber effluent pH value below 6.1	An excursion is defined as a 1-hour average pressure less than 8 psi or greater than 13 psi.	An excursion is defined as when scale buildup reduces the inside diameter of the scrubber pipe to 6 inches or less.	An excursion is defined as any finding that the dryer does not meet the permitted emission limit.
Corrective Action	An excursion triggers an inspection, corrective action as necessary, and a reporting requirement.	An excursion triggers an inspection, corrective action as necessary, and a reporting requirement.	An excursion triggers replacement or repair of the affected pipe section(s) to restore the inside diameter to greater than 6 inches.	An excursion triggers an assessment of the problem, corrective action and a reporting requirement.
III. Performance Criteria				
A. Representative Data	The scrubber liquid pH sensor is located in the scrubber return line.	The pressure transducer is located in the scrubber pump line.	NA	A test protocol shall be prepared and approved by the Department prior to conducting the performance test.
B. Verification of Operational Status	Calibrate the pH sensor against standard reference buffer	Factory calibration before installation.	NA	NA

Table IV – 6 **Compliance Assurance Monitoring (CAM) [Reference: 40 CFR Part 64]** **Thermal Dryer MDE Reg. No. 9-0009 – SO_2**				
	Indicator #1	**Indicator #2**	**Indicator #3**	**Indicator #4**
	solutions of known pH.			
C. QA/QC Practices and Criteria	The pH meter is calibrated once per week to within +/- 0.1 pH units accuracy.	Calibrate the pressure transducer to within +/- 1 PSI annually	NA	EPA test methods approved in protocol.
D. Monitoring Frequency	The scrubber liquid pH is measured continuously when the dryer is in operation.	The scrubber pressure is measured continuously when the dryer is in operation.	Visual inspection of the scrubber pipe every 6 months.	Conduct an annual Reference Method 6 stack test. There must be at least a 5-month span between each stack test.
Data Collection Procedure.	Scrubber effluent pH is recorded at 5-minute intervals then 1-hour averages are computed and stored based on the 5-minute intervals.	Pressure is recorded at 5-minute intervals then 1-hour averages are computed and stored based on the 5-minute intervals.	Results of the pipe inspections, including scale buildup measurements are recorded & submitted to MDE on monthly monitoring reports, where applicable.	Per approved test methods.
Averaging Period	1-hour.	1-hour.	NA	NA
E. Record Keeping	Maintain a log of scrubber liquid pH and corrective actions implements.	Maintain a log the pressure in the scrubber pump line and corrective actions implements.	Maintain a log the Work Practice and corrective actions implements.	Maintain a copy of the test report for 5 years or until another test is conducted. Maintain

Table IV – 6 **Compliance Assurance Monitoring (CAM) [Reference: 40 CFR Part 64]** **Thermal Dryer MDE Reg. No. 9-0009 – SO_2**				
	Indicator #1	**Indicator #2**	**Indicator #3**	**Indicator #4**
				records of corrective actions taken in response to excursions.
Reporting	The scrubber effluent pH is measured using a pH sensor. Submit monthly report.	The pressure in the scrubber pump line is measured using a pressure transducer. Submit monthly report.	Visual inspections of the thickness of the scale buildup in the scrubber pipe. Submit twice per year.	Submit test protocol and notification of testing to Agency 30 days prior to test date. Submit test report 45 days after conducting a performance test.
Frequency	An excursion is defined as a 1-hour average scrubber effluent pH value below 6.1	An excursion is defined as a 1-hour average pressure less than 8 psi or greater than 13 psi	An excursion is defined as when scale buildup reduces the inside diameter of the scrubber pipe to 6 inches or less.	For each performance test conducted.

Table IV – 7 **Compliance Assurance Monitoring (CAM) [Reference: 40 CFR Part 64]** **Thermal Dryer - MDE Reg. No. 9-0009 PM**		
	Indicator #1	**Indicator #2**
I. Indicator	Scrubber differential Pressure	Performance test
Measurement Approach	The pressure drop across the venturi is measured using a differential pressure transducer (Kinpactor pressure monitors.)	Conduct EPA Method 5 emissions test to demonstrate compliance with permitted emission limits

Table IV – 7 **Compliance Assurance Monitoring (CAM) [Reference: 40 CFR Part 64]** **Thermal Dryer - MDE Reg. No. 9-0009 PM**		
	Indicator #1	**Indicator #2**
II. Indicator Range	An excursion is defined as a 1-hour average differential pressure below 30 inches of water	An excursion is defined as any finding that the dryer does not meet the permitted emission limit.
Corrective Action	Each excursion triggers an inspection, corrective action as necessary and a reporting requirement.	An excursion triggers an assessment of the problem, corrective action and a reporting requirement.
III. Performance Criteria		
A. Representative Data	The differential pressure transducer monitors the static pressures upstream and downstream of the scrubber's venturi throat.	A test protocol shall be prepared and approved by the Department prior to conducting the performance test.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	The differential pressure transducer is calibrated annually within +/- 1 inch water.	EPA test methods approved in protocol.
D. Monitoring Frequency	Measured continuously when the dryer is operating.	Conduct an annual Reference Method 5 stack test. There must be at least a 5-month span between each stack test.
Data Collection Procedure	Differential pressure is recorded at 5-minute intervals then 1-hour averages are computed and stored based on the 5-minute intervals.	Per approved test methods.
Averaging Period	1-Hour	Not applicable.

SECTION V INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(2) ✓ Photographic process equipment used to reproduce an image upon sensitized material through the use of radiant energy;

(3) Containers, reservoirs, or tanks used exclusively for:

(a) ✓ Storage of butane, propane, or liquefied petroleum, or natural gas;

(b) No. 7 Storage of lubricating oils;

(c) No. 1 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(4) ✓ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meter) or less;

(5) ✓ Certain recreational equipment and activities, such as fireplaces, barbecue pits and cookers, fireworks displays, and kerosene fuel use.

SECTION VI STATE-ONLY ENFORCEABLE CONDITIONS

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations:

    a. COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

    b. COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T – BACT) to control emissions of toxic air pollutants.

    c. COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health.

2. Record Keeping and Reporting:

    a. The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

        i. A statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

        ii. A revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

3. Consent Decree, dated August 24, 2007 Requirements

    a. Mettiki shall replace the scrubber pipe, within 1-week of discovery, whenever an inspection indicates that the scale build-up in the pipe reduces the inside diameter of the pipe to six (6) inches or less.

    b. Mettiki shall inspect the scrubber pipe, determine and record the thickness of the scale build-up in the pipe once every six months. There must be at least a 5-month span between inspections.

c. Mettiki shall maintain records of the semi-annual scrubber pipe inspections and record the thickness of the scale build-up. The records shall be kept at the Facility for a period of three (3) years and made available to the Department upon request

d. The diameter of the opening of the scrubber bleed line orifice shall not exceed 1.75 inches, nor shall the flow rate exceed 250 gallons per minute on a daily basis. If discovered during inspection and/or monitoring that these limits are exceeded, Mettiki shall replace the bleed line orifice within 1-week of discovery.

e. Mettiki shall inspect the scrubber bleed to the disposal line orifice and determine the orifice diameter on a monthly basis.

f. Mettiki shall maintain the monthly records of the scrubber bleed to the disposal line orifice inspections and records of the orifice diameter. The records shall be kept at the Facility for a period of three (3) years and made available to the Department upon request

g. Except during periods of startup and shutdown of the thermal coal dryer, when the dryer is in operation Mettiki shall maintain:

   i. pH of the effluent from the scrubbers on the thermal coal dryer at 6.1 or higher (hourly average);

   ii. Pressure drop across the venturi at greater than 30 inches of water column (hourly average);

   iii. Scrubber pump line between 8 psi and 13 psi (hourly average)

   For these requirements the startup and shutdown exception period for the thermal coal dryer is limited to thirty (30) minutes per incident.

h. Mettiki shall measure and record the following parameters at intervals of no greater than 5 minutes during all times that thermal coal dryer is in operation:

   i. pH of the effluent from the scrubbers;

   ii. Pressure drop across the venturi;

   iii. Pressure in the scrubber pump line; and

iv. Perform scrubber bleed to disposal flow monitoring to determine flow using a gallon per minute measure on a continuous basis.

i. Mettiki shall maintain the monthly records of the following parameters:

i. pH of the effluent from the scrubbers;

ii. Pressure drop across the venturi;

iii. Pressure in the scrubber pump line; and

iv. Perform scrubber bleed to disposal flow.

j. Mettiki shall submit a monthly report to the Department that identifies:

i. The days and hours during which the thermal coal dryer was in operation;

ii. An explanation for all exceedances of each of the thermal coal dryer scrubber operational limits;

iii. Results of inspections of the scrubber bleed to disposal line orifice;

iv. The following data reported as hourly averages:

1. pH of the effluent from the scrubbers;

2. Pressure drop across the venturi; and

3. Pressure in the scrubber pump line;

Each monthly report shall be due on the tenth (10^{th}) business day following the end of the reporting period and shall be sent to:

Air Quality Compliance Program,
Air and Radiation Administration
Maryland Department of the Environment
1800 Washington Blvd. - Ste. 720
Baltimore, Maryland 21230.

k. If the facility fails a SO_2 stack test, Mettiki shall submit to the Department, for its review and approval within 60 days of notification of the failed test, a plan to install additional SO_2 emissions controls,

including a schedule for doing such. Should the Department disapprove the plan, Mettiki shall submit a revised plan incorporating those revisions requested by the Department within two (2) weeks of receiving the notice of disapproval. Upon Departmental approval of the plan to install additional SO_2 emission controls, Mettiki shall implement the plan in accordance with the approved schedule. Notwithstanding this provision, if Mettiki elects to initiate a re-permit proceeding and it is determined not to be a PSD source, Mettiki shall perform stack testing in accordance with the schedule contained in the new permit in lieu of that contained herein.

METTIKI COAL, LLC
293 TABLE ROACK ROAD, OAKLAND, MD 21550
PERMIT NO. 24-023-0042
PART 70 OPERATING PERMIT FACT SHEET

BACKGROUND

Mettiki Coal, LLC (Mettiki) operates a bituminous coal mining plant located at 293 Table Road, Oakland, Garrett County, Maryland 21550, Maryland Air Quality Region 1. The SIC code for this facility is 1241.

Mettiki has been in operation at this location since 1977, having originally produced a low-volatile metallurgical coal product for sale to Japanese steel mills. Currently, the plant produces steam grade coal primarily for domestic utilities in Maryland and West Virginia.

Mettiki was originally made up of four separate mine portals, all in Maryland: A Mine, B Mine, C mine, and D Mine. The Maryland mines have ceased operations, running out of mineable reserves in the first quarter of 2007. Mettiki's A Mine closed prior to 1985. Mettiki's B and C Mines were closed in 1985 and 1987, respectively. Mettiki opened the "E" Mine in West Virginia in July 2005 in anticipation of the closure of the D Mine in 2007; coal from the E Mine is trucked to the Oakland Maryland plant for processing. Mettiki currently mines all of its coal from the E Mine in West Virginia.

Mettiki is still performing land reclamation at the closed mines and may occasionally extract some coal from time to time during the reclamation process.

The Department issued an initial Title V Operating Permit to Mettiki on July 25, 2001 and renewed the permit on June 1, 2008 and again on January 1, 2013. The 2013 Title V Operating Permit was reissued on April 1, 2015 in order to clarify the monitoring requirements in the CAM plan. Both the permit issued in 2013 and 2015 have the same expiration date of December 31, 2017. Mettiki submitted a permit renewal application on December 27, 2016. The Department sent a completeness determination letter to Mettiki on January 4, 2017 granting the facility an application shield.

FACILITY DESCRIPTION

Mettiki operates a coal cleaning/preparation operation with a thermal dryer and a shipping/receiving operation at the Oakland location. Raw coal from the Mettiki mine located in West Virginia is trucked to the Oakland facility where it is off-loaded. Coal is normally conveyed from the raw coal truck dump to the 4,000 ton raw coal silo, then to the preparation plant via a 36 inch conveyor belt, rated at 1,500 tons per hour (tph). However, in the event the silo becomes full, the plant feed belt becomes inoperable, or there is maintenance being conducted on the conveyor belts, a temporary raw coal storage pile is used as an emergency stock-out near the old rotary breaker. The extent of the temporary raw coal storage pile is approximately 10,000 to 20,000 tons or ½ acre for about one day of storage. Raw coal is reclaimed via a reclaim hopper using a bulldozer and conveyed to the coal preparation plant.

Typically, raw coal is processed in the preparation plant at a rate of approximately 1,000 tph. Coal in the preparation plant undergoes several wet screening and washing processes. Coal refuse is returned via the plant feed conveyor, to the refuse disposal area. The refuse and coal fines smaller than 100 mesh are sluiced to refuse thickeners and discharged to an injection well (an old underground mine).

Raw coal cleaned in the preparation plant is delivered by a conveying belt to the thermal dryer feed bin. The coal is discharged from the feed bin by a vibratory feeder into the drying chamber of the dryer. The hot gases used for drying is generated by the combustion of pulverized coal which has been previously dried in the dryer and collected in the flue gas cyclones. Number 2 fuel oil is used for startup of the dryer and is used only until enough coal is collected in the flue gas cyclones to support combustion. The vertical cylindrical shaped combustion chamber is rated at 267 MMBTU/hour for coal combustion and 40 MMBTU/hour for No. 2 fuel oil combustion.

The thermal dryer system dries the washed coal to less than 6% surface moisture. Emissions from the dryer are controlled by four cyclones and two scrubbers which are vented to the atmosphere through two stacks. The fines collected in the flue gas cyclones are used as fuel for the thermal dryer. The fines removed from the gas stream by the scrubbers are sent to the static thickener and then discharged to an underground injection well in the old “C” underground mine.

The cleaned and dried coal is conveyed to stock-out piles and two 10,000 tons storage silos. The end product is cleaned dried steam grade coal which is shipped to power plant via railcar or truck.

The thermal dryer was installed in 1978. Prior to the installation of the dryer, the US EPA issued a Prevention of Significant (PSD) Approval which allowed the construction and operation of the dryer. The PSD permit was reissued on October 1, 1982 by the State of Maryland and revised on May 6, 1983 to correct the daily emission rate limit for SO_2.

EMISSIONS

Criteria Pollutants and Hazardous Air Pollutants

Table 1 summarizes the actual emissions of criteria and Hazardous Air Pollutants (HAPs) from Mettiki based on its Annual Emission Certification Reports.

Table 1: Actual Emissions

Year	NO_X (TPY)	SO_X (TPY)	PM_{10} (TPY)	CO (TPY)	VOC (TPY)	Total HAP (TPY)	PM condensibles
2012	177.3	19.27	19.25	4.55	0.39	1.91	7.72
2013	157.7	64.13	19.45	4.30	0.37	1.68	11.02
2014	125.0	49.07	16.36	3.35	0.23	1.18	3.41
2015	143.5	37.96	18.84	3.97	0.29	1.40	3.30
2016	127.2	22.21	17.41	3.81	0.60	1.30	3.37

The major source threshold for triggering Title V permitting requirements in Garrett County is a potential to emit of 50 tons per year for VOC, and 100 tons per year of any other criteria pollutant. A major source of Hazardous Air Pollutants (HAP) has the potential to emit greater than 10 tons of any single HAP or 25 tons of total HAP. Since actual emissions of NOx from the facility are greater than the major source threshold, Mettiki Coal LLC is required to obtain a Title V-Part 70 Operating Permit under COMAR 26.11.03.01.

GREENHOUSE GAS (GHG) EMISSIONS

Mettiki emits the following greenhouse gases (GHGs) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHGs originate from the thermal dryer installed at the facility in 1977. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements.

Table 2 summarizes the actual GHG emissions from Mettiki based on its Annual Emission Certification Reports:

Table 2: Greenhouse Gases Emissions Summary

GHG	**Conversion factor**	**2014** tpy CO_2e	**2015** tpy CO_2e	**2016** tpy CO_2e
Carbon dioxide CO_2	1	34,725	40,966	38,742
Methane CH_4	25	90	108	103
Nitrous Oxide N_2O	300	186	189	180
Total GHG CO_{2eq}		**35,001**	**41,263**	**39,025**

EMISSION UNIT IDENTIFICATION

Mettiki Coal, LLC has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

Table 3: Emission Unit Identification

Emissions Unit Number	*ARMA Registration Number*	Emissions Unit Name and Description	Date of Installation
EU 1	9-0009	Thermal Coal Dryer	1977
EU 2	9-0009	Coal Handling System	1977 Mod. 9/2005 & 10/2006
EU 3	9-0029	6000 Gallon Gasoline storage tank	1978
EU 4	6-0129	150 ton per hour coal crusher	2009 - Removed

PERMITTING ACTIVITY SINCE LAST RENEWAL

EU 4, the 150 ton per hour coal crusher (AMA Registration No. 023-0042-6-0129), was moved to a storage area due to adverse market conditions and will not be operated. The emission unit will be removed from the operating permit. This removal is permanent but the facility has not requested deregistration.

COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS

Compliance Assurance Monitoring (CAM) applies to any emission unit at a major source that meets all of the following criteria:

1. The emission unit is subject to a federally enforceable emission limit or standard for a regulated pollutant;

2. The emission unit uses a control device to achieve compliance with any such emission limitation or standard; and

3. The emission unit has the potential to emit pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year required for a source to be classified as a major source and must not otherwise be exempt from CAM.

Table 4: CAM Applicability Table

Emission Unit	Pollutant	Emission Limitation	Control Device	Major Pre-Control Emissions	CAM Applicable?
Thermal Dryer	SO_X	78.6 lb/hr	Scrubber	Yes	Yes
	NO_X	None	None	Yes	No
	Total HAP	None	Cyclone/ Scrubber	Yes	No
	HCL	None	Scrubber	Yes	No
	TSP	0.02 gr/dscf	Cyclone/ Scrubber	Yes	Yes
Coal Handling System	PM10	None	Enclosure/ Water sprays	Yes	No
Gasoline Storage Tank	VOC	None	Stage 1 Vapor Recovery	No	No

As can be seen from Table 4, CAM is applicable to the Thermal Dryer for PM10 and SO_X.

AN OVERVIEW OF THE PART 70 PERMIT

The Fact Sheet is an informational document. If there are any discrepancies between the Fact Sheet and the Part 70 permit, the Part 70 permit is the enforceable document.

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess

emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis upon which the Permittee will demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

I. Emission Unit: Facility Wide

Applicable Standards/Limits:

The coal preparation plant shall not be operated in excess of 16 hrs/day.
[PSD Approval Condition 2 Issued October 1, 1982 and revised May 6, 1983]

Compliance Demonstration:

The Permittee shall maintain records of the facility daily operating hours.
[Reference: COMAR 26.11.03.06(C)]

Note: All records must be maintained for a period of at least 5 years and be made available to the Department upon request. **[Reference: COMAR 26.11.03.06C(5)(g)]**

II. Emission Unit: EU-1 Thermal Coal Dryer

The McNally-Pittsburgh Model No. 12 coal thermal dryer is designed to dry 713.2 tons of coal per hour from an initial surface moisture of 15.9 % to a final surface

moisture of 5.5%. Hot gases used to dry the coal are generated by the combustion of pulverized coal. No. 2 fuel oil is used for dryer startup. The vertical cylindrical shaped combustion chamber has a capacity of 267 MMBtu/hr (input) for pulverized coal firing and 40 MMBtu/hr (input) when using diesel oil during startup.

Particulate and sulfur oxide emissions from the dryer are controlled by four cyclones and two scrubbers which are vented to the atmosphere by two stacks. Particulate removed from the dryer exhaust is transported to a static thickener. Thickened solids are discharged to an injection well located in the old C underground mine.

The Thermal Dryer is subject to NSPS Subpart Y for Coal Preparation plants since it commenced construction after the applicability date of October 24, 1974. The thermal dryer was installed in 1978. NSPS Subpart Y limits visible emissions to 20% opacity (40 CFR §60.252) and particulate emissions to 0.031 gr/dscf (40 CFR §60.252(a)).

Prior to the installation of the dryer, the US EPA issued a Prevention of Significant (PSD) Approval which allowed the construction and operation of the dryer. The PSD permit was reissued on October 1, 1982 by the State of Maryland and revised on May 6, 1983 to correct the daily emission rate limit for SO_2. The PSD limits for SO2 are 78.6 lb/hr and 1,258 lb/day and the limits for particulate matter are gr/dcsf and 760 lb/day.

Consent Decrees

Mettiki is subject to an August 24, 2007 Consent Decree. The August 24, 2007 Consent Decree superseded the previous June 18, 2001 Consent Decree.

August 24, 2007 - A Consent Decree was entered with Mettiki on August 24, 2007 for failing a sulfur dioxide stack test on May 24, 2006 on the thermal coal dryer. The Decree required Mettiki to pay a penalty, perform semi-annual PM and SO_2 stack tests on the thermal coal dryer and begin monthly inspections of the scrubber bleed orifice, as well as, continue to monitor the pH of the scrubber effluent, pressure drop across the venturi scrubber and the pressure in the scrubber pump line, conduct semi-annual scrubber pipe inspections and commence monitoring the daily flow through the scrubber bleed pipe.

The operational parameters remained the same for the scrubber:

- 6.1 pH or higher for the scrubber effluent;
- 30 inches of water or greater for the pressure drop across the venturi scrubber;
- Maintain a pressure between 8 psi and 13 psi in the scrubber pipe; and
- Maintain the daily flow through the bleed pipe to below 250 gpm.

Mettiki submits monthly reports to MDE showing compliance with all the scrubber parameters. There is no end date for the Consent Decree and there are stipulated penalties for Mettiki if they fail to operate the thermal coal dryer scrubber within the operational parameter limits.

The August 2007 Consent Decree contained a provision allowing Mettiki to petition the Department to reduce the semi-annual testing frequency requirement for the thermal coal dryer if, after three years of testing, the test results show compliance with the facility's particulate matter and sulfur dioxide emission standards. In a July 9, 2010 letter, Mettiki requested that the semi-annual testing on the thermal coal dryer be reduced from semi-annual to once every three years.

The Department, in a September 24, 2010 letter, granted a reduction in the testing frequency from semi-annual to once per year (not once every three years as requested by Mettiki) for particulate matter and sulfur dioxide.

Stack Test Results:

Particulate Matter

Mettiki has been performing the annual particulate matter stack tests as required by the 2010 amendment to the August 24, 2007 Consent Decree to show compliance with the particulate matter limits of 0.02 gr/dscf and 47.5 lbs/hour. The following is a list of particulate matter stack test dates and the results:

October 2012 – 0.0082 gr/dscf
October 2013 – 0.0092 gr/dscf and 25.4 lbs/hr
October 2014 – 0.0097 gr/dscf and 28.3 lbs/hr
November 2015 – 0.014 gr/dscf and 29.53 lbs/hr
November 2016 – 0.01 gr/dscf 23.82 lbs/hr

Sulfur Dioxide

Mettiki has been performing the annual SO_2 stack tests as required by the 2010 amendment to the August 24, 2007 Consent Decree to show compliance with the sulfur dioxide limit of 78.6 lbs/hour. The following is a list of sulfur dioxide stack test dates and the results:

October 2012 – 12.7 lbs/hr
October 2013 – 47.6 lbs/hr
October 2014 – 46.0 lbs/hr
November 2015 – 26.7 lbs/hr
November 2016 – 17.6 lbs/hr

NOx

A NOx stack test is required during the life of by the Title V Operating Permit. The most recent stack test was performed in September 2015 and showed an emission rate from the thermal dryer of 100.8 lbs/hour.

Applicable Standards/Limits

A. Control of Visible Emissions:

1. **COMAR 26.11.06.02C(1)** – Visible Emission Standards. "In Areas I, II, V, and VI, a person may not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity."

2. **COMAR 26.11.06.02A(2)** – Exceptions. "The visible emissions standards in §C of this regulation do not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:

   a. The visible emissions are not greater than 40 percent opacity; and

   b. The visible emissions do not occur for more than 6 consecutive minutes in any 60-minute period.

3. On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, the Permittee shall not cause to be discharged into the atmosphere from the thermal dryer any gases which exhibit 20 percent opacity or greater. **[Reference: 40 CFR § 60.252(a)(2)]**

Compliance Demonstration:

Since the opacity requirement also acts as a surrogate for particulate matter (PM) emissions and due to the fact that the Permittee's use of a venturi scrubber to control PM emissions, makes it impractical to perform an EPA Reference Method 9 on the exhaust from the coal dryer/scrubber, the Permittee shall satisfy compliance with the visible emissions standard by complying with the requirements of their Compliance Assurance Monitoring (CAM) Plan for control of PM.

B. Control of Particulate Matter:

1. Total plant emissions shall not exceed 760 lb/day (based on a 16 hour operating day) and 0.02 gr/scfd. **[Authority: PSD Approval Condition 2 Issued October 1, 1982 and revised May 6, 1983]**

2. On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, the Permittee shall not cause to be discharged into the atmosphere from the thermal dryer any gases which contain PM in excess of 0.070 g/dscm (0.031 grains per dry standard cubic feet (gr/dscf)). **[Reference: 40 CFR § 60.252(a)(2)]**

3. **COMAR 26.11.06.03B(1)(a)** – Particulate Matter from Confined Sources in Areas I, II, V and VI Constructed On or After January 17, 1972. A person may not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/dcsf (115 mg/dscm).

   Note: Demonstration of compliance with the more stringent PSD particulate matter emission limit of 0.02 gr/dscf also demonstrates compliance with the NSPS and COMAR particulate matter emission limits.

Compliance Demonstration:

The Permittee shall perform an annual stack test in accordance with EPA Reference Test Method 5. There must be at least a 5-month span between each stack test. [Reference: COMAR 26.11.03.06C and periodic monitoring based on Consent Decree dated August 24, 2007]

The Permittee shall monitor continuously the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 1 inch water gauge. The Permittee shall recalibrate the monitoring device annually in accordance with the procedures under §60.13(b). **[Reference: 40 CFR §60.256(a)(1)(ii)(A) & (a)(2)]**

The Permittee shall monitor continuously the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 % of design water supply pressure. The Permittee shall recalibrate the monitoring device annually in accordance with the procedures under §60.13(b). **[Reference: 40 CFR §60.256(a)(1)(ii)(B) & (a)(2)]**

The Permittee shall monitor continuously the temperature of the gas stream at the exit of the thermal dryer. The monitoring device is to be certified by the manufacturer to be accurate within ± 3º Fahrenheit. The Permittee shall recalibrate the monitoring device annually in accordance with the procedures under §60.13(b). **[Reference: 40 CFR §60.256(a)(1)(i) & (a)(2)]**

The Permittee shall maintain records of the following:

1. Stack tests results;
2. Venturi throat pressure differential;
3. Water supply pressure to the control equipment;
4. Gas stream temperature; and
5. Recalibration of all monitoring devices.

[Reference: PSD Approval dated October 1, 1982 and revised May 6, 1983 and COMAR 26.11.03.06C Periodic Monitoring]

The Permittee submit a test protocol to the Department for approval at least 30 days prior to the scheduled test date. The Permittee shall submit a copy of the results of compliance stack tests to the Department within 45 days after the date the test was completed. **[Reference: PSD Approval dated October 1, 1982 and revised May 6, 1983 and COMAR 26.11.03.06C Periodic Monitoring]**

Note: Additional monitoring, testing and reporting requirements for particulate emissions are contained in the CAM plan.

Compliance Assurance Monitoring Requirements for Particulate Matter

The Mettiki Coal CAM plan to assure compliance with the particulate matter standards utilizes a three-pronged approach for assuring compliance with the particulate matter limit: (1) performance testing to demonstrate that the specified limit is being met; (2) operation and maintenance of the scrubber to ensure that is continues to operate properly; and (3) the CAM plan to provide a mechanism for assessing the performance of the scrubber on an ongoing basis. The CAM monitoring sets specific indicators that are used to monitor the operation of the control device. Under the CAM requirements, ranges are specified for the indicators and operation of the unit outside of the indicator range is subject to investigation, and, if applicable, corrective action in addition to reporting requirements.

The annual stack test provides direct evidence of compliance and provided the scrubber is properly operated and maintained, continued compliance with the standard is expected. The CAM requirements serve as specific indicators that the scrubber is operated properly. As a result, all three prongs together are appropriate measures to assure compliance with the PM emission limitation.

The following table as found in the Part 70 permit outlines Mettiki's CAM plan:

Indicator 1- Scrubber Differential Pressure

The scrubber differential pressure was selected as the indicator of control device performance. For a venturi scrubber, differential pressure drop is directly related to the particulate control efficiency of the scrubber. The differential pressure is

proportional to the water flow and air flow through the scrubber venturi throat and is an indicator of the energy across the scrubber and the proper operation of the scrubber within established conditions.

The indicator differential pressure drop selected is 30 inches of water. This was based upon the monitoring data collected during compliance stack tests performed on September 7 & 8, 2000. These tests were conducted to resolve an enforcement action for failing a compliance stack test for PM. The monitoring of 30 inches of water pressure drop was established in the Consent Decree which resolved the enforcement action. The facility has passed every annual compliance stack test for PM since 2000.

The differential pressure is continuously monitored and recorded during all periods of the Thermal Dryer's operations including startups, shutdowns, and malfunctions.

Indicator 2- Annual Stack Test

Mettiki is required to conduct annual stack test to demonstrate compliance with the particulate emissions limit.

Table IV – 7
Compliance Assurance Monitoring (CAM) [Reference: 40 CFR Part 64]
Thermal Dryer - MDE Reg. No. 9-0009 PM

	Indicator #1	**Indicator #2**
I. Indicator	Scrubber differential Pressure	Performance test
Measurement Approach	The pressure drop across the venturi is measured using a differential pressure transducer (Kinpactor pressure monitors.)	Conduct EPA Method 5 emissions test to demonstrate compliance with permitted emission limits
II. Indicator Range	An excursion is defined as a 1-hour average differential pressure below 30 inches of water.	An excursion is defined as any finding that the dryer does not meet the permitted emission limit.
Corrective Action	Each excursion triggers an inspection, corrective action as necessary and a reporting requirement.	An excursion triggers an assessment of the problem, corrective action and a reporting requirement.
III. Performance Criteria		
A. Representative	The differential pressure transducer monitors the static	A test protocol shall be prepared and approved by the Department

Table IV – 7 **Compliance Assurance Monitoring (CAM) [Reference: 40 CFR Part 64]** **Thermal Dryer - MDE Reg. No. 9-0009 PM**		
	Indicator #1	**Indicator #2**
Data	pressures upstream and downstream of the scrubber's venturi throat.	prior to conducting the performance test.
B. Verification of Operational Status	NA	NA
C. QA/QC Practices and Criteria	The differential pressure transducer is calibrated annually within +/- 1 inch water.	EPA test methods approved in protocol.
D. Monitoring Frequency	Measured continuously when the dryer is operating including startups, shutdowns, and malfunctions.	Conduct an annual Reference Method 5 stack test. There must be at least a 5-month span between each stack test.
Data Collection Procedure	Differential pressure is recorded at 5-minute intervals then 1-hour averages are computed and stored based on the 5-minute intervals.	Per approved test methods.
Averaging Period	1-hour	Not applicable

C. Control of SO_2 Emissions

1. Total plant emissions shall not exceed 78.6 lbs/hr and 1,258 lbs/day (based on a 16 hour operating day). **[PSD Approval Condition 2 Issued October 1, 1982 and revised May 6, 1983]**

2. **COMAR 26.11.09.07A(1)(a) & (c) –** Sulfur Content Limitation for Fuel Burning Equipment Located in Areas I, II, V, and VI. A person may not burn, sell, or make available for sale any fuel with a sulfur content by weight in excess of or which otherwise exceeds the following limitations:

   a. The combustion of all solid fuels on a premises where the sum total maximum rated heat input of all fuel burning equipment located on the

premises is 100 million Btu (10^6 gigajoules) per hour or greater may not result in a total emission of oxides of sulfur in excess of 3.5 pounds per million Btu (1.50 kilograms per gigajoule) actual heat input per hour;

b. Distillate fuel oils, 0.3 percent.

Compliance Demonstration:

The Permittee shall conduct annual Reference Method 6 stack tests. A test protocol shall be submitted to the Department for approval at least 30 days prior to the scheduled test date. The Permittee shall submit a copy of the results of compliance stack tests to the Department within 45 days after the date the test was completed. **[Reference: Consent Decree dated August 24, 2007 and COMAR 26.11.03.06C]**

The Permittee shall obtain and maintain a fuel oil certification or specification from the fuel supplier indicating that the oil complies with the limitation on sulfur content. **[Reference: COMAR 26.11.03.06(C)]**

Note: Additional monitoring, record keeping and reporting requirements for SO_2 emissions are contained in the CAM Plan.

Compliance Assurance Monitoring (CAM) Requirements

The Mettiki Coal CAM plan to assure compliance with the sulfur dioxide standards utilizes a three-pronged approach for assuring compliance with the SO_2 limit: (1) Performance testing to demonstrate that the specified limit is being met; (2) operation and maintenance of the scrubber to ensure that is continues to operate properly; and (3) the CAM plan to provide a mechanism for assessing the performance of the scrubber on an ongoing basis. The CAM monitoring sets specific indicators that are used to monitor the operation of the control device. Under the CAM requirements, ranges are specified for the indicators and operation of the unit outside of the indicator range is subject to investigation, and, if applicable, corrective action in addition to reporting requirements.

The annual stack test provides direct evidence of compliance and provided the scrubber is properly operated and maintained, continued compliance with the standard is expected. The CAM requirements serve as specific indicators that the scrubber is operated properly. As a result, all three prongs together are appropriate measures to assure compliance with the SO_2 emission limitation.

The *CAM Plan* indicators were established upon completion of Mettiki's evaluation of the SO_2 control system which was initiated in order to resolve a compliance action that related to failing compliance stack tests on May 10 and 11, 1995. These indicators to ensure compliance were validated during compliance stack tests

performed on November 16 and 17, 1995 and subsequent annual compliance stack tests. All the annual compliance stack tests since November 1995 for PM have demonstrated compliance with the emission standards.

Indicator 1- Scrubber Liquid pH

As the pH of the scrubbing liquid decreases, the available concentration gradient between the liquid and gas decreases, and less SO_2 is absorbed. If pH is too high, SO_2 will be absorbed but excessive amounts of reagents are used and magnesium sulfite ($MgSO_3$) will precipitate inside the scrubber, forming scale that tends to plug the scrubber piping. The selected range for scrubber liquid pH is greater than 6.1 to ensure the reaction favors creation of the $MgSO_3$ compound. Oxygen from the flue gas oxidizes the $MgSO_3$ to magnesium sulfate $MgSO_4$. This slurry is removed using an absorber bleed line and fed to a thickener for densification and underground injection. An excursion occurs and is documented if an hourly average value is less than 6.1.

The pH of the scrubbing liquid is continuously monitored and recorded at all times of the Thermal Dryer's operations including startups, shutdowns, and malfunctions.

Indicator 2- Pressure in the Scrubber Pump Line

To ensure compliance with the applicable emission limits, a minimum scrubbing liquid pressure must be supplied to the scrubber to absorb a given amount of SO_2 in the gas stream. If the pressure decreases below the minimum, sufficient mass transfer of the pollutant from the gas phase to the liquid phase will not occur. The minimum pressure required to maintain the proper removal at the maximum gas flow and vapor loading through the scrubber can be determined. Maintaining this minimum pressure, even during periods of reduced gas flow, will ensure that the required removal is achieved at all times. The selected indicator range for unacceptable scrubber pump line pressure is less than 8 psi or greater than 13 psi. If an average value is less than 8 psi or greater than 13 psi, an excursion occurs and is documented. Hourly average readings are sufficient to ensure proper operation of the control device as operating experience with this scrubber has shown that the pH and pressure in the scrubber pump line do not vary over the course of a month.

The pH of the scrubbing liquid is continuously monitored and recorded at all times of the Thermal Dryer's operations including startups, shutdowns, and malfunctions.

Indicator 3- Work Practice

The scrubber pipe is inspected for scale buildup every 6 months. If the scale buildup reduces any section of the scrubber pipe to an inside diameter of 6 inches or less, the pipe is replaced,

Indicator 4- Annual Stack Test

Mettiki is required to conduct annual stack test to demonstrate compliance with the SO_2 emissions limit.

The following table as found in the Part 70 permit outlines Mettiki's CAM plan:

Table IV – 6 **Compliance Assurance Monitoring (CAM) [Reference: 40 CFR Part 64]** **Thermal Dryer MDE Reg. No. 9-0009 – SO_2**				
	Indicator #1	**Indicator #2**	**Indicator #3**	**Indicator #4**
I. Indicator Description	Scrubber liquid pH	Pressure in the scrubber pump line.	Work Practice	Performance test EPA Method 6
Measurement Approach	The scrubber effluent pH is measured using a pH sensor.	The pressure in the scrubber pump line is measured using a pressure transducer.	Visual inspections of the thickness of the scale buildup in the scrubber pipe.	Conduct emissions test to demonstrate compliance with permitted emission limits.
II. Indicator Range	An excursion is defined as a 1-hour average scrubber effluent pH value below 6.1	An excursion is defined as a 1-hour average pressure less than 8 psi or greater than 13 psi.	An excursion is defined as when scale buildup reduces the inside diameter of the scrubber pipe to 6 inches or less.	An excursion is defined as any finding that the dryer does not meet the permitted emission limit.
Corrective Action	An excursion triggers an inspection, corrective action as necessary, and a reporting requirement.	An excursion triggers an inspection, corrective action as necessary, and a reporting requirement.	An excursion triggers replacement or repair of the affected pipe section(s) to restore the inside diameter to greater than 6 inches.	An excursion triggers an assessment of the problem, corrective action and a reporting requirement.
III. Performance Criteria				
A. Representative	The scrubber liquid pH	The pressure transducer is	NA	A test protocol shall be

Table IV – 6
Compliance Assurance Monitoring (CAM) [Reference: 40 CFR Part 64]
Thermal Dryer MDE Reg. No. 9-0009 – SO_2

	Indicator #1	Indicator #2	Indicator #3	Indicator #4
Data	sensor is located in the scrubber return line.	located in the scrubber pump line.		prepared and approved by the Department prior to conducting the performance test.
B. Verification of Operational Status	Calibrate the pH sensor against standard reference buffer solutions of known pH.	Factory calibration before installation.	NA	NA
C. QA/QC Practices and Criteria	The pH meter is calibrated once per week to within +/- 0.1 pH units accuracy.	Calibrate the pressure transducer to within +/- 1 PSI annually	NA	EPA test methods approved in protocol.
D. Monitoring Frequency	The scrubber liquid pH is measured continuously when the dryer is in operation including startups, shutdowns, and malfunctions.	The scrubber pressure is measured continuously when the dryer is in operation including startups, shutdowns, and malfunctions.	Visual inspection of the scrubber pipe every 6 months.	Conduct an annual Reference Method 6 stack test. There must be at least a 5-month span between each stack test.
Data Collection Procedure.	Scrubber effluent pH is recorded at 5-minute intervals then 1-hour averages are computed and stored based on the 5-minute intervals.	Pressure is recorded at 5-minute intervals then 1-hour averages are computed and stored based on the 5-minute intervals.	Results of the pipe inspections, including scale buildup measurements are recorded & submitted to MDE on monthly	Per approved test methods.

Table IV – 6 **Compliance Assurance Monitoring (CAM) [Reference: 40 CFR Part 64]** **Thermal Dryer MDE Reg. No. 9-0009 – SO_2**				
	Indicator #1	**Indicator #2**	**Indicator #3**	**Indicator #4**
			monitoring reports, where applicable.	
Averaging Period	1-hour.	1-hour.	NA	NA
E. Record Keeping	Maintain a log of scrubber liquid pH and corrective actions implements.	Maintain a log the pressure in the scrubber pump line and corrective actions implements.	Maintain a log the Work Practice and corrective actions implements.	Maintain a copy of the test report for 5 years or until another test is conducted. Maintain records of corrective actions taken in response to excursions.
Reporting	The scrubber effluent pH is measured using a pH sensor. Submit monthly report.	The pressure in the scrubber pump line is measured using a pressure transducer. Submit monthly report.	Visual inspections of the thickness of the scale buildup in the scrubber pipe. Submit twice per year.	Submit test protocol and notification of testing to Agency 30 days prior to test date. Submit test report 45 days after conducting a performance test.
Frequency	An excursion is defined as a 1-hour average scrubber effluent pH value below 6.1	An excursion is defined as a 1-hour average pressure less than 8 psi or greater than 13 psi	An excursion is defined as when scale buildup reduces the inside diameter of the scrubber pipe to 6 inches or less.	For each performance test conducted.

D. Control of NOx Emissions

1. **COMAR 26.11.09.08(J) –** Requirements for Industrial Furnaces and Other Miscellaneous Installations that Cause Emissions of NO_x. A person who owns or operates any installation other than fuel-burning equipment that causes NO_x emissions shall:

    a. Maintain good operating practices as recommended by the equipment vendor to minimize NO_x emissions;

    b. Prepare and implement a written in-house training program for all operators of these installations that include instruction on good operating and maintenance practices for the particular installation;

    c. Maintain and make available to the Department, upon request, the written in-house operator training program;

    d. Burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year; and

    e. Maintain operator training attendance records for each operator at the site for at least 2 years and make these records available to the Department upon request.

Compliance Demonstration:

The Permittee shall conduct Reference Method 7 stack tests at least once during the term of the permit. **[Reference: COMAR 26.11.03.06C Periodic monitoring]**

The Permittee shall maintain annual fuel use records on site. **[Reference: COMAR 26.11.09.08K(3)]**

The Permittee shall maintain records of operator training program and attendance by each operator. **[Reference: COMAR 26.11.03.06C]**

The Permittee shall maintain good operating practices as recommended by the equipment vendor to minimize NOX emissions." **[Reference: COMAR 26.11.09.08J(1)]**

A test protocol shall be submitted to the Department for approval at least 30 days prior to the scheduled test date. The Permittee shall submit a copy of the results of compliance stack tests to the Department within 45 days after the date the test was completed**. [Reference: COMAR 26.11.09.08K(2)]**

The Permittee shall maintain records of Stack test results. **[Reference: COMAR 26.11.03.06C Periodic monitoring]**

III. Emission Unit: EU-2 Coal Handling System

EU-2 consists of a coal handling system including a 1,500 tph rotary breaker which is located inside a building and numerous fugitive particulate emission sources including storage piles, unpaved roads and loading operations. Particulate emissions are controlled by water sprays and captured particulate is returned to the process.

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Emission Unit No.	Description	Emission Type	Control
MCC02	Rotary Breaker & Screening	Fugitive	Enclosure, water sprays
MCC03	Raw Coal Temporary Stockout-Temporary	Fugitive	None
MCC04	Raw Coal Temporary Stockout Storage, Wind Erosion		None
MCC05	Raw Coal Silo	Fugitive	None
MCC06	Storage Pile Stockout – Middling from Thermal Dryer	Fugitive	None
MCC07	Clean Coal Storage Silos Stockout – from Thermal Dryer	Fugitive	None
MCC08	Clean Coal Storage Pile Stockout -	Fugitive	None
MCC09	Storage Pile Maintenance	Fugitive	None
MCC10	Storage Pile Wind Erosion – Clean Coal	Fugitive	None
MCC11A/B	Railcar/Truck Loading	Fugitive	Enclosure,
MCC12	Coal Refuse Stockout	Fugitive	None
MCC13	Low BTU Coal Stockout	Fugitive	None
MCC14	Storage Pile Wind Erosion – Low Btu Coal	Fugitive	None
MCC15	Maintenance Vehicle Traffic	Fugitive	Water sprays
MCC17	1500-ton per hour (TPH) Double-bay Truck Dump-E Mine	Fugitive	Enclosure
MCC18	Scalped Rock Dump System	Fugitive	None

A. Control of Visible Emissions

1. The Permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater. **[Reference: 40 CFR § 60.252(c)]**

Compliance Demonstration

The Permittee shall maintain and update as necessary a Best Management Practices Plan that outlines how the source shall monitor and control visible and particulate emissions. The Plan shall include monthly visual emissions observations required to be conducted and a log of the results of the observations.

The Permittee shall maintain a written copy of the Best Management Practices Plan and logs of the dates, time, and results of all visible emissions observations performed on site and shall make them available to the Department upon request

The Permittee shall submit an updated plan and the visible emissions logs to the Department upon request. **[Reference: COMAR 26.11.03.06C Periodic Monitoring]**

B. Control of Particulate Matter

1. **COMAR 26.11.06.03C(1) –** Particulate Matter from Unconfined Sources. A person may not cause or permit emissions from an unconfined source without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, when appropriate as determined by the Department, the installation and use of hoods, fans, and dust collectors to enclose, capture, and vent emissions. In making this determination, the Department shall consider technological feasibility, practicality, economic impact, and the environmental consequences of the decision.

2. **COMAR 26.11.06.03D –** Particulate Matter from Materials Handling and Construction. A person may not cause or permit any material to be handled, transported, or stored, or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, but not be limited to, the following when appropriate as determined by the control officer:

a. Use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land.

b. Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces, which can create airborne dusts.

c. Installation and use of hoods, fans, and dust collectors to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting of buildings or other similar operations.

d. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to create air pollution. Alternate means may be employed to achieve the same results as would covering the vehicles.

e. The paving of roadways and their maintenance in clean condition.

f. The prompt removal from paved streets of earth or other material which has been transported there by trucks or earth moving equipment or erosion by water.

Compliance Demonstration

The Permittee shall maintain and update as necessary a Best Management Practices Plan that outlines how the source shall control particulate emissions. The Plan shall include visual emissions observations required to be conducted in accordance with 40 CFR Subpart Y.

The Permittee shall maintain a copy of the Best Management Practices Plan and a record of the date and times when the reasonable control actions are completed.

The Permittee shall submit an updated plan and the records of actions completed to the Department upon request. **[Reference: COMAR 26.11.03.06C Periodic monitoring]**

IV. Emission Unit : EU-3 6000 Gallon Gasoline Storage Tank

Applicable Standards and Limits

Control of VOC Emissions

1. **COMAR 26.11.13.04C(2)** – Small Storage Tanks – Stage I Recovery. An owner or operator of a gasoline tank truck or an owner or operator of a stationary storage tank subject to this regulation may not cause or permit gasoline to be loaded into a stationary tank unless the loading system is equipped with a vapor balance line that is properly installed, maintained and used.

2. **COMAR 26.11.13.04D** – Small Storage Tanks - General Standards. A person may not cause or permit gasoline or VOC having a TVP greater than 1.5 psia or greater be loaded into any tank truck, railroad tank car, or other contrivance unless:

    a. Loading connections on the vapor lines are equipped with fittings that have no leaks and that automatically and immediately close upon disconnection to prevent release of gasoline or VOC from these fittings; and

    b. The equipment is maintained and operated in a manner to prevent avoidable liquid leaks during loading or unloading operations.

Compliance Demonstration

The Permittee shall inspect at least one fuel drop once every six months to verify that:

a. The Stage 1 vapor balance system is used;

b. No liquid spills occur; and

c. The hose fittings and connections are operating properly and do not leak.

If leaks are detected, The Permittee shall take the following corrective actions:

a. Take immediate action to repair all observed VOC leaks that can be repaired with 48 hours; and

b. Repair all other leaking components no later than 15 days after the leak is discovered. If a replacement part is needed, the part shall be ordered within 3 days after discovery of the leak, and the leak shall be repaired within 48 hours after receiving the part. **[Reference: COMAR 26.11.03.06C Periodic Monitoring]**

The Permittee shall maintain records of fuel drop monitoring results and corrective actions. The Permittee shall make records available to the Department upon request. **[Reference: COMAR 26.11.03.06C Periodic Monitoring]**

COMPLIANCE SCHEDULE

Mettiki Coal LLC is currently in compliance with all applicable air quality regulations.

TITLE IV – ACID RAIN

Not Applicable

TITLE VI – OZONE DEPLETING SUBSTANCES

Mettiki Coal LLC is not subject to Title VI requirements.

SECTION 112(r) – ACCIDENTAL RELEASE

Mettiki Coal LLC is not subject to the requirements of 40 CFR 68.

PERMIT SHIELD

Mettiki Coal LLC did not request a permit shield.

INSIGNIFICANT ACTIVITIES

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) ✓ Space heaters utilizing direct heat transfer and used solely for comfort heat;

(2) ✓ Photographic process equipment used to reproduce an image upon sensitized material through the use of radiant energy;

(3) Containers, reservoirs, or tanks used exclusively for:

(a) ✓ Storage of butane, propane, or liquefied petroleum, or natural gas;

(b) No. 7 Storage of lubricating oils;

(c) No. 1 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;

(4) ✓ Charbroilers and pit barbecues as defined in COMAR 26.11.18.01 with a total cooking area of 5 square feet (0.46 square meter) or less;

(5) ✓ Certain recreational equipment and activities, such as fireplaces, barbecue pits and cookers, fireworks displays, and kerosene fuel use;

STATE ONLY ENFORCEABLE REQUIREMENTS

This section of the permit contains state-only enforceable requirements. The requirements in this section will not be enforced by the U.S. Environmental Protection Agency. The requirements in this section are not subject to COMAR 26.11.03 10 - Public Petitions for Review to EPA Regarding Part 70 Permits.

The Permittee is subject to the following State-only enforceable requirements:

1. Applicable Regulations:

   a. COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.

   b. COMAR 26.11.15.05, which requires that the Permittee implement “Best Available Control Technology for Toxics” (T – BACT) to control emissions of toxic air pollutants.

   c. COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health.

2. Record Keeping and Reporting:

a. The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

i. A statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or

ii. A revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.

3. Consent Decree, dated August 24, 2007 Requirements

a. Mettiki shall replace the scrubber pipe, within 1-week of discovery, whenever an inspection indicates that the scale build-up in the pipe reduces the inside diameter of the pipe to six (6) inches or less.

b. Mettiki shall inspect the scrubber pipe, determine and record the thickness of the scale build-up in the pipe once every six months. There must be at least a 5-month span between inspections.

c. Mettiki shall maintain records of the semi-annual scrubber pipe inspections and record the thickness of the scale build-up. The records shall be kept at the Facility for a period of three (3) years and made available to the Department upon request

d. The diameter of the opening of the scrubber bleed line orifice shall not exceed 1.75 inches, nor shall the flow rate exceed 250 gallons per minute on a daily basis. If discovered during inspection and/or monitoring that these limits are exceeded, Mettiki shall replace the bleed line orifice within 1-week of discovery.

e. Mettiki shall inspect the scrubber bleed to the disposal line orifice and determine the orifice diameter on a monthly basis.

f. Mettiki shall maintain the monthly records of the scrubber bleed to the disposal line orifice inspections and records of the orifice diameter. The records shall be kept at the Facility for a period of three (3) years and made available to the Department upon request

g. Except during periods of startup and shutdown of the thermal coal dryer, when the dryer is in operation Mettiki shall maintain:

   i. pH of the effluent from the scrubbers on the thermal coal dryer at 6.1 or higher (hourly average);

   ii. Pressure drop across the venturi at greater than 30 inches of water column (hourly average);

   iii. Scrubber pump line between 8 psi and 13 psi (hourly average)

   For these requirements the startup and shutdown exception period for the thermal coal dryer is limited to thirty (30) minutes per incident.

h. Mettiki shall measure and record the following parameters at intervals of no greater than 5 minutes during all times that thermal coal dryer is in operation:

   i. pH of the effluent from the scrubbers;

   ii. Pressure drop across the venturi;

   iii. Pressure in the scrubber pump line; and

   iv. Perform scrubber bleed to disposal flow monitoring to determine flow using a gallon per minute measure on a continuous basis.

i. Mettiki shall maintain the monthly records of the following parameters:

   i. pH of the effluent from the scrubbers;

   ii. Pressure drop across the venturi;

   iii. Pressure in the scrubber pump line; and

   iv. Perform scrubber bleed to disposal flow.

j. Mettiki shall submit a monthly report to the Department that identifies:

   i. The days and hours during which the thermal coal dryer was in operation;

   ii. An explanation for all exceedances of each of the thermal coal dryer scrubber operational limits;

iii. Results of inspections of the scrubber bleed to disposal line orifice;

iv. The following data reported as hourly averages:

1. pH of the effluent from the scrubbers;

2. Pressure drop across the venturi; and

3. Pressure in the scrubber pump line;

Each monthly report shall be due on the tenth (10^{th}) business day following the end of the reporting period and shall be sent to:

Air Quality Compliance Program,
Air and Radiation Administration
Maryland Department of the Environment
1800 Washington Blvd. - Ste. 720
Baltimore, Maryland 21230.

k. If the facility fails a SO_2 stack test, Mettiki shall submit to the Department, for its review and approval within 60 days of notification of the failed test, a plan to install additional SO_2 emissions controls, including a schedule for doing such. Should the Department disapprove the plan, Mettiki shall submit a revised plan incorporating those revisions requested by the Department within two (2) weeks of receiving the notice of disapproval. Upon Departmental approval of the plan to install additional SO_2 emission controls, Mettiki shall implement the plan in accordance with the approved schedule. Notwithstanding this provision, if Mettiki elects to initiate a re-permit proceeding and it is determined not to be a PSD source, Mettiki shall perform stack testing in accordance with the schedule contained in the new permit in lieu of that contained herein.