

# COYOTE CREEK MINING COMPANY, L.L.C.

A SUBSIDIARY OF THE NORTH AMERICAN COAL CORPORATION

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September 9, 2014

Terry O'Clair  
Director, Division of Air Quality  
North Dakota Department of Health  
918 East Divide Avenue, 2<sup>nd</sup> Floor  
Bismarck, ND 58501-1947

RE: Application for Permit to Construct – Coyote Creek Mine

Dear Mr. O'Clair

Enclosed is Coyote Creek Mining Company's (CCMC) application for Air Quality Permit to Construct a proposed lignite surface coal mine and coal processing facility near Beulah in Mercer County. Enclosed are two paper copies of the permit application and an electronic copy along with the permit application fee of \$150.

CCMC looks forward to discussing this project in detail with the NDDH. Please contact me at (701) 873-7800 with any questions.

Sincerely,

COYOTE CREEK MINING COMPANY, L.L.C.



Donn R. Steffen  
Engineering/Environmental Manager

Enclosures

cc: James F. Melchior  
Joel Trinkle, Barr Engineering Company



***Application for Air Quality Permit to Construct  
a Surface Lignite Coal Mine and Coal  
Processing Facility***

***Prepared for  
Coyote Creek Mining Company, L.L.C.***

***August 2014***



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# Application for Air Quality Permit to Construct a Surface Lignite Coal Mine and Coal Processing Facility

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# 1.0 Introduction and Project Description

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Coyote Creek Mining Company, L.L.C. (CCMC) is proposing to establish a surface lignite coal mine and coal processing facility near Beulah called Coyote Creek Mine (CCM). The proposed installation is a “designated air contaminant source” because it shall include activities that satisfy the North Dakota Administrative Code (NDAC) section 33-15-14-01 as follows:

- Coal mining (subdivision i of subsection 4);
- Coal handling and processing (subdivision j of subsection 4);
- Coal preparation plant, which is subject to standards of performance at 40 CFR 60 Subpart Y (subsection 9).

Pursuant to subsection 1 of section 33-15-14-02, the proposed CCM shall apply for a permit to construct (PTC) and not commence “construction, installation, or establishment,” as defined in section 33-15-14-01.1, until a PTC is issued by the North Dakota Department of Health (NDDH).

CCMC has completed a Prevention of Significant Deterioration (PSD) regulatory applicability analysis for the proposed source. As part of this effort, CCMC sought for and received from the NDDH confirmation that the proposed CCM is a separate stationary source from the existing Coyote Station electric generating station. CCMC has calculated the emissions of each regulated New Source Review (NSR) pollutant. The proposed mine does not result in the potential to emit (PTE) of any criteria pollutants equal to or greater than 250 tons per year under the PSD program or 100 tons per year for the Title V Operating Permit program. Therefore, CCMC will be considered a minor source under the PSD program, as detailed in this report. As such, this permit application provides documentation of CCMC’s regulatory applicability analyses and requests a minor source permit to construct.

The NDDH Permit to Construct application forms are included in Appendix A and the filing fee of \$150 is included in this application package.

## 1.1. Project Description

CCMC is proposing to construct a surface lignite coal mine with an expected annual production of approximately 2.5 million tons of lignite coal for sale, with the capability to process up to 3.2 million tons of lignite coal. The primary mining operations are proposed to occur in a 13-square mile area located 3 to 4 miles southwest of Coyote Station and west-southwest of Dakota

Westmoreland's existing Beulah Mine. See Appendix B for the relative locations of these facilities and their operating activities. The mined lignite will then be transported by CCMC to CCMC's coal processing facility west of Coyote Station where it will be further prepared for sale.

Initial construction activities at the mine, primarily with respect to the dragline, began in summer of 2014. Construction activities related to the emission units will begin in April of 2015.

Commercial delivery of lignite is scheduled to begin in May 2016 with respect to a lignite sales agreement with the Coyote Station owners. The 25-year sales agreement provides for lignite delivery through 2040 with opportunity for extension.

## **1.2. Emissions Units**

Activities at the open mine face include removing overburden with a dragline, ripping and preparing the coal for loading, loading the coal into haul trucks, short term mine face coal storage, and transportation of the lignite to the coal processing facility. These activities result in fugitive particulate matter emissions and are not quantified herein as described in Section 2.1.1.

Once the coal is brought to the processing facility, it is unloaded onto an open storage pile. From the pile the coal is pushed via a dozer into a receiving pocket and apron feeder where it enters the coal processing facility. At this point it undergoes primary and secondary crushing, all within enclosed chutes and skirtboards that are considered a passive enclosure containment system (PECS). After crushing, the coal is transferred to a conveyer belt that is owned and operated by Coyote Station, at which point it is no longer considered part of the CCMC permit.

The only non-fugitive emission source related to the facility is the coal processing equipment, which includes primary and secondary crushing, conveyors, and associated enclosures and PECS.

Emissions from the coal processing equipment are subject to the control requirements of 40 CFR 60 Subpart Y and will be controlled by enclosures and PECS to mitigate dust formation in the process. Fogging will be used as necessary if it is determined that the PECS is not effective at mitigating dust formation. Effectively, no measureable particulate emissions are expected from the equipment as a result of using these control systems.

The capacity of the open coal storage pile will be approximately 180,000 tons with a base area of roughly 700 feet (ft) by 500 ft covering a surface area of 350,000 ft<sup>2</sup> (~8 acres). The open storage pile will only store raw, unprocessed coal. As described in Section 2.1.1, the open storage pile is

not subject to NSPS Subpart Y; therefore CCMC did not quantify the potential emissions associated with this storage pile.

## 2.0 Regulatory Applicability and Compliance

CCMC has completed an applicability review of Federal and State air quality regulations as part of the air permit application process for Coyote Creek Mine. Table 2-1 provides a summary of the major air quality programs that were reviewed for the project. Each regulation which requires explanation is described in the following sections.

**Table 2-1. Summary of Air Quality Regulatory Applicability for the Project.**

Report Section	Program Description	Regulatory Citation	Does This Project Trigger New Applicable Requirements?
2.1	New Source Review (NSR)	40 CFR 52	No
2.2	National Ambient Air Quality Standards (NAAQS)	40 CFR 50	No
2.3	New Source Performance Standards (NSPS)	40 CFR 60	Yes
2.4	National Emission Standards for Hazardous Air Pollutants (NESHAPs)	40 CFR 61	No
2.5	NESHAPs for Source Categories	40 CFR 63	No
---	Risk Management Programs for Chemical Accidental Release Prevention	40 CFR 68	No
---	Title V Operating Permit	40 CFR 70	No
---	Acid Rain Requirements	40 CFR 72	No
---	Stratospheric Ozone Protection Requirements	40 CFR 82	No
<b>2.6</b>	<b>North Dakota State Rules</b>	<b>NDAC 33-15</b>	
---	General Provisions	33-15-01	No
2.6.1	Ambient Air Quality Standards	33-15-02	No
2.6.2	Restriction of Emission of Visible Air Contaminants	33-15-03	Yes
---	Open Burning Restrictions	33-15-04	No

**Table 2-1. Summary of Air Quality Regulatory Applicability for the Project  
(continued).**

<b>Report Section</b>	<b>Program Description</b>	<b>Regulatory Citation</b>	<b>Does This Project Trigger New Applicable Requirements?</b>
2.6.3	Emissions of Particulate Matter Restricted	33-15-05	Yes
---	Emissions of Sulfur Compounds Restricted	33-15-06	No
---	Control of Organic Compounds Emissions	33-15-07	No
---	Control of Air Pollution From Vehicles and Other Internal Combustion Engines	33-15-08	No
---	Emissions of Certain Settleable Acids and Alkaline Substances Restricted	33-15-09	No
---	Control of Pesticides	33-15-10	No
---	Prevention of Air Pollution Emergency Episodes	33-15-11	No
2.6.4	Standards of Performance for New Stationary Sources	33-15-12	Yes
2.6.5	Emission Standards for Hazardous Air Pollutants	33-15-13	No
---	Designated Air Contaminant Sources, Permit to Construct, Minor Source Permit to Operate, Title V Permit to Operate	33-15-14	No
---	Prevention of Significant Deterioration of Air Quality	33-15-15	No
---	Restriction of Odorous Air Contaminants	33-15-16	No
---	Restriction of Fugitive Emissions	33-15-17	No
---	Stack Heights	33-15-18	No
---	Visibility Protection	33-15-19	No
---	Control of Emissions from Oil and Gas Production Facilities	33-15-20	No
---	Acid Rain Program	33-15-21	No
---	Emissions Standards for HAP for Source Categories	33-15-22	No
2.6.6	Fees	33-15-23	Yes
---	Standards for Lead-Based Paint Activities	33-15-24	No
---	Regional Haze Requirements	33-15-25	No

## **2.1. New Source Review (NSR)/Prevention of Significant Deterioration (PSD) (40 CFR 52)**

Mercer County in North Dakota is an unclassifiable or attainment area for all criteria pollutants.<sup>1</sup> New sources of emissions located in an attainment area must be reviewed for applicability under the Prevention of Significant Deterioration (PSD) program. North Dakota has a federally-approved PSD program under North Dakota Administrative Code (NDAC) 33-15-15 for sources proposing to construct on areas other than Indian Reservations.<sup>2</sup> Chapter 33-15-15 adopts the applicability provisions §52.21 as they exist on July 1, 2013, including revisions to the EPA PSD program that were published in the Federal Register (FR) but had not yet been published in the CFR.<sup>3</sup>

On February 13, 2013, CCMC submitted a request to the NDDH seeking clarification that the proposed mine and the existing Coyote Station power generation facility are separate stationary sources as it relates to the PSD rules, Section 112 of the Clean Air Act (CAA) for hazardous air pollutants (HAP) and Title V (Part 70) rules. In an April 11, 2013 letter to CCMC, NDDH confirmed that CCMC and Coyote Station are separate stationary sources. The PSD applicability analysis herein focuses on whether CCMC is a major stationary source in and of itself, which would trigger PSD for the facility.

### **2.1.1. PSD Applicability Analysis Procedures**

A PSD applicability analysis has been conducted for the project to determine if the construction of the CCMC mine is a major stationary source. A major stationary source is defined below.<sup>4</sup>

*“(1)(i) Major stationary source means:*

*( a ) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc*

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<sup>1</sup> 40 CFR 81.335.

<sup>2</sup> 40 CFR 52.1829(a).

<sup>3</sup> NDAC 33-15-15-01.2.

<sup>4</sup> 40 CFR 52.21(b)(1)(i)

*smelters, iron and steel mill plants, primary aluminum ore reduction plants (with thermal dryers), primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140), fossil-fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;*

*(b) Notwithstanding the stationary source size specified in paragraph (b)(1)(i) of this section, any stationary source which emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant; ... ”*

CCMC is principally a surface mining operation with additional facilities located separately from the mine face to process the coal for sale. This processing equipment will not include a coal cleaning plant with thermal dryer or any other listed source category; therefore, the major source threshold for each regulated NSR pollutant is 250 tons per year on a PTE basis.

Fugitive emissions are not considered in the PTE determination for those operations that are not contained in a listed source category, as described below:<sup>5</sup>

*“(iii) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this section whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:*

- (a) Coal cleaning plants (with thermal dryers);*
- (b) Kraft pulp mills;*
- (c) Portland cement plants;*
- (d) Primary zinc smelters;*
- (e) Iron and steel mills;*
- (f) Primary aluminum ore reduction plants;*
- (g) Primary copper smelters;*
- (h) Municipal incinerators capable of charging more than 250 tons of refuse per day;*
- (i) Hydrofluoric, sulfuric, or nitric acid plants;*

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<sup>5</sup> 40 CFR 52.21(b)(1)(iii)

- (j) Petroleum refineries;
- (k) Lime plants;
- (l) Phosphate rock processing plants;
- (m) Coke oven batteries;
- (n) Sulfur recovery plants;
- (o) Carbon black plants (furnace process);
- (p) Primary lead smelters;
- (q) Fuel conversion plants;
- (r) Sintering plants;
- (s) Secondary metal production plants;
- (t) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;
- (u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- (v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- (w) Taconite ore processing plants;
- (x) Glass fiber processing plants;
- (y) Charcoal production plants;
- (z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, and
- (aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.”

The source category of concern is described in paragraph (aa) and relates to sources that are subject to New Source Performance Standards (NSPS) promulgated in 40 CFR 60 pursuant to section 111 of the Clean Air Act. CCMC’s coal processing activities are subject to Subpart Y for coal preparation and processing plants. Operations at the coal mine face are not subject to this subpart pursuant to the definition of coal processing and conveying equipment from NSPS Subpart Y is provided as follows:<sup>6</sup>

*“Coal processing and conveying equipment means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts. **Equipment located at the mine face is not considered to be part of the coal preparation and processing plant.**”*

Because equipment at the mine face are not part of the affected facility, fugitive emissions from these equipment are not considered in the facility PTE calculations.

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<sup>6</sup> 40 CFR 60.251(f)

The EPA has clarified that although the principal activity of a stationary source may not be covered by a listed source category, fugitive emissions shall be included from those emissions units within the stationary source that are covered by a source category:<sup>7</sup>

*“If the primary activity of a stationary source falls within a source category that is not listed, then as a general matter fugitive emissions from the emissions units at the source are not included in determining whether the source is a major stationary source.*

*However, if the source also contains emission units which do fall within a listed source category (or categories), then you include fugitive emissions from these listed emissions units to determine if the source is a major stationary source.”*

CCMC plans to transport raw mined lignite coal from the mine face to a separate location nearer to the Coyote Station for processing. The raw lignite is placed onto a storage pile and is subsequently pushed by a dozer or equivalent device into a receiving pocket. This receiving pocket constitutes the beginning of the coal preparation plant subject to Subpart Y in accordance with EPA’s interpretation.<sup>8</sup>

*As commenters noted, in 1998 EPA issued an interpretative ruling that states that “coal unloading” operations (which include both truck and rail car dumping) are regulated under subpart Y. This interpretative ruling has not been changed in the intervening years and, thus, remains in effect. In the interpretative ruling, EPA concluded*

*...that coal unloading that involves conveying coal to plant machinery fits within the definition of “coal processing and conveying equipment.” 40 CFR 60.251(g) defines “coal processing and conveying equipment” as “any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts.” The key phrases*

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<sup>7</sup> March 6, 2003, letter from Ms. Cheryl Newton of US EPA to Ms. Janet McCabe of Indiana Department of Environmental Management.

<sup>8</sup> US EPA, “Standards of Performance for Coal Preparation and Processing Plants (40 CFR 60 subpart Y); Response to Comments Received on Proposed Amendments (Published April 28, 2008; 73 FR 22901) and Supplemental Proposal (Published May 27, 2009; 74 FR 25304),” September 2009

*are “the equipment used to convey coal to \* \* \* machinery” and “but is not limited to.” While the “equipment” involved in coal unloading varies from plant to plant (the definition is written broadly enough to accommodate the differences), what is important is that the equipment perform the function of conveying...The coal must be directly unloaded into receiving equipment, such as a hopper, to be subject to the provisions of NSPS Subpart Y. (see 63 FR 53288.)*

*Thus, EPA interprets coal unloading into the first hopper “downstream” from any form of transportation to be the beginning of the “coal preparation plant.”*

Unloading the raw lignite coal to the open storage pile is not regulated by Subpart Y. Therefore, the only emission unit at CCMC subject to NSPS Subpart Y is the coal processing equipment (FUG-1).

#### **2.1.1.1 Emission Calculations**

The only emission unit which would be considered for the stationary source PTE calculations is the coal processing equipment. However, no emissions are calculated for the coal processing equipment as it will be controlled by enclosures and PECS. Any emissions from the coal processing equipment are expected to be negligible and unquantifiable as the control equipment is known to be very effective in reducing particulate emissions from coal processing facilities. For these reasons, in the 2009 amendments to Subpart Y, EPA acknowledged control technologies other than fabric filters, addressing technologies such as PECS and fogging systems and providing that those affected facilities that utilize control technologies without a mechanical vent are not subject to the particulate standards provided by Subpart Y; instead, such sources are only subject to opacity standards<sup>9</sup>.

The potential to emit from the proposed lignite surface coal mine and coal processing facility is provided in Table 2-2 below. Detailed emission calculations were not required for the proposed surface coal mine as there are no quantifiable emissions associated with the proposed activities at CCMC. Note that as described in Section 2.1.1, fugitive emissions from activities at the mine face

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<sup>9</sup> Technical Support Document for Particulate Matter and Opacity Standards for Coal-Handling Equipment. Christian Fellner, May 2009. Page 4.

or raw storage pile are not included in determining major source status. As shown below, CCMC will be a minor source for PSD and Title V programs.

**Table 2-2. Project Facility-Wide Potential to Emit (tpy)**

New Unit	PM	PM <sub>10</sub>	PM <sub>2.5</sub>
FUG 1 –Coal Processing Equipment	--	--	--
<b>Facility-Wide Total</b>	--	--	--
<b>Title V Major Source Threshold</b>	N/A	100	100
<b>PSD Major Source Threshold</b>	250	250	250

## **2.2. National Ambient Air Quality Standards (40 CFR 51)**

Primary NAAQS define levels of air quality which the United States Environmental Protection Agency (USEPA) deems necessary to protect the public health. Secondary NAAQS define levels of air quality, which the USEPA judges necessary to protect the welfare (i.e. wildlife, national monuments, vegetation, visibility, and property values) from any known, or anticipated adverse effects of a pollutant. Refer to Section 2.6.1 for compliance with the NAAQS.

## **2.3. New Source Performance Standards (40 CFR 60)**

An NSPS is applicable to certain categories of affected facilities that are constructed, modified, or reconstructed and that meet other applicability criteria on or after a compliance date upon which a relevant subpart applies. If an individual NSPS subpart is applicable to a project, the general provisions of NSPS Subpart A also apply.

### **2.3.1. Standards of Performance for Coal Preparation and Processing Plants (40 CFR 60 Subpart Y)**

Subpart Y applies to coal preparation and processing plants that process more than 200 tons of coal per day and trigger construction, reconstruction, or modification after one of a number of certain trigger dates. CCMC is a coal preparation and processing plant that processes more than 200 tons per day, and its associated coal processing equipment will trigger new conditions of Subpart Y. The coal processing equipment triggers Subpart Y via construction of a new individual affected facility. As discussed in Section 2.1.1, The fugitive emissions from the mine face and the

raw coal pile upstream of the coal processing at CCMC do not trigger Subpart Y as the mining operation is not a source category listed in §52.21(b)(1)(iii) and the equipment located at the mine face is not considered part of the coal preparation and processing plant.<sup>10</sup>The coal handling equipment will be subject to §60.254(b), and will be required to meet the opacity requirements, which prohibit discharges into the atmosphere of any gases which exhibit greater than 10% opacity. The coal handling equipment will not be subject to the PM limits of §60.254(b)(2) as this equipment does not utilize a mechanical vent, which is defined below:<sup>11</sup>

*Mechanical vent means any vent that uses a powered mechanical drive (machine) to induce air flow.*

## **2.4. National Emission Standards for Hazardous Air Pollutants (40 CFR 61)**

The National Emission Standards for Hazardous Air Pollutants (NESHAPs) are contained within 40 CFR 61. Part 61 applies to owners or operators of stationary sources for which a standard is prescribed under this part. CCMC is not a stationary source subject to 40 CFR 61.

## **2.5. National Emission Standards for Hazardous Air Pollutants for Source Categories (40 CFR 63)**

40 CFR 63 defines source categories that emit HAPs above major source thresholds. This part is also known as Maximum Achievable Control Technology (MACT) standards. The major source thresholds are 10 tpy for any single HAP and/or 25 tpy of all combined HAPs. CCMC is not a major source subject to 40 CFR 63.

## **2.6. State of North Dakota Air Rules (NDAC 33-15)**

The following subsections detail regulatory applicability for Chapters 33-15-01 through 33-15-25 of the NDAC.

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<sup>10</sup> 40 CFR 60.251(f)

<sup>11</sup> 40 CFR 60.251(l)

### **2.6.1. Ambient Air Quality Standards (NDAC 33-15-02)**

North Dakota AAQS are equal to or more stringent than Federal requirements. It is the purpose of these air quality standards to set forth levels of air quality for the maintenance of public health and welfare and to provide guidance to governmental and other parties interested in abating air pollution.

NDDH has two programs/initiatives intended to protect ambient air that a permit applicant is required to evaluate during the permit to construct application process. The first, "*Policy for the Control of Hazardous Air Pollutant Emissions in North Dakota*" is utilized to determine the health-related risk of a facility that emits hazardous air pollutants. The second is a September 12, 2006, internal memorandum<sup>12</sup> that prescribes using the PSD significant emission rates (SER) rather than the major source threshold when determining if dispersion modeling should be performed for Federal and State ambient air quality standards.

In order to determine compliance with the NDDH "*Policy for the Control of Hazardous Air Pollutant Emissions in North Dakota*", the maximum off-property, ground-level ambient concentration of each HAP emitted must be determined. The NDDH may exempt sources of minor significance from the requirements of this policy. This project will not result in HAP emissions from the facility in any appreciable quantity. Therefore, CCMC is in compliance with the State's air toxics policy.

The NDDH internal memorandum regarding evaluation of new projects for Federal and State ambient air compliance requires that the potential emissions from new facilities be compared to the corresponding Significant Emission Rate (SER) thresholds given in the memorandum. If the PTE is greater than the SER, the "general rule of thumb" as stated in the memorandum is that dispersion modeling is required in the Permit to Construct application. Emissions increases of PM<sub>10</sub> are less than the modeling thresholds established in the NDDH internal memorandum, thus air dispersion modeling is not required.

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<sup>12</sup> Intradepartmental Memorandum from Mr. Terry O'Clair to Air Quality Permitting Staff, "Modeling Requirements for a Permit to Construct," September 12, 2006.

### **2.6.2. Restriction of Emission of Visible Air Contaminants (NDAC 33-15-03)**

New point sources are prohibited from producing visible emissions of greater than 20 percent opacity, with the exception that 40 percent opacity is permissible for not more than one 6-minute period per hour. New fugitive sources are prohibited from producing emissions of greater than 40 percent opacity, with the exception that 40 percent opacity for more than one 6-minute period per hour, measured at the property line. Equipment from the project will be subject to these requirements.

### **2.6.3. Emissions of Particulate Matter Restricted (NDAC 33-15-05)**

This chapter regulates particulate matter from industrial processes and indirect heating equipment. At NDAC 33-15-05-01.2, emission limitations are based on the process weight allocated to each source. CCMC will be considered an industrial process capable of processing 3.2 million tons of coal per year (365 ton/hr) and will be subject to a particulate matter emission limit of 65.3 lb/hr. As shown in Table 2-2, this emission limit is much higher than the actual expected emissions from the facility, which are unquantifiable.

### **2.6.4. Standards of Performance for New Stationary Sources (NDAC 33-15-12)**

The state rules, in general, refer to Federal NSPS regulations. Certain NSPS regulations apply to CCMC and have been addressed in Section 2.3.

### **2.6.5. Emission Standards for Hazardous Air Pollutants (NDAC 33-15-13)**

These regulations refer to or closely emulate the Federal NESHAPs in 40 CFR 61. There are no applicable NESHAPs, refer to Section 2.4 for more detail.

### **2.6.6. Fees (NDAC 33-15-23)**

CCMC is responsible for a \$150 filing fee for construction permit applications, plus any additional fees based on actual processing costs.

## **Appendix A**

### **NDDH Application Forms**



**PERMIT APPLICATION FOR  
AIR CONTAMINANT SOURCES**  
NORTH DAKOTA DEPARTMENT OF HEALTH  
DIVISION OF AIR QUALITY  
SFN 8516 (06-13)

**SECTION A - FACILITY INFORMATION**

Name of Firm or Organization Coyote Creek Mining Company, L.L.C.		
Contact Person for Air Pollution Matters Donn Steffen		
Title Engineering / Environmental Manger	Telephone Number 701-873-7800	E-mail Address donn.steffen@nacoal.com
Applicant's Name Donn Steffen		
Title Engineering / Environmental Manger	Telephone Number 701-873-7800	E-mail Address donn.steffen@nacoal.com
Mailing Address (Street & No.) 6504 17th St. SW		
City Zap	State ND	ZIP Code 58580
Facility Address (Street & No.) 6504 17th St. SW		
City Zap	State ND	ZIP Code 58580
County Mercer	Latitude (Nearest Second)	Longitude (Nearest Second)
Legal Description of Facility Site _____ 1/4 _____ 1/4, See App. B Section _____ Twp. _____ Range	Land Area at Facility Site Acres (or) 8000 Acres Sq. Ft.	MSL Elevation at Facility ~1900

**SECTION B – GENERAL NATURE OF BUSINESS**

Describe Nature of Business	North American Industry Classification System Number	Standard Industrial Classification Number (SIC)
Coal Processing (Crushing and Conveying)	212111	1221

**SECTION C – GENERAL PERMIT INFORMATION**

Type of Permit? Permit to Construct (PTC) <input checked="" type="checkbox"/> Permit to Operate (PTO) <input type="checkbox"/>	
If application is for a Permit to Construct, please provide the following data:	
Planned Start Construction Date April 1, 2015	Planned End Construction Date April 1, 2016

**SECTION D – SOURCE IDENTIFICATION AND CATEGORY OF EACH SOURCE INCLUDED ON THIS PERMIT APPLICATION**

Your Source ID Number	Source or Unit (Equipment, Machines, Devices, Boilers, Processes, Incinerators, Etc.)	Permit to Construct				Minor Source Permit to Operate						
		New Source	Existing Source Modification	Existing Source Expansion	Existing Source Change of Location	New Source	Existing Source Initial Application	Existing Source After Modification	Existing Source After Expansion	Existing Source After Change of Location	Existing Source After Change of Ownership	Other
FUG-1	Coal Processing Equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Add additional pages if necessary

**SECTION E – IDENTIFICATION OF AIR CONTAMINANTS**

Check all which are emitted in measurable quantities into the atmosphere from any operation at facility

<input type="checkbox"/> Arsenic	<input type="checkbox"/> Chlorine Compounds	<input type="checkbox"/> Sulfur Compounds	<input type="checkbox"/> Radioisotopes
<input type="checkbox"/> Asbestos	<input type="checkbox"/> Chromium Compounds	<input type="checkbox"/> Hydrogen Sulfide	<input type="checkbox"/> Visible Emissions
<input type="checkbox"/> Beryllium	<input type="checkbox"/> Fluoride Compounds	<input type="checkbox"/> Odors	<input checked="" type="checkbox"/> Particulates (specify)
<input type="checkbox"/> Cadmium	<input type="checkbox"/> Volatile Organic Compounds	<input type="checkbox"/> Carbon Monoxide	<input checked="" type="checkbox"/> Dust
<input type="checkbox"/> Lead	<input type="checkbox"/> Other Organic Compounds	<input type="checkbox"/> Nitrogen Compounds	<input type="checkbox"/> Silica
<input type="checkbox"/> Mercury	<input type="checkbox"/> Greenhouse Gases (CO <sub>2</sub> e)	<input type="checkbox"/> Pesticides	<input type="checkbox"/> Other (specify)

List Specific Compounds  
PM, PM10, PM2.5

Has Source Testing Been Done at the Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Last Date when a Testing Program was Completed N/A	If Program is Continuous, Give Approximate Testing Frequency N/A
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**SECTION F1 – ADDITIONAL FORMS**

Indicate which of the following forms are attached and made part of the application

<input type="checkbox"/> Air Pollution Control Equipment (SFN 8532)	<input type="checkbox"/> Fuel Burning Equipment Used for Indirect Heating (SFN 8518)
<input type="checkbox"/> Construct/Operate Incinerators (SFN 8522)	<input type="checkbox"/> Hazardous Air Pollutant (HAP) Sources (SFN 8329)
<input type="checkbox"/> Natural Gas Processing Plants (SFN 11408)	<input checked="" type="checkbox"/> Manufacturing or Processing Equipment (SFN 8520)
<input type="checkbox"/> Glycol Dehydration Units (SFN 58923)	<input type="checkbox"/> Volatile Organic Compounds Storage Tank (SFN 8535)
<input type="checkbox"/> Flares (SFN 59652)	<input type="checkbox"/> Internal Combustion Engines and Turbines (SFN 8891)
<input type="checkbox"/> Rock, Sand, and Gravel Plants (SFN 8530)	<input type="checkbox"/> Oil/Gas Production Facility Registration (SFN 14334)
<input type="checkbox"/> Asphalt Concrete Plants (SFN 8526)	<input type="checkbox"/> Grain, Feed, and Fertilizer Operations (SFN 8524)



**PERMIT APPLICATION FOR  
MANUFACTURING OR PROCESSING EQUIPMENT**  
NORTH DAKOTA DEPARTMENT OF HEALTH  
DIVISION OF AIR QUALITY  
SFN 8520 (09-12)

**SECTION A – GENERAL INFORMATION**

Equipment items operating as a functional unit may be grouped as one application		
Name of Firm or Organization Coyote Creek Mining Company, L.L.C.		
Applicant's Name Donn Steffen		
Title Engineer/Environmental Manager	Telephone Number 701-873-7800	E-mail Address donn.steffen@nacoal.com
Mailing Address (Street & No.) 6504 17th St. SW		
City Zap	State ND	ZIP Code 58580

**SECTION B - FACILITY INFORMATION**

Facility Name Coyote Creek Mine		
ND Air Pollution Control Permit No. (If Applicable) N/A		
Contact Person for Air Pollution Matters Donn Steffen		
Title Engineer/Environmental Manager	Telephone Number 701-873-7800	E-mail Address donn.steffen@nacoal.com
Facility Address (Street & No.) 6504 17th St. SW		
City Zap	State ND	ZIP Code 58580
County Mercer	Latitude (Nearest Second) 47-12'-57"	Longitude (Nearest Second) 101-48'-47"
Legal Description of Facility Site SE 1/4 1/4, 10 Section 143N Twp. 88W Range	MSL Elevation at Facility 1895	Ref. Datum

**SECTION C – EQUIPMENT INFORMATION**

Type of Unit or Process (rotary dryer, cupola furnace, crusher, pelletizer, etc.) Coal Handling Equipment		
Make N/A	Model N/A	Date Installed N/A
Capacity (manufacturer's or designer's guaranteed maximum) N/A	Operating Capacity (specific units) N/A	
Brief description of operation of unit or process: Equipment associated with the conveying and processing of coal		

**SECTION D – NORMAL OPERATING SCHEDULE**

Hours Per Day	Days Per Week	Weeks Per Year	Peak Production Season (if any)	Dates of Annual Shutdown
12	6	52	none	none

**SECTION E – RAW MATERIALS INTRODUCED INTO UNIT OR PROCESS**

Include solid fuels such as coke or coal. *Exclude* indirect heat exchangers from this section  
For indirect heat exchangers, complete form SFN 8518

Material	Hourly Process Weight (Pounds Per Hour)			Average Annual (Specify Units)	Intermittent Operation Only (Average Hours Per Week)
	Average	Maximum	Minimum		
Coal		4,000,000	2,000,000	2,500,000 ton/yr	

**SECTION F – PRODUCTS OF UNIT OR PROCESS**

Include all, even those not usable because they do not meet specifications

Material	Hourly Process Weight (Pounds Per Hour)			Average Annual (Specify Units)	Intermittent Operation Only (Average Hours Per Week)
	Average	Maximum	Minimum		
Coal		4,000,000	2,000,000	2,500,000 ton/yr	

**SECTION G – FUELS USED**

Coal (Tons/Yr) N/A	% Sulfur N/A	% Ash N/A	Oil (Gal/Yr) N/A	% Sulfur N/A	Grade No. N/A
Natural Gas (Thousand CF/Yr) N/A		LP Gas (Gal/Yr) N/A		Other (Specify) N/A	

**SECTION H – EMISSION POINTS**

List each point separately, number each and locate on attached flow chart

Number	Stack Height (ft)	Stack Diameter (ft at top)	Gas Volume (ACFM)	Exit Temp (°F)	Gas Velocity (fps)
FUG-1	N/A	N/A	N/A	N/A	N/A

**SECTION I – AIR CONTAMINANTS EMITTED**

Known or Suspected - Use same identification number as above

Number	Pollutant	Amount		Basis of Estimate
		Pounds/Hr	Tons/Yr	
FUG-1	PM	negligible	negligible	NSPS Subpart Y
FUG-1	PM10	negligible	negligible	NSPS Subpart Y
FUG-1	PM2.5	negligible	negligible	NSPS Subpart Y

**SECTION J – VOLATILE ORGANIC COMPOUNDS**

Are any volatile organic compounds (VOCs) stored on premises?  No  Yes – List Below  
 See 40 CFR 51.100(s) for classes of compounds covered

Material Stored	Size Tank (Gallons)	Vapor Control Device

**SECTION K – ORGANIC SOLVENTS**

Are any organic solvents used or produced?  No (None or less than 50 gal/yr)  Yes – List Below

Type	Principal Use	Gallons/Yr Consumed	Gallons/Yr Produced

**SECTION L – AIR POLLUTION CONTROL EQUIPMENT**

Is any air pollution control equipment installed on this unit or process?  No  Yes  
 If 'Yes' attach form SFN 8532

**SECTION M – MATERIAL STORAGE**

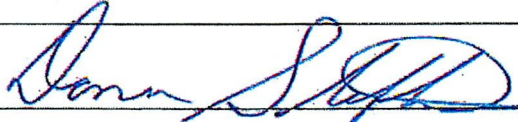
Does the input material or product from this process contain finely divided material which could become airborne?  No  Yes

Describe storage methods used:

Storage Piles	Type of Material	Particle Diameter (Avg. or Screen Size)	Pile Size Average Tons	Pile Wetted	Pile Covered

Describe any fugitive dust problems:  
 Fugitive Dust will be controlled by PECS.

Attach additional sheets if needed to explain any answers. Use separate form for each contaminant emitting process

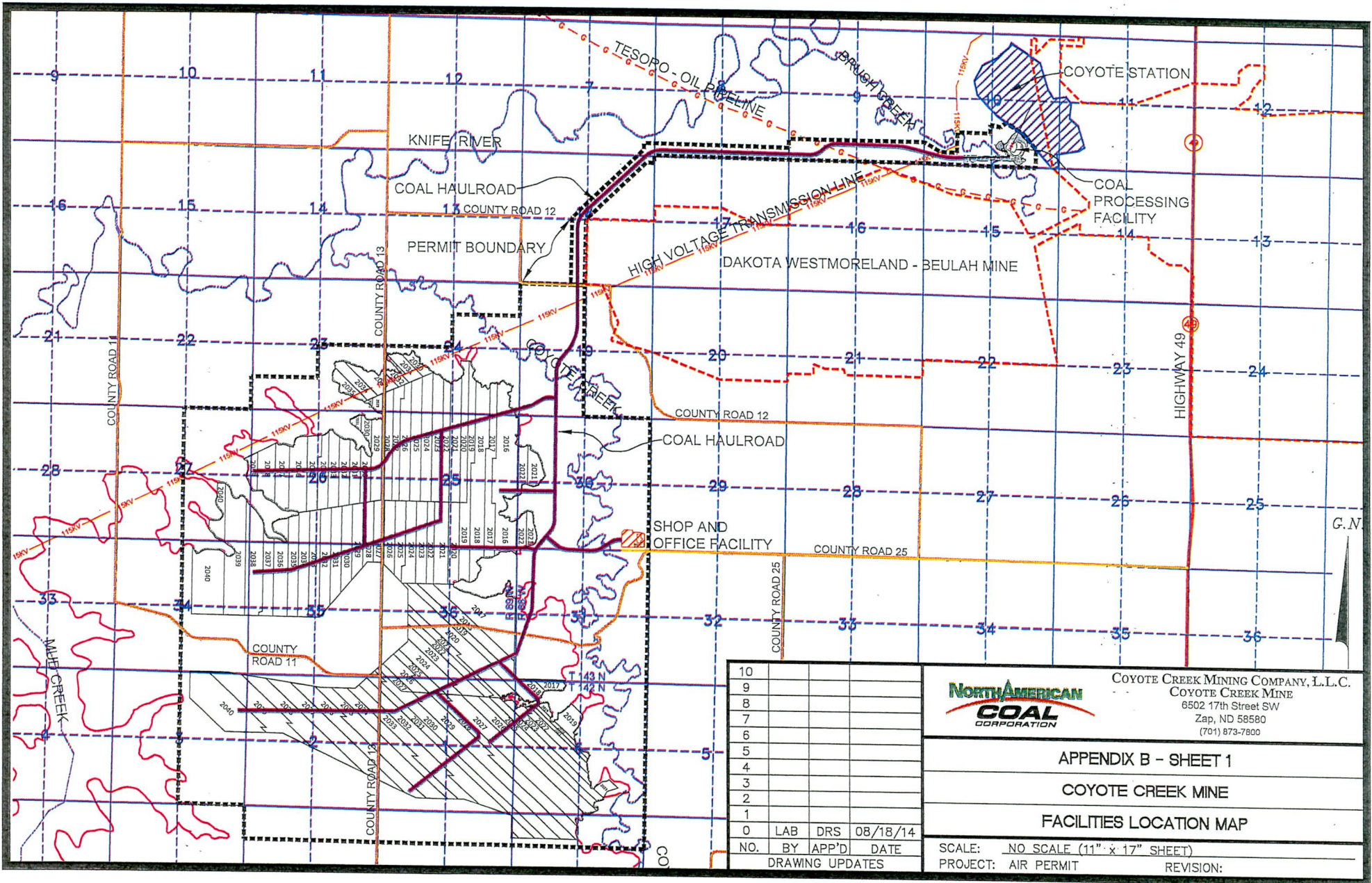
Signature of Applicant 	Date 9-9-14
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SEND COMPLETED APPLICATION AND ALL ATTACHMENTS TO:

North Dakota Department of Health  
 Division of Air Quality  
 918 E Divide Ave., 2nd Floor  
 Bismarck, ND 58501-1947  
 (701) 328-5188

## **Appendix B**

### **Project Diagrams**



10			
9			
8			
7			
6			
5			
4			
3			
2			
1			
0	LAB	DRS	08/18/14
NO.	BY	APP'D	DATE
	DRAWING UPDATES		



COYOTE CREEK MINING COMPANY, L.L.C.  
 COYOTE CREEK MINE  
 6502 17th Street SW  
 Zap, ND 58580  
 (701) 673-7800

APPENDIX B - SHEET 1

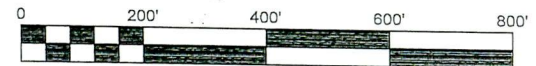
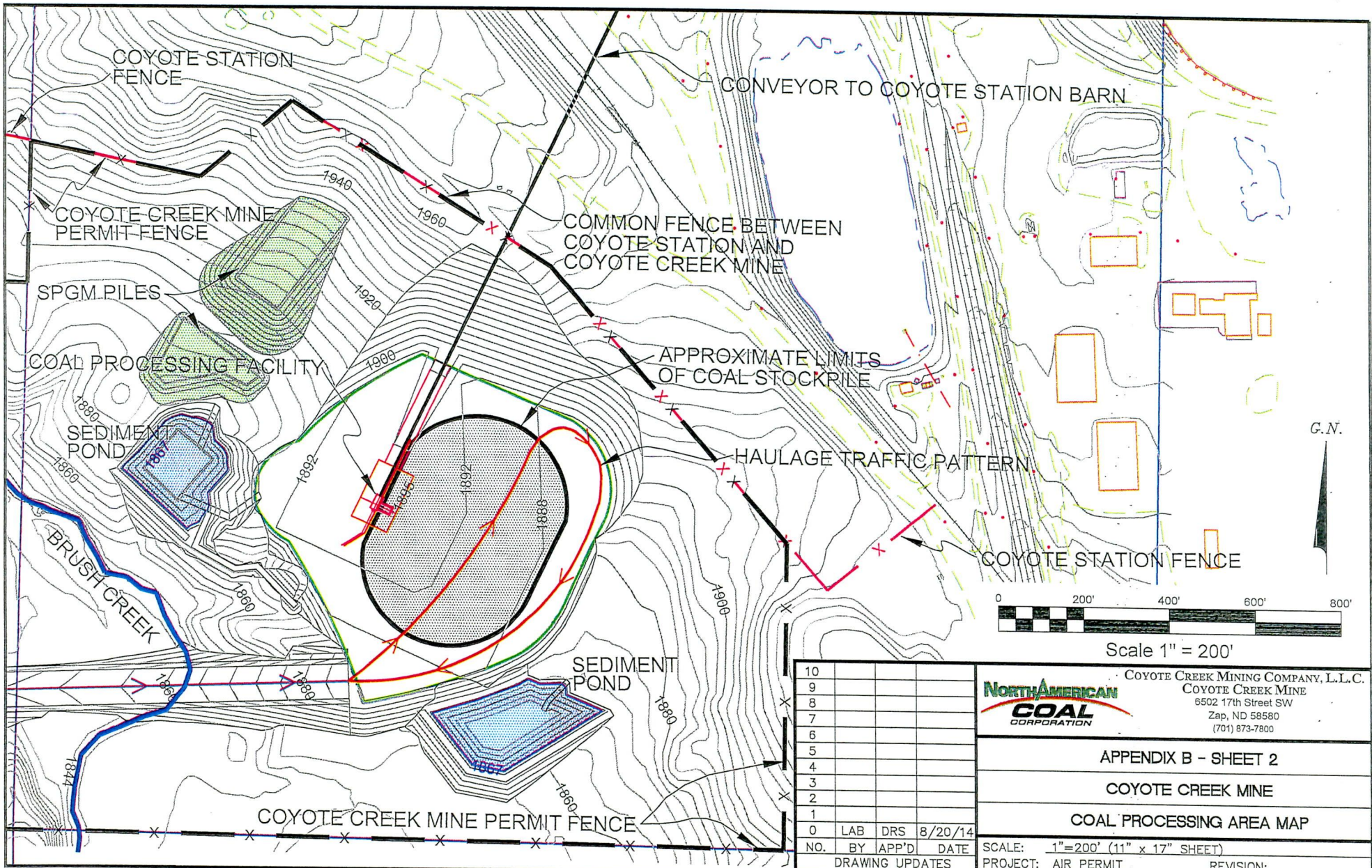
COYOTE CREEK MINE

FACILITIES LOCATION MAP

SCALE: NO SCALE (11" x 17" SHEET)

PROJECT: AIR PERMIT

REVISION:



Scale 1" = 200'

10			
9			
8			
7			
6			
5			
4			
3			
2			
1			
0	LAB	DRS	8/20/14
NO.	BY	APP'D	DATE
	DRAWING UPDATES		

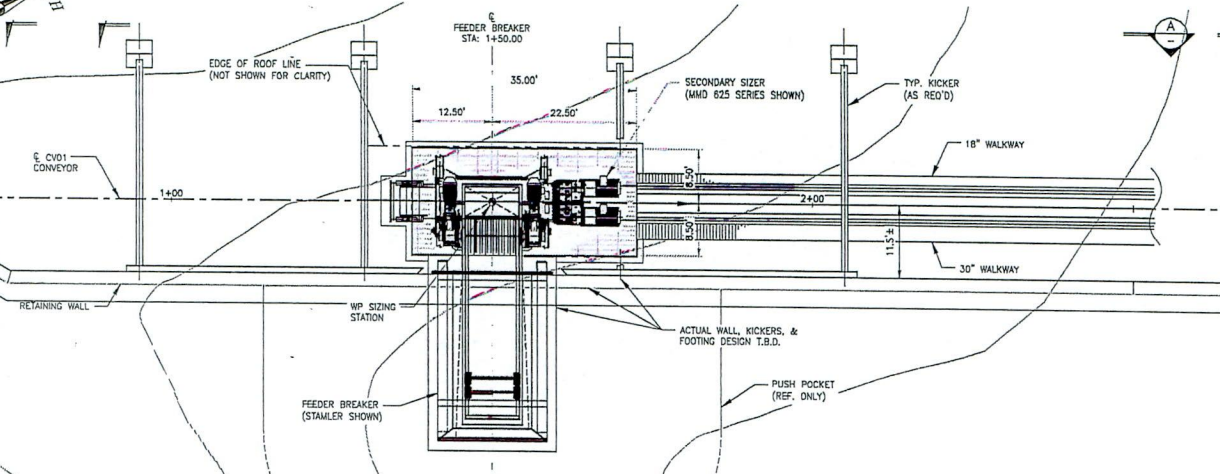
**NORTH AMERICAN COAL CORPORATION**  
 COYOTE CREEK MINING COMPANY, L.L.C.  
 COYOTE CREEK MINE  
 6502 17th Street SW  
 Zap, ND 58580  
 (701) 873-7800

APPENDIX B - SHEET 2

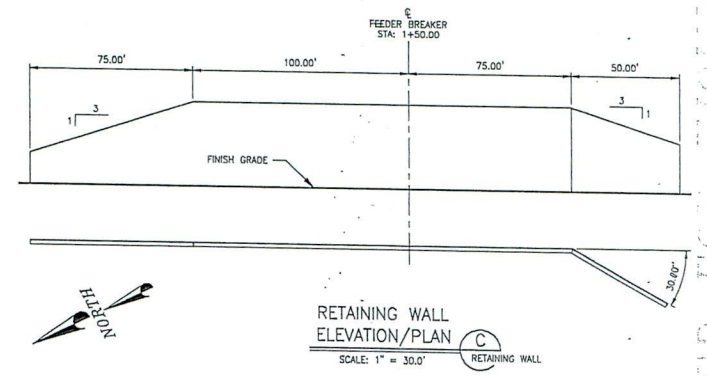
COYOTE CREEK MINE

COAL PROCESSING AREA MAP

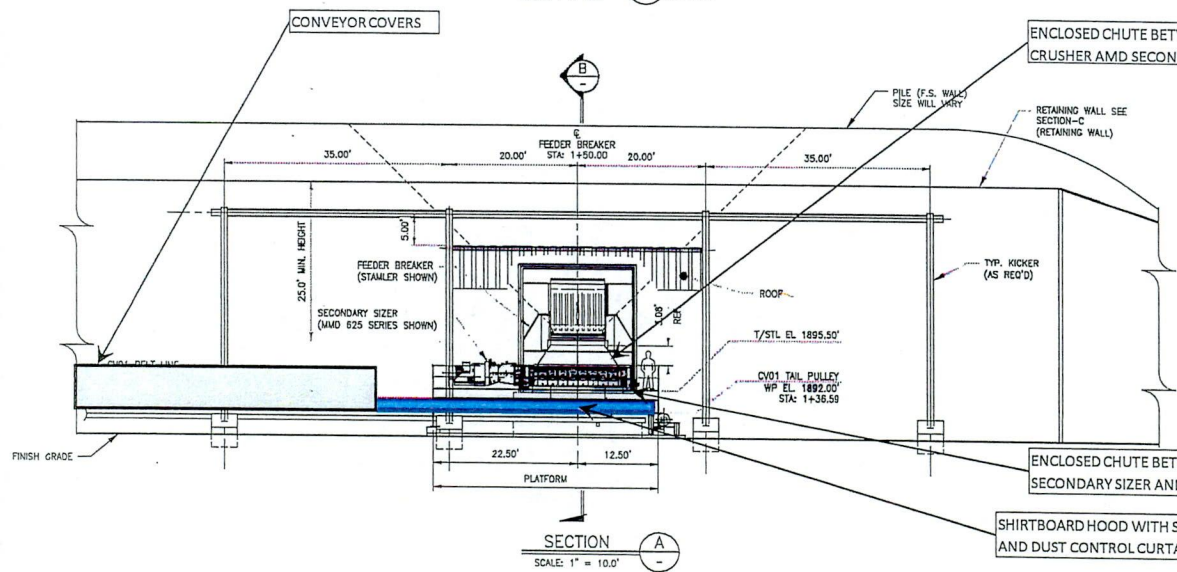
SCALE: 1"=200' (11" x 17" SHEET)  
 PROJECT: AIR PERMIT REVISION:



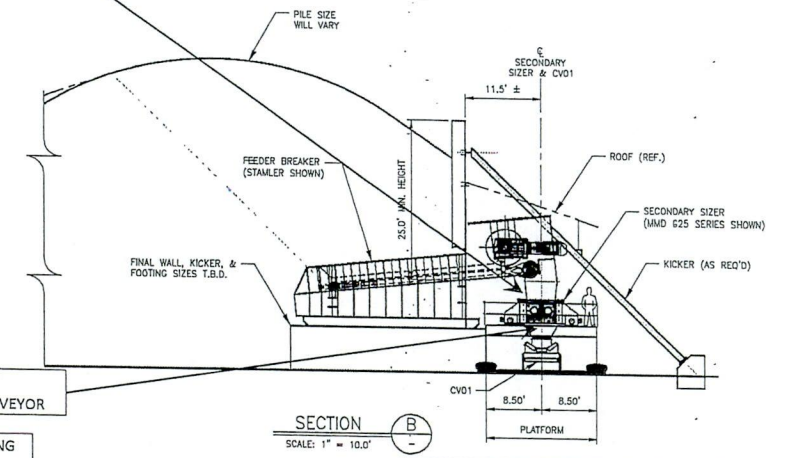
PLAN/DETAIL 1  
SCALE: 1" = 10.0' F775-CV01-L100



ISSUED FOR INQUIRY



SECTION A-B  
SCALE: 1" = 10.0'



SECTION B-C  
SCALE: 1" = 10.0'

APPENDIX B - SHEET 3  
COYOTE CREEK MINE  
COAL PROCESSING DETAILS