NORTH DAKOTA
DEPARTMENT *of* HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov

June 19, 2009

Mr. Robert French
GTLE Dakota Plant 1 LLC
6215 Cottonwood Shores
Wellington, CO 80549

Re: Air Pollution Control
Permit to Construct

Dear Mr. French:

Pursuant to the Air Pollution Control Rules of the State of North Dakota, the Department of Health has completed final review of your application to obtain a Permit to Construct for a coal beneficiation plant to be located near South Heart, North Dakota.

Based on a review of all relevant information regarding the facility, the Department hereby issues the enclosed North Dakota Air Pollution Control Permit to Construct No. PTC09002.

If you have any questions, feel free to contact me at (701)328-5188.

Sincerely,

Craig D. Thorstenson
Environmental Engineer
Division of Air Quality

CDT:saj
Enc:

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AIR POLLUTION CONTROL
PERMIT TO CONSTRUCT

Pursuant to Chapter 23-25 of the North Dakota Century Code, and the Air Pollution Control Rules of the State of North Dakota (Article 33-15 of the North Dakota Administrative Code), and in reliance on statements and representations heretofore made by the owner designated below, a Permit to Construct is hereby issued authorizing such owner to construct and initially operate the source unit(s) at the location designated below. This Permit to Construct is subject to all applicable rules and orders now or hereafter in effect of the North Dakota Department of Health and to any conditions specified below:

I. **General Information**:

A. **Permit to Construct Number**: PTC09002

B. **Source**:

1. Name: GTLE Dakota Plant 1 LLC
2. Location: Section 20, Township 139N, Range 98W in Stark County, North Dakota
3. Source Type: Coal Beneficiation
4. Equipment at the Facility:

Emission Unit	Emission Unit ID (EUI)	Emission Point (EP)	Air Pollution Control Equipment
One Cleaver Brooks Model CBL-700-1500 Boiler rated at 62.8 MMBtu/hr and fired on natural gas	1	1	None
Truck Dump	2	2	Baghouse
Raw Coal Storage, Handling, Conveying and Crushing	3	3	Baghouse
Coal Dryer	4	4	Cyclone and Baghouse
Product Coal Storage and Handling	5	5	Baghouse

Emission Unit	Emission Unit ID (EUI)	Emission Point (EP)	Air Pollution Control Equipment
One Caterpillar Model DM5441 natural gas-driven emergency generator rated at 470 bhp	6	6	None

C. **Owner/Operator (Permit Applicant)**:

1. Name: GTLE Dakota Plant 1 LLC
2. Address: 6215 Cottonwood Shores Drive
Wellington, CO 80549

II. **Conditions**: This Permit to Construct allows the construction and initial operation of the above-mentioned new or modified equipment at the source. The source may be operated under this Permit to Construct until a Permit to Operate is issued unless this permit is suspended or revoked. The source is subject to all applicable rules, regulations, and orders now or hereafter in effect of the North Dakota Department of Health and to the conditions specified below:

A. **Emission Limits**: Emission limits from the operation of the major source unit(s) identified in Item I.B of this Permit to Construct (hereafter referred to as "permit") are as follows. Minor source units not listed are subject to the applicable emission limits specified in the North Dakota Air Pollution Control Rules.

Emission Unit	EUI	EP	Pollutant/ Parameter	Emission Limit
Cleaver Brooks Model CBL-700-1500 Boiler rated at 62.8 MMBtu/hr	1	1	PM Opacity	0.612 lb/hr 20% (40%*)
Truck Dump	2	2	PM Opacity	1.50 lb/hr 20%
Raw Coal Storage, Handling, Conveying and Crushing	3	3	PM Opacity	1.0 lb/hr 20%
Coal Dryer	4	4	PM Opacity	1.30 lb/hr 20% (40%*)
Product Coal Storage and Handling	5	5	PM Opacity	0.65 lb/hr 20%

Emission Unit	EUI	EP	Pollutant/ Parameter	Emission Limit
One Caterpillar Model DM5441 natural gas-driven emergency generator	6	6	Opacity	20% (40%*)

* Permissible for not more than one six-minute period per hour.

B. **Fuel Restriction**: EUI 1 is restricted to combusting only pipeline quality natural gas containing no more than 2 grains of sulfur per 100 standard cubic feet.

C. **Operation of Air Pollution Control Equipment**: The owner/operator shall maintain and operate all air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

D. **40 CFR 60, Subpart Dc**: The permittee shall comply with all applicable requirements of 40 CFR 60, Subpart Dc-Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

E. **40 CFR 60, Subpart Y**: The permittee shall comply with all applicable requirements of 40 CFR 60, Subpart Y-Standards of Performance for Coal Preparation Plants.

F. **40 CFR 60, Subpart JJJJ**: If applicable, the permittee shall comply with all applicable requirements of 40 CFR 60, Subpart JJJJ-Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

G. **40 CFR 63, Subpart ZZZZ**: The permittee shall comply with all applicable requirements of 40 CFR 63, Subpart ZZZZ-National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

H. **Stack Heights**: The emissions from the facility shall be vented through stacks that meet the following requirements:

Emission Unit	EP	Minimum Stack Height (ft)
Boiler rated at 62.8 MMBtu/hr	1	60
Truck Dump Baghouse	2	65
Raw Coal Storage, Handling, Crushing, Conveying and Drying Baghouse	3	65
Coal Dryer	4	60

Emission Unit	EP	Minimum Stack Height (ft)
Product Coal Storage and Handling	5	65

I. **Emissions Testing**:

1. Initial Testing: Within 180 days after initial startup, the permittee shall conduct emissions tests using an independent testing firm to determine the compliance status of the coal dryer (EUI 4) and either EUI 2, 3, or 5 with respect to the emission limits specified in Condition II.A. Emissions testing shall be conducted to measure the PM emission rates.

   Within 180 days after initial startup, the permittee shall conduct an emissions test using an independent testing firm to determine the VOC emission rate from the coal dryer (EUI 4).

2. Notification: The permittee shall notify the Department using the form in the Emission Testing Guideline, or its equivalent, at least 30 calendar days in advance of any tests of emissions of air contaminants required by the Department. If the permittee is unable to conduct the performance test on the scheduled date, the permittee shall notify the Department at least five days prior to the scheduled test date and coordinate a new test date with the Department.

3. Sampling Ports/Access: Sampling ports shall be provided downstream of all emission control devices and in a flue, conduit, duct, stack or chimney arranged to conduct emissions to the ambient air.

   The ports shall be located to allow for reliable sampling and shall be adequate for test methods applicable to the facility. Safe sampling platforms and safe access to the platforms shall be provided. Plans and specifications showing the size and location of the ports, platform and utilities shall be submitted to the Department for review and approval.

4. Other Testing:

   a) The Department may require the permittee to have tests conducted to determine the emission of air contaminants from any source, whenever the Department has reason to believe that an emission of a contaminant not addressed by the permit applicant is occurring, or the emission of a contaminant in excess of that allowed by this permit is occurring. The Department may specify testing methods to be used in accordance with good professional practice. The Department may observe the testing. All tests shall be conducted by reputable, qualified personnel. The Department shall be given a

copy of the test results in writing and signed by the person responsible for the tests.

All tests shall be made and the results calculated in accordance with test procedures approved by the Department. All tests shall be made under the direction of persons qualified by training or experience in the field of air pollution control as approved by the Department.

b) The Department may conduct tests of emissions of air contaminants from any source. Upon request of the Department, the permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants.

J. **Construction**: Construction of the above described facility shall be in accordance with information provided in the permit application as well as any plans, specifications and supporting data submitted to the Department. The Department shall be notified ten days in advance of any significant deviations from the specifications furnished. The issuance of this Permit to Construct may be suspended or revoked if the Department determines that a significant deviation from the plans and specifications furnished has been or is to be made.

Any violation of a condition issued as part of this permit to construct as well as any construction which proceeds in variance with any information submitted in the application, is regarded as a violation of construction authority and is subject to enforcement action.

K. **Startup Notice**: A notification of the actual date of initial startup shall be submitted to the Department within 15 days after the date of initial startup.

L. **Permit Invalidation**: This permit shall become invalid if construction is not commenced within eighteen months after issuance of such permit, if construction is discontinued for a period of eighteen months or more; or if construction is not completed within a reasonable time.

M. **Fugitive Emissions**: All reasonable precautions shall be taken by the owner/operator to prevent and/or minimize fugitive emissions from the construction and operation of the source identified under Item I.B.

N. **Annual Emission Inventory/Annual Production Reports**: The owner/operator shall submit an annual emission inventory report or an annual production report, upon request, on forms supplied or approved by the Department.

O. **Source Operations**: Operations at the installation shall be in accordance with statements, representations, procedures and supporting data contained in the initial application, and any supplemental information or application(s) submitted thereafter. Any operations not listed in this permit are subject to all applicable North Dakota Air Pollution Control Rules.

P. **Alterations, Modifications or Changes**: Any alteration, repairing, expansion, or change in the method of operation of the source which results in the emission of an additional type or greater amount of air contaminants or which results in an increase in the ambient concentration of any air contaminant, must be reviewed and approved by the Department prior to the start of such alteration, repairing, expansion or change in the method of operation.

Q. **Recordkeeping**: The owner/operator shall maintain any compliance monitoring records required by this permit or applicable requirements. The owner/operator shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report or application. Support information may include all calibration and maintenance records and all original strip-chart recordings/computer printouts for continuous monitoring instrumentation, and copies of all reports required by the permit.

R. **Nuisance or Danger**: This permit shall in no way authorize the maintenance of a nuisance or a danger to public health or safety.

S. **Malfunction Notification**: The owner/operator shall notify the Department of any malfunction which can be expected to last longer than twenty-four hours and can cause the emission of air contaminants in violation of applicable rules and regulations.

T. **Change of Ownership**: This permit may not be transferred and is to be returned to the Department upon the destruction or change of ownership of the source unit(s), or upon expiration, suspension or revocation of this permit.

U. **Right of Entry**: Any duly authorized officer, employee or agent of the North Dakota Department of Health may enter and inspect any property, premise or place at which the source listed in Item I.B of this permit is located at any time for the purpose of ascertaining the state of compliance with the North Dakota Air Pollution Control Rules. The Department may conduct tests and take samples of air contaminants, fuel, processing material, and other materials which affect or may affect emissions of air contaminants from any source. The Department shall have the right to access and copy any records required by the Department's rules and to inspect monitoring equipment located on the premises.

V. **Other Regulations**: The owner/operator of the source unit(s) described in Item I.B of this permit shall comply with all State and Federal environmental laws and

rules. In addition, the owner/operator shall comply with all local burning, fire, zoning, and other applicable ordinances, codes, rules and regulations.

W. **Permit Issuance**: This permit is issued in reliance upon the accuracy and completeness of the information set forth in the application. Notwithstanding the tentative nature of this information, the conditions of this permit herein become, upon the effective date of this permit, enforceable by the Department pursuant to any remedies it now has, or may in the future have, under the North Dakota Air Pollution Control Law, NDCC Chapter 23-25. Each and every condition of this permit is a material part thereof, and is not severable.

X. **Odor Restrictions**: The owner/operator shall not discharge into the ambient air any objectionable odorous air contaminant which is in excess of the limits established in NDAC 33-15-16 and NDCC 23-25-11.

Y. **Fugitive Dust Control:** The owner/operator shall control fugitive dust as follows:

1. Water unpaved on-site haul roads as often as necessary to control fugitive particulate matter emissions.
2. Limit vehicle speeds on on-site roads to 20 miles per hour.
3. All coal stockpiles shall be located inside of the buildings on the GTL Energy property.

The need for on-site watering shall generally be based on the following factors: visual observations, surface conditions, ambient temperature, recent precipitation, humidity, wind conditions and traffic volume.

Z. **Coal Analysis:** The owner/operator shall submit a coal analysis to the Department for each coal mine prior to processing coal from the mine. The analysis shall be submitted to the Department at least 30 days prior to the processing of the coal. The analysis shall include the following:

1. The name and location of the coal mine.
2. The concentration (in parts per million, by weight) in the coal of the following: arsenic, beryllium, chromium, mercury and uranium.

FOR THE NORTH DAKOTA
DEPARTMENT OF HEALTH

Date 6/19/09

By Terry O'Clair

Terry L. O'Clair, P.E.
Director
Division of Air Quality