

9. Efforts to Utilize Existing Electric Generating Facility Sites

SB 257 Section 4(2)(g)

9. Efforts to Utilize Existing Electric Generating Facility Sites – SB257, Section 4(2)(g)

Thoroughbred Generating Company, LLC began the selection and the permitting processes for a Kentucky site on which to locate a power plant in early 2000, approximately two years before the passage of SB 257. The Muhlenberg County site was selected for a number of reasons, including its rural location, large area of land control (over 7,000 acres), close proximity to the coal reserves which will fuel the plant, the proximity of the Green River for cooling water and barge access, and rail lines to the site for delivery of materials for construction and operation of the facility. Although existing generating facilities are not present on the site, the site has already been utilized for an industrial purpose, surface mining. The majority of the site pre-dates, and thus was not subject to, the Surface Mining and Reclamation Control Act of 1977. The installation of the plant in this area will result in beneficial use of the disturbed area and have an overall positive impact on land use of the site and surrounding area.

As noted above, the process of preparing required permit applications for the plant began approximately two years before the passage of SB 257. The applications for the air permit, FAA permit and Corps of Engineer permit required specific information about the plant location which necessitated a firm commitment to the plant location at the time of submittal. Permit applications which fixed the site location were filed at least a year before passage of the siting legislation at significant expense. As a result, efforts to relocate the plant to a site with existing electric generating facilities, assuming a site that otherwise meets the project needs could be found, are no longer practicable.

10. PERMIT STATUS

SB 257 Section 3(1)

10. Permit (Approvals) Status SB257, Section 3(1)

10.1 Federal Permits (Approvals)

Permit or Approval	Responsible Agency	Regulated Activities	Status
U. S. Army Corps of Engineers 404 Permit	U.S. Army Corps of Engineers	Construction of water intake structure, water discharge structure, and barge dock	Permit issued 05/15/03
Determination of Obstruction Hazard	Federal Aviation Administration	Construction of tall structures	No hazard determination issued 10/17/01, extended 06/27/03
Phase II Acid Rain Permit	US EPA/Kentucky DAQ	Power plant operation in compliance with Acid Rain Regulations	Permit issued 10/11/02, revised 12/06/02.
Exempt Wholesale Generator Certification	Federal Energy Regulatory Commission	Sale of wholesale electricity	Approved 02/28/02

10.2 State of Kentucky Issued Permits

Permit or Approval	Responsible Agency	Regulated Activities	Status
PSD/ Title V Air Permit	Kentucky Division of Air Quality	Construction and operation of major source of air emissions	Permit issued 10/12/02, revised 12/06/02
Water Withdrawal Permit	Kentucky Division of Water	Withdrawal of water from Kentucky streams	Letter of assurance issued 09/19/02
Section 401 Water Quality Certification	Kentucky Division of Water	Required for USACE 404 permit	Certification issued 07/22/02
KPDES General Storm Water Construction Permit	Kentucky Division of Water	Discharge of storm water runoff during construction	Permit issued 6/13/02, 09/30/02
Stream Construction Permit	Kentucky Division of Water	For construction in or along a stream	06/01/02, expired 06/01/03
Kentucky Pollutant Discharge Elimination System	Kentucky Division of Water	Discharge of cooling waters and storm water runoff	Draft permit to be issued next week per Bruce Scott-KDOW
Special Waste Permit	Kentucky Division of Waste	Disposal of coal combustion waste byproducts	Application submitted 10/02, under review
Permit to Construct or Alter a Structure	Kentucky Airport Zoning Commission	Construction of a structure greater than 200'	Application to be submitted closer to start of construction

10.3 Local Permits

No local permits are required.

Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

Title V
AIR QUALITY PERMIT
Issued under 401 KAR 52:020

Permittee Name: Thoroughbred Generating Company, LLC
Mailing Address: 701 Market Street, 6th Floor, St. Louis, MO 63101

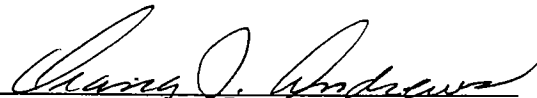
Source Name: Thoroughbred Generating Station
Mailing Address: P.O. Box 151, Central City, KY 42330

Source Location: Thoroughbred Generating Station
1380 Thoroughbred Drive, Central City, KY 42330

Permit Number: V-02-001 Revision 1
Log Number: 53619
SIC Code: 4911
Review Type: Title V/PSD
Source ID #: 21-177-00077
Oris Code: 55462

Region: Owensboro
County: Muhlenberg

Application
Complete Date: April 23, 2001
Issuance Date: October 11, 2002
Revision Date : December 06, 2002
Expiration Date: October 11, 2007



John S. Lyons, Director
Division for Air Quality



This notice of authorization must be conspicuously displayed at the site of work.

United States Army Corps of Engineers

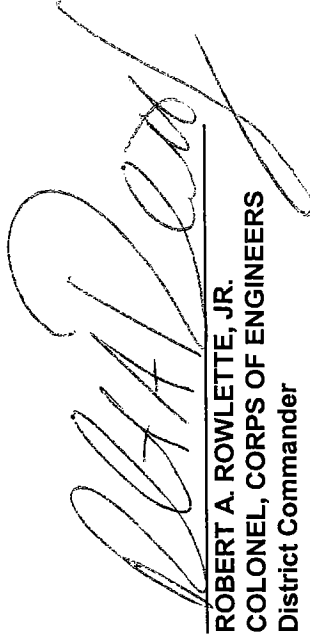
DATE: MAY 15 2003

A permit to: CONSTRUCT AN INTAKE STRUCTURE, AN OUTFALL STRUCTURE, A BARGE UNLOADING FACILITY, AND A BARGE FLEETING AREA AND PERFORM MAINTENANCE DREDGING IN THE GIBALTAR SLIP

at: THE LEFT BANK OF THE GREEN RIVER AT MILE 85, IN MUHLENBERG COUNTY, KENTUCKY
has been issued to: THOROUGHbred GENERATING COMPANY, LLC

ADDRESS OF PERMITTEE: 6TH FLOOR-701 MARKET STREET
SAINT LOUIS, MISSOURI 63101

Permit No. 200200190


ROBERT A. ROWLETTE, JR.
COLONEL, CORPS OF ENGINEERS
District Commander

(Proponent: DAEN-CWO)

ENG FORM 4336, JUL 81 (ER 1145-2 303) EDITION OF JUL 70 MAY BE USED

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601

1

RECEIVED

OCT 28 2002

DIANNA TICKNER

September 30, 2002

DIANNA TICKNER
THOROUGHbred GENERATING CO LLC
701 MARKET ST 6TH FL
ST LOUIS MO 63101

Re: THOROUGHbred ENERGY CAMPUS
KPDES General Permit No.: KYR104958
Permit Type: Construction
County: MUHLENBERG

Location:
1100 ST RT 175 S

GRAHAM KY 42344

Dear Permittee:

The discharges associated with the Notice of Intent letter you submitted have been approved for coverage under a "General Permit for Storm Water Point Sources in the Commonwealth of Kentucky." This coverage becomes effective the date of this letter and will remain effective until the general permit expires or the Division of Water revokes coverage. During this period of coverage all discharges shall comply with the conditions of the applicable general permit. A copy of the applicable permit has been enclosed.

Any questions concerning the general permit and its requirements should be directed to Ronnie Thompson at (502) 564-2225, extension 423.

Sincerely,



Jeffrey W. Pratt, Director
Division of Water

Enclosures

cc: Division of Water Files
Regional Office: MADISONVILLE

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DIVISION OF WATER
14 REILLY ROAD
FRANKFORT, KENTUCKY 40601

1092

RECEIVED

OCT 07 2002

DIANNA TICKNER

September 30, 2002

DIANNA TICKNER
THOROUGHbred GENERATING CO LLC
701 MARKET ST 6TH FL
ST LOUIS MO 63101

Re: THOROUGHbred ENERGY CAMPUS
KPDES General Permit No.: KYR104958
Permit Type: Landfill-Land Ap
County: MUHLENBERG

Location:
1100 ST RT 175 S

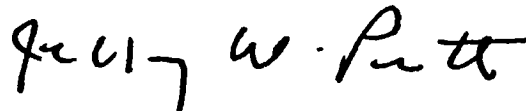
GRAHAM KY 42344

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Sincerely,



Jeffrey W. Pratt, Director
Division of Water

Enclosures

cc: Division of Water Files
Regional Office: MADISONVILLE

JAMES E. BICKFORD
SECRETARY



PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

RECEIVED

July 22, 2002

AUG 2 2002

Ms. Dianna Tickner
Thoroughbred Generating Company, LLC
6th Floor
701 Market Street
Saint Louis, MO 63101

DIANNA TICKNER

RE: Water Quality Certification # 2002-0065-1,
Construction for the Thoroughbred Energy Campus
at Mile 85 on the Green River, Muhlenberg County
(N37°19'24", W87°19'24")

Dear Ms. Tickner:

Pursuant to Section 401 of the Clean Water Act (CWA), the Commonwealth of Kentucky certifies it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 5, established pursuant to Sections 301, 302, 303, 304, 306, and 307 of the CWA, will not be violated by the above project, provided that the following conditions are met:

1. The work approved by this certification shall be limited to:
 - Construction of a barge dock and water-intake structure in the existing Gibraltar slip and construction of a cooling water outfall structure on the Green River at mile 85.3.
2. All work performed under this certification shall adhere to the design and specifications set forth in the application for Water Quality Certification dated December 3, 2001, and in U.S. Army Corps of Engineers Public Notice No. 200200190, dated April 16, 2002.
3. The applicant is responsible for preventing degradation of waters of the Commonwealth from soil erosion. An erosion and sedimentation control plan must be designed, implemented, and maintained in effective operating condition at all times during construction.



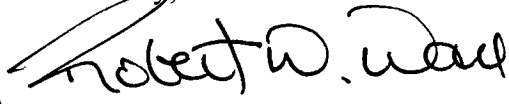
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Ms. Dianna Tickner
Page Two
July 22, 2002

4. The Division of Water reserves the right to modify or revoke this certification should it be determined that the activity is in noncompliance with any condition set forth in this certification.
5. If construction does not commence within one year of the date of this letter, this certification will become void. A letter requesting a renewal should be submitted.
6. Attached with this letter is a listing of General Conditions for Water Quality Certification that applies to this project.
7. Other permits may be required from the Division of Water for this project. If this project takes place within the floodplain, a permit may be required from the Water Resources Branch. The contact person is Ali Daneshmand. If this project will disturb 5 acres or more of land, a KPDES general storm water permit will be required from the KPDES Branch. The contact person is Doug Allgeier. Both can be reached at 502/564-3410.

If you should have any questions concerning the conditions of this water quality certification, please contact Brent Johnson of my staff by calling 502/564-3410.

Sincerely,


for Jeffrey W. Pratt, Director
Division of Water

JWP:JLD:bj

Attachment

c: Amy Babey, COE: Louisville
Eric Somerville, EPA: Atlanta
Leon Smothers, DOW: Frankfort
John Lyons, DAQ: Frankfort

JAMES E. BICKFORD
SECRETARY



PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
14 REILLY RD
FRANKFORT KY 40601

September 19, 2002

Mr. Scott McGarvie, Manager
Environmental Engineering
Thoroughbred Generating Co.
P.O. Box 148
Graham, KY 42344

Re: Letter of Assurance for Proposed
Water Withdrawal at mile 85.75 of the
Green River in Muhlenberg County

Dear Mr. McGarvie:

We have reviewed the request for a letter of assurance and supporting information that you provided for a proposed water withdrawal at the referenced location. We understand that this water would be used to provide make-up water to a recirculating turbine cooling system. We have determined that the requested amount of water is available at this location and that all other requirements of law would be met, so that a permit for this amount and location could be issued within six months of the completion of the water intake and infrastructure.

Therefore, since Thoroughbred Generating Company has provided acceptable project documentation and a schedule for obtaining financing and completing construction by November 01, 2007, we hereby provide assurance that the Division of Water will withhold 24.0 million gallons per day from our calculation of "available water" for any applications that are submitted for water withdrawals in this stream reach prior to November 01, 2007.

This assurance does not vest any right to this water to Thoroughbred Generating Company, but is intended to ensure that this amount of water will remain available until an estimated project completion date of November 01, 2007, at which time a permit can be issued. In order to keep this assurance in effect, Thoroughbred Generating Company or its designated representative must provide us with proof of financing and quarterly progress reports (March, June, September, and December) to verify that the approved schedule is being followed. The schedule may be amended and the expiration date for this assurance extended if just cause is provided by Thoroughbred Generating Company .



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Approvals for water withdrawals during the construction and testing phases of this project will be issued upon request as temporary authorizations matched to specific needs that have been provided by you to the Division. Please refer the following dates and withdrawal amounts so that you can request the authorizations in a timely manner:

1. October 2004 - up to 30 MGD for filling raw water impoundment
2. January 2006 - up to 1.0 MGD for maintaining water level in the raw water impoundment
3. November 2006 - up to 15.0 MGD for initial testing and startup
4. February 2007 - submit application for a permanent water withdrawal permit for up to 24.0 MGD.

Please note that the above dates should be adjusted if there are any changes to the approved construction schedule.

Enclosed with this letter is a representation of what the official permit would contain indicating all stipulations and requirements of the applicant for water withdrawal. Also included is a Schedule of Milestones that identifies completion dates and milestone dates for selected financing and construction activities. The status of these milestone activities should be addressed in the quarterly progress reports.

If you have any questions or require further information on this matter, please contact Bill Caldwell or me at (502) 564-3410.

Sincerely,



A. Leon Smothers, P.E.

Manager, Water Resources Branch
Division of Water

BC
Enclosures

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
 DEPARTMENT FOR ENVIRONMENTAL PROTECTION
 DIVISION OF WATER
 FRANKFORT, KENTUCKY 40601

PERMIT TO WITHDRAW PUBLIC WATER

Permit Number: #XXXX

Issued to: **Thoroughbred Generating Company LLC**
P. O. Box 148
Graham, Kentucky 423

The Natural Resources and Environmental Protection Cabinet authorizes the above named party to withdraw Public Water of the Commonwealth of Kentucky. This permit has been issued in accordance with the provisions of KRS Chapter 151.125, 151.140 and 151.150 and regulations promulgated with respect to the withdrawal of public waters. Issuance of this permit does not relieve the permittee from the responsibility of obtaining other permits or licenses required by this Cabinet, or other state, federal or local agencies. Withdrawals are limited to the quantities, times, and locations specified below. This permit represents a limited right of use and does not vest ownership nor absolute right to withdrawal or use of Public Water, nor does it guarantee that requested amounts will be available for use at all times. In times of drought or emergency, the Cabinet may temporarily alter the terms of the permit. Any violation of the Water Resources Act of 1966 as amended is subject to penalties as set forth in KRS 151.090 and other applicable provisions of law.

The location of the authorized water withdrawal is as follows:

From an inlet at river mile 85.75 of the Green River, Muhlenberg County
 latitude 37°19'29.26" N, longitude 87°06'13.21" W.

Water withdrawals are limited to the following rates from the specified location:

Jan. 20.0 mgd	April 22.0 mgd	July 24.0 mgd	Oct. 22.0 mgd
Feb. 20.0 mgd	May 22.0 mgd	Aug. 24.0 mgd	Nov. 21.0 mgd
March 21.0 mgd	June 24.0 mgd	Sept. 23.0 mgd	Dec. 20.0 mgd

Conditions to this permit are as follows:

1. Your proposed method for measuring water withdrawals has been reviewed and, as approved, withdrawals shall be measured with _____. The meter should be maintained according to the manufacturer's recommendations and calibrated at least once per year. In addition, you are required to notify the Division and obtain approval prior to any changes made to your approved method of measuring water withdrawals.
2. Under no circumstances shall these withdrawals reduce flows in Green River immediately below this intake to a rate of 515 cubic feet per second or less. When flows immediately below the raw water intake approach 515 cubic feet per second, withdrawals must be reduced. When flows immediately below the raw water intake are 515 cubic feet per second or less for four (4) consecutive days, withdrawals must cease in order to comply with this requirement.

Issued: XX/XX/XX

Latest Revision: _____

 Manager, Water Resources Branch
 Division of Water

Thoroughbred Generating Station
 Schedule of Milestone Submittals to Fulfill Conditions for a Letter of Assurance

Milestone Activity	Start Date	End Date	Anticipated Milestone Quartile Date				Milestone Status (Yes = on schedule, No = deviation from schedule) (if No, provide additional explanation)
			1	2	3	4	
Construction Financing		Sep-03	-	-	-	-	
Long-term Financing in Place		May-07	-	-	-	-	
Permitting Activities		Mar-07	Oct-03	Dec-04	Feb-06	Mar-07	
Detailed Engineering Design		Jul-04	Aug-02	Mar-03	Nov-03	Jul-04	
Complete Engineering Design		Jul-04	-	-	-	-	
Site Preparation		Jun-03	-	-	-	-	
Begin Construction *	Jul-03	-	-	-	-	-	
Construction Unit #1	Jul-03	May-07	Jul-04	Jun-05	Jul-06	May-07	
Construction of BOP Equipment	Jul-03	Oct-07	Aug-04	Sep-05	Oct-06	Oct-07	
Unit #1 - Air Quality Control Equipment Erection	Sep-03	Jul-06	May-04	Feb-05	Oct-05	Jul-06	
Unit #1 - Steam Generator Erection	Sep-03	Sep-06	Jun-04	Mar-05	Dec-05	Sep-06	
Unit #1 - Steam Turbine Erection	Sep-03	Jan-07	Jul-04	May-05	Mar-06	Jan-07	
Construction Unit #2	Feb-04	Oct-07	Jan-05	Dec-05	Nov-06	Oct-07	
Unit #2 - Air Quality Control Equipment Erection	Mar-04	Jan-07	Dec-04	Aug-05	May-06	Jan-07	
Unit #2 - Steam Generator Erection	Mar-04	Mar-07	Dec-04	Sep-05	Jun-06	Mar-07	
Unit #2 - Steam Turbine Erection	Mar-04	Jul-07	Jan-05	Nov-05	Sep-06	Jul-07	
Unit #1 - Initial Water Withdrawal	-	Oct-04	-	-	-	-	
Unit #1 - Water Withdrawal	-	Dec-05	-	-	-	-	
Unit #2 - Water Withdrawal	-	Apr-06	-	-	-	-	
Unit #2 - Full Water Withdrawal	-	Oct-06	-	-	-	-	
Unit #1 - Full Water Withdrawal	-	Nov-06	-	-	-	-	
Unit #1 - Testing	-	Jan-07	-	-	-	-	
Unit #2 - Testing	-	Mar-07	-	-	-	-	
Unit #1 - Project Startup	-	May-07	-	-	-	-	
Unit #2 - Project Startup	-	Nov-07	-	-	-	-	
Project Completed	-	Nov-07	-	-	-	-	

* Anchor Date for all subsequent activities

APPLICATION FOR A PERMIT TO WITHDRAW WATER
Natural Resources and Environmental Protection Cabinet

14 Reilly Road

Division of Water

Frankfort, KY 40601

Action Desired (check one): New Permit
 Revision to Permit _____
Number

Division Use Only
 Permit No. _____

Applicant Information
Thoroughbred Generating Company, LLC. (TGC)
 Name of Person or Organization Requesting Permit (This name will be on any permit resulting from this application.)
701 Market Street, 6th floor St. Louis MO 63101
 Street Address City State Zip Code
 Standard Industrial Classification (SIC) Code 4911

Permit Request

Why is this new permit /permit revision necessary? Coal-fueled electrical generating facility - 1500mw. Water from the Green River will be purified and fed to boilers to generate steam. Steam drives turbines to generate electricity. River water will provide make-up to a recirculating cooling water system for cooling of turbines.

If facility uses multiple sources of water, **complete one application form for each water source.** Note - 1
 If multiple sources are used, is this application for a primary N/A or secondary N/A source? (check one)

Date proposed water withdrawals would begin July 2004
 If facility constructed _____ or proposed ?

Amount of water facility wishes to withdraw on an average operational day in each month.
 Give amounts the facility expects to use in gallons per day:

Jan. <u>20,000,000</u>	April <u>22,000,000</u>	July <u>24,000,000</u>	Oct. <u>22,000,000</u>
Feb. <u>20,000,000</u>	May <u>22,000,000</u>	Aug. <u>24,000,000</u>	Nov. <u>21,000,000</u>
Mar. <u>21,000,000</u>	June <u>24,000,000</u>	Sept. <u>23,000,000</u>	Dec. <u>20,000,000</u>

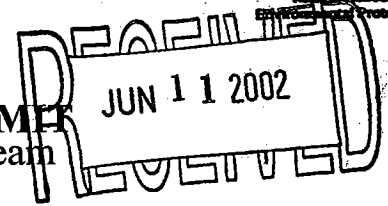
Maximum Daily Pumping Rate: 30 MGD

Please provide some detail regarding the proposed withdrawal amounts and the pumping schedule.
See Water Usage Summary in Appendix - 1.
Note - 1: Central City approved the connection of the TGC to its potable water supply system for sanitary water use. See Appendix - 4.

Please accurately complete the sections of this application that pertain to your source(s). Questions about this application or the water withdrawal permitting program may be addressed to the Water Quantity Management Section of the Division of Water at (502)564-3410.



COMMONWEALTH OF KENTUCKY
 NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
 DEPARTMENT FOR ENVIRONMENTAL PROTECTION
 DIVISION OF WATER
 FRANKFORT, KENTUCKY 40601



STREAM CONSTRUCTION PERMIT
 For Construction In Or Along A Stream

Issued to: **Thoroughbred Generating Company, LLC**
 Attn: **Dianna Tickner, Vice President Gen. Dev.**
 Address: **701 Market Street, 6th Floor**
St. Louis, MO 63101
 |||||

Permit No. **12012**
 Expires if work is not begun by
June 01, 2003

In accordance with KRS 151.250 and KRS 151.260, the Natural Resources and Environmental Protection Cabinet approves the application dated January 29, 2002 for construction of a water outfall structure and a water intake structure and barge dock on the Green River at stream miles 85.24 and 85.8 respectively, with coordinates N37°19'29.0", W87°07'06.3", and N37°19'28.9, W87°06'13.3" in Muhlenberg County.

There shall be no deviation from the plans and specifications submitted and hereby approved unless the proposed change shall first have been submitted to and approved in writing by the Cabinet. This approval is subject to the following limitations:

1. This permit is issued from the standpoint of stream obstruction only and does not constitute certification of any other aspect of the proposed construction. The applicant is liable for any damage resulting from the construction, operation, or maintenance of this project. This permit has been issued under the provisions of KRS Chapter 151.250 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal and local agencies.
2. This permit holder must obtain a permit from the U.S. Army Corps of Engineers, Louisville District, pursuant to Section 10 of the River and Harbor Act of 1899 and Section 404 of the Clean Water Act, as may be required.
3. Thoroughbred Generating Company, LLC must, within 90 days of completion of construction, certify in writing that the project has been completed in accordance with the approved plans and specifications. *A Final Construction Report Form is enclosed.*
4. Since Muhlenberg County participates in the National Flood Insurance Program, a local floodplain permit must be obtained prior to beginning of construction. Upon completion of construction Thoroughbred Generating Company, LLC must contact the local permitting agency for final approval of the construction for compliance with the requirements of the local floodplain ordinance.
5. Any work performed by or for Thoroughbred Generating Company, LLC that does not fully conform to the submitted application or drawings and the limitations set forth in this permit, is subject to partial or total removal and enforcement actions pursuant to KRS 151.280 as directed by the Kentucky Department for Environmental Protection.
6. A copy of this permit must be available at the construction site.

(OVER)

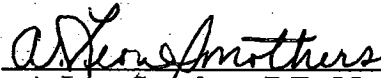
7. Any electrical components should be elevated above the base flood elevation of 398.0 feet MSL or provided with ground fault breakers.
8. At no point below the base flood elevation 398.0 feet MSL shall the use of construction materials or the permanent storage of materials subject to flood damage be allowed.
9. Thoroughbred Generating Company, LLC must use standard silt control practices in such quantity to prevent siltation of Green River. Silt fences, rock check dams and/or straw-bales are acceptable.

This permit is nontransferable and is not valid unless actual construction of this authorized work is begun prior to the expiration date noted above. Any violation of the Water Resources Act of 1966 as amended is subject to penalties as set forth in KRS 151.990.

If you have any questions regarding this permit, please call Ali Daneshmand, P.E. at (502) 564-3410.

Issued this 1st day of June 2002

By:



A. Leon Smothers, P.E., Manager
Water Resources Branch

ALS/AC/kla

pc: Madisonville Regional Office
File

DEP7026
Rev. 5/97

JAMES E. BICKFORD
SECRETARY



PAUL E. PATTON
GOVERNOR

COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
14 REILLY RD
FRANKFORT KY 40601-1190

October 16, 2002

RECEIVED

NOV 8 2002

Ms. Dianna Tickner, President
Thoroughbred Generating Company, LLC
701 Market Street
St. Louis, MO 63101

RE: Thoroughbred Generating Company, LLC
Petition to designate Coal Combustion Ash a Special Waste
Muhlenberg County

Dear Ms. Tickner:

The Natural Resources and Environmental Protection Cabinet (cabinet) approves the special waste petition that was submitted by Thoroughbred Generating Company, LLC, on May 20, 2002. The petition meets the requirements of KRS 224.50-769 and 401 KAR 45:210 concerning procedures for designating special wastes.

The cabinet advertised the petition in the July 3, 2002 *Central City Leader News* and requested comments before the end of the thirty day comment period on August 5, 2002. Mr. Tom Fitzgerald submitted comments on the petition and the cabinet includes its responses to those comments with this correspondence.

Should you have any questions concerning the above referenced application, please contact Mr. George Gilbert at (502) 564-2225, extension 217.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert H. Daniell".

Robert H. Daniell
Director

RHD/GFG/gfg

c: Madisonville Regional Office
Kentucky Resources Council
Solid Waste Branch
Office of Legal Services
Division for Air Quality



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Federal Aviation Administration
Southern Regional Office
1701 Columbia Avenue-ASO-520
College Park, GA 30337

Aeronautical Study No.
2001-ASO-4261-OE

Issued Date: 5/18/2003

JACOB WILLIAMS
THOROUGHbred GENERATING COMPANY LLC
701 MARKET ST, 6TH FLOOR
ST LOUIS, MO 63101

**** EXTENSION ****

A Determination was issued by the Federal Aviation Administration (FAA) concerning:

Structure Type: EXHAUST STACK 1
Location: GRAHAM, KY
Latitude: 37-18-53.06 NAD 83
Longitude: 87-5-22.58
Heights: 650 feet above ground level (AGL)
1090 feet above mean sea level (AMSL)

In response to your request for an extension of the effective period of the determination, the FAA has reviewed the aeronautical study in light of current aeronautical operations in the area of the structure and finds that no significant aeronautical changes have occurred which would alter the determination issued for this structure.

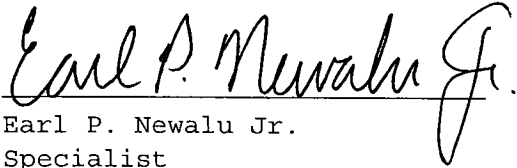
Accordingly, pursuant to the authority delegated me, the effective period of the determination issued under the above cited aeronautical study number is hereby extended and will expire on 11/18/2004 unless otherwise extended, revised, or terminated by this office.

This extension is subject to review if an interested party files a petition on or before 6/17/2003. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and should be submitted in triplicate to the Manager, Airspace Branch, Federal Aviation Administration, Washington, D.C. 20591. This extension becomes final on 6/27/2003 unless a petition is timely filed. If so, this extension will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review.

This extension issued in accordance with 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerns the effect of the structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this extension will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (404)305-5579.
On any future correspondence concerning this matter, please refer to
Aeronautical Study Number 2001-ASO-4261-OE.


Earl P. Newalu Jr.
Specialist

(EXTDNH) 177215



Federal Aviation Administration
Southern Regional Office
1701 Columbia Avenue-ASO-520
College Park, GA 30337

Aeronautical Study No.
2001-ASO-4262-OE

Issued Date: 5/18/2003

JACOB WILLIAMS
THOROUGHbred GENERATING COMPANY LLC
701 MARKET ST, 6TH FLOOR
ST LOUIS, MO 63101

**** EXTENSION ****

A Determination was issued by the Federal Aviation Administration (FAA) concerning:

Structure Type: EXHAUST STACK 2
Location: GRAHAM, KY
Latitude: 37-18-53.35 NAD 83
Longitude: 87-5-21.94
Heights: 650 feet above ground level (AGL)
1090 feet above mean sea level (AMSL)

In response to your request for an extension of the effective period of the determination, the FAA has reviewed the aeronautical study in light of current aeronautical operations in the area of the structure and finds that no significant aeronautical changes have occurred which would alter the determination issued for this structure.

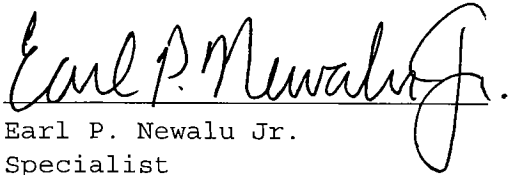
Accordingly, pursuant to the authority delegated me, the effective period of the determination issued under the above cited aeronautical study number is hereby extended and will expire on 11/18/2004 unless otherwise extended, revised, or terminated by this office.

This extension is subject to review if an interested party files a petition on or before 6/17/2003. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and should be submitted in triplicate to the Manager, Airspace Branch, Federal Aviation Administration, Washington, D.C. 20591. This extension becomes final on 6/27/2003 unless a petition is timely filed. If so, this extension will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review.

This extension issued in accordance with 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerns the effect of the structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this extension will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (404)305-5579.
On any future correspondence concerning this matter, please refer to
Aeronautical Study Number 2001-ASO-4262-OE.


Earl P. Newalu Jr.
Specialist

(EXTDNH) 177216

RECEIVED

MAY 27 2003

JACOB WILLIAMS

10.4 Cumulative Environmental Assessment Notification SB257
10(1)(a)

The Cumulative Environmental Assessment report (CEA) was sent certified mail to Mr. Henry C. List, Secretary of the Natural Resources and Environmental Protection Cabinet for review on June 26, 2003. It was received at his office on June 30, 2003. Proof of receipt and copy of the CEA is included for reference.

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Henry C. List, Secretary
Natural Resources & Environmental
Protection Cabinet
5th Floor
Capital Plaza Tower
Frankfort, KY 40601

2. Article Number (Copy from service label)

7000 1530 0001 8468 1660

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

HERBY CHESNUN JUN 30 2003

C. Signature

X Herby Chesn

- Agent
- Addressee

D. Is delivery address different from item 1? Yes

If YES, enter delivery address below: No

3. Service Type

- Certified Mail Express Mail
- Registered Return Receipt for Merchandise
- Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee)

- Yes

Thoroughbred Generating Company, LLC

701 Market Street, Suite 781
St. Louis, Missouri 63101

Certified Mail

June 26, 2003

Mr. Henry C. List
Secretary
Natural Resources and Environmental
Protection Cabinet
5th Floor
Capital Plaza Tower
Frankfort, KY 40601

RE: Kentucky State Board on Electric Generation and Transmission Siting
– Case No. 2002-00150, Thoroughbred Generating Company, LLC

Dear Secretary List:

Pursuant to SB 257, an act relating to electric generation and transmission siting, applicants for an electric generating plant siting permit are required to file with your cabinet for review a Cumulative Environmental Assessment (CEA) report.

Thoroughbred Generating Company LLC is proposing to construct a nominal 1,500 Mw coal fueled power plant in Muhlenberg County near Central City. The attached CEA report details the types of pollutants the plant will emit. A matrix showing the status of Kentucky issued/applied for permits is also attached.

Please review the CEA report and provide you evaluation to the Kentucky State Board on Electric Generation and Transmission Siting. If you have questions on the report please contact me at 314-342-7613.

Sincerely,



Dianna Tickner
President

attachments

10. Permit (Approvals) Status SB257, Section 3(1)

10.1 Federal Permits (Approvals)

Permit or Approval	Responsible Agency	Regulated Activities	Status
U. S. Army Corps of Engineers 404 Permit	U.S. Army Corps of Engineers	Construction of water intake structure, water discharge structure, and barge dock	Permit issued 05/15/03
Determination of Obstruction Hazard	Federal Aviation Administration	Construction of tall structures	No hazard determination issued 10/17/01, extended 06/27/03
Phase II Acid Rain Permit	US EPA/Kentucky DAQ	Power plant operation in compliance with Acid Rain Regulations	Permit issued 10/11/02, revised 12/06/02.
Exempt Wholesale Generator Certification	Federal Energy Regulatory Commission	Sale of wholesale electricity	Approved 02/28/02

10.2 State of Kentucky Issued Permits

Permit or Approval	Responsible Agency	Regulated Activities	Status
PSD/ Title V Air Permit	Kentucky Division of Air Quality	Construction and operation of major source of air emissions	Permit issued 10/12/02, revised 12/06/02
Water Withdrawal Permit	Kentucky Division of Water	Withdrawal of water from Kentucky streams	Letter of assurance issued 09/19/02
Section 401 Water Quality Certification	Kentucky Division of Water	Required for USACE 404 permit	Certification issued 07/22/02
KPDES General Storm Water Construction Permit	Kentucky Division of Water	Discharge of storm water runoff during construction	Permit issued 6/13/02, 09/30/02
Stream Construction Permit	Kentucky Division of Water	For construction in or along a stream	06/01/02, expired 06/01/03
Kentucky Pollutant Discharge Elimination System	Kentucky Division of Water	Discharge of cooling waters and storm water runoff	Draft permit to be issued soon per Larry Sowder - KDOW
Special Waste Permit	Kentucky Division of Waste	Disposal of coal combustion waste byproducts	Application submitted 10/02, under review
Permit to Construct or Alter a Structure	Kentucky Airport Zoning Commission	Construction of a structure greater than 200'	Application to be submitted closer to start of construction

10.3 Local Permits

No local permits are required.

SB 257 Section 10 (3)
Cumulative Environmental Assessment

Thoroughbred Generating Company, LLC
1380 Thoroughbred Drive
Central City, KY

Prepared by: Thoroughbred Generating Company, LLC
June 2003

SECTION 10

Introduction

Pursuant to Subchapter 10 (1) (a) and 10 (3) of KRS 224, Thoroughbred Generating Company, LLC submits this Cumulative Environmental Assessment.

The Thoroughbred Generating Station (TGS) will be located one and a half miles northeast of Central City in Muhlenberg County. The site, consisting of 4,100 acres, has been entirely surfaced mined and portions have also been underground mined. The nearest inhabited structure is the Green River Correctional Institution, over a mile away.

The TGS plant will consist of two 750 MW pulverized coal boilers, turbines, associated air quality control devices, and material handling structures. The Plant will burn Kentucky #8 & #9 seam coal from a nearby mine. The Plant design and location take advantage of reclaimed mine lands, a Kentucky coal resource that would otherwise most likely not be utilized, and a remote location.

Permitting for the plant is underway, with several permits already received. The PSD/Title V Air permit was issued by the Kentucky Division of Air Quality on October 11, 2002. The Kentucky Division of Water (DOW) issued a Letter of Assurance for water withdrawal on September 19, 2002. The Kentucky Division of Waste (KDOW) approved the TGS petition for Special Waste on October 16, 2002. The Special Waste Permit Application was submitted to the KDOW on October 25, 2002. Review and approval is estimated to take 180 days. A KPDES permit application was filed with the DOW on December 14, 2001. The permit application was recently revised to incorporate the new EPA 316(b) requirements for plants not yet constructed. The draft KPDES permit was received June xx, 2003.

Section 10 (3) (a) Air Pollutants:

1. Types and Quantities of Air Pollutants

The major pollutants are presented on the following table. A copy of the Title V/PSD Air Permit containing all emissions limitations is attached for reference in Appendix 1. All permit levels for regulated pollutants are addressed in detail in the permit.

Constituent	Limit	Monitoring period
SO₂	0.0167 lb/mmbtu	based on a 30 day rolling average
SO₂	0.410 lb/mmbtu	based on 24 hour block average
NO_x	0.080 lb/mmbtu	based on a 30 day rolling average
Particulates	0.018 lb/mmbtu	99% removal, 20% opacity
CO	0.10 lbs/mmbtu	based on 30 day rolling average
VOC	0.0072 lbs/mmbtu	based on 30 day rolling average
Beryllium	0.000000944 lbs/mmbtu	based on quarterly average
H₂SO₄	0.00497 lbs/mmbtu	based on 30 day rolling average
HF	0.000159 lbs/mmbtu	based on 30 day rolling average
Hg	0.00000321 lbs/ mmbtu	based on quarterly average
Pb	0.00000386 lbs/mmbtu	based on quarterly average

2. Air Pollution Control Equipment

The TGS plant will utilize a suite of emissions control devices deemed Best Available Control Technology (BACT) to meet or better the air permit limits. The emissions control train consists of low NO_x burners, over-fire air, Selective Catalytic Reduction (SCR), a dry Electrostatic Precipitator (ESP), a wet limestone scrubber, and a wet electrostatic precipitator.

Low NOx Burners and Overfire Air

The boilers being supplied by Alstom will employ the use of tangentially fired burners with staged combustion. Tangential burner technology has been long recognized as producing the lowest NOx emissions as compared to other burners. Supplementing these burners with a separated over fire air system further reduces NOx emissions by staging combustion. This staged process reduces flame temperatures dramatically and consequently reduces the rate of formation of NOx. Reducing in furnace NOx is the initial step in emissions control. The over fire air system is also designed to control CO emissions. By combining mechanical changes to burner position in conjunction with sophisticated control systems, CO emissions are regulated.

Selective Catalytic Reduction (SCR)

Supplementing the Low NOx Burners for the purpose of further reducing NOx emissions will be a system known as Selective Catalytic Reduction (SCR). The SCR's main key component consists of a precious metal based catalyst installed inside of a reaction chamber. This reactor is located in the flue gas stream between the boiler economizer and the air pre-heater. The heat of the flue gases in conjunction with a fine spray of ammonia, which is injected upstream of the reactor, and the catalytic metals react to reduce NOx to nitrogen and water vapor.

Dry Electrostatic Precipitator (ESP)

Removing the ash generated by the combustion of coal, also known as particulates, is accomplished by means of a high efficiency electrostatic precipitator (ESP). The ESP eliminates particulates from the flue gas by charging the particles inductively with an electric field and then attracting them to highly charged collector plates. The particulates are then removed and disposed of by means of a collection system. The ESP consists of a hopper-bottomed box containing rows of plates that form passages through which the flue gas flows. A high voltage negative polarity charged rigid frame electrode ionizes the flue gas as it passes through. These charged ions flow toward the collecting plate in what is known as a corona current. Charged ions collide with and adhere to the particulates in the flue gas as they are deposited on the collection plate. The plates are periodically cleaned by a rapping system which releases the fly ash into a hopper. Collection systems withdraw the fly ash for disposal.

Wet Limestone Force Oxidation Scrubber

The scrubber receives particulate cleaned flue gas which has been discharged from the ESP. These gases are then introduced into a scrubber module wherein the gases come in contact with a spray of limestone slurry. The SO₂ within the gas is removed to the required levels. Delivered limestone is reduced in size in a wet grinding system so that it will chemically react in the scrubber module. The processed wet limestone is first fed into a re-circulation or reaction tank located at the bottom of the absorber module. The reaction tank product is then pumped up to spray nozzles in the tower where, after atomization, the slurry comes in contact with the flue gases and reacts with the sulfur to form calcium sulfite. The solution upon falling back into the reaction tank, is blown with air to render the product to calcium sulfate or commonly known as gypsum. The gypsum is dewatered and mixed with the fly ash (removed from the ESP) to develop a stable, disposable product.

Wet Precipitator (WESP)

The WESP was added to the equipment train to remove sulfuric acid mist and other condensable acids such as HCL and HF. The Alstom WESP design chosen is a horizontal flow, flat plate style. The WESP uses multiple collecting and discharge electrode fields in the direction of gas flow housed in a single casing. Continuous water washing sprays are used to keep the discharge and collecting electrode systems free of precipitated dust and mists. The use of the multiple high voltage fields in the direction of gas flow makes this design extremely effective on applications with sub-micron particulate and fumes. This design allows removal of up to 98% of sulfuric acid mist and other sub micron particulates.

Section 10 (3) (b) Water Pollutants:

KPDES permits are either pending or have been issued by the Kentucky Division of Water for the construction and operation of the Thoroughbred plant. The approved Construction permit and draft KPDES permits are attached in Appendix 2.

1. Water Discharge Qualities & Quantities

Permit No. KY 0104558

Approximate Monthly Discharge Rates:

Month	Gallons/Day
January	947,529
February	1,025,280
March	1,211,040
April	1,372,320
May	1,539,360
June	1,595,520
July	1,676,160
August	1,585,440
September	1,507,680
October	1,314,720
November	1,215,360
December	1,045,440

Effluent Limits proposed by Kentucky Division of Water

Outfall 001

Parameter	Monthly Average	Daily Maximum
Flow (MGD)	Report	Report
Temperature (°F)	Report	89
Total Suspended Solids (mg/l)	Report	Report
Total Dissolved Solids (mg/l)	Report	Report
Oil & Grease (mg/l)	Report	Report
Hardness (as mg/l CaCO ₃)	Report	Report
Free Available Chlorine (mg/l)	0.2	0.5
Total Residual Chlorine (mg/l)	0.019	0.019
Total Residual Oxidants (mg/l)	Report	0.2
Time of Oxidant Addition (minutes/unit/day)	N/R	120
Total Chromium (mg/l)	0.2	0.2
Total Zinc (mg/l)	0.388	0.388
pH (standard units)	Between 6.0 and 9.0 at all times	
Priority Pollutants (mg/l)	N/R	NDA

NDA – No Detectable Amounts	N/R – Not Required	N/A – Not Available
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Outfalls 002 & 004 - 007

Parameter	Monthly Average	Daily Maximum
Flow (MGD)	N/R	Report
Precipitation (inches)	N/R	Report
Total Suspended Solids (mg/l)	N/R	50
Oil & Grease (mg/l)	N/R	Report
Hardness (as mg/l CaCO ₃)	N/R	Report
pH (standard units)	Between 6.0 and 9.0 at all times	
If the storm event is greater than a 10 Year 24 Hour event (4.8 inches) then the limits for TSS do not apply. All other criteria must be met regardless of the storm event.		

Outfalls 003

Parameter	Monthly Average	Daily Maximum
Flow (MGD)	N/R	Report
Precipitation (inches)	N/R	Report
Total Suspended Solids (mg/l)	N/R	100
Total Dissolved Solids (mg/l)	N/R	Report
Oil & Grease (mg/l)	N/R	20
Hardness (as mg/l CaCO ₃)	N/R	Report
Total Recoverable Metals	N/R	Report
Acute Toxicity (Tu _a)	N/R	1.0
pH (standard units)	Between 6.0 and 9.0 at all times	
If the storm event is greater than a 10 Year 24 Hour event (4.8 inches) then the limits for TSS do not apply. All other criteria must be met regardless of the storm event.		

NDA – No Detectable Amounts	N/R – Not Required	N/A – Not Available
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2. Discharge Control Measures

- (i) Stormwater discharges KPDES General Permit No. KYR104958 (issued September 30, 2002) - construction phase
Silt fences, straw bales, or an equivalent method of protection will be utilized on the perimeter of the disturbed area to remove sediment and help prevent erosion
- (ii) Cooling Tower Blowdown
The Thoroughbred plant is designed with cooling towers to maximize the amount of water reuse. The cooling water cycle is designed for seven times concentration which minimizes both water intake and discharge. Cooling tower blowdown will be utilized in other processes such as scrubbing, Wet ESP, and waste disposal to minimize the volume of flow returned to the Green River.

Section 10 (3) (c) Solid Wastes

Thoroughbred filed a Special Waste Permit Application on October 25, 2002. The application was deemed Administratively complete on January 06, 2003. Copies of the Special Waste Designation and completeness letter are included in Appendix 3.

1. Types and Quantities of Wastes

(i). Trash – All trash will be disposed of in appropriate containers located around the plant. These containers will be emptied and hauled to a commercial landfill by a licensed refuse disposal company.

(ii). Plant waste by-products- The plant will produce three by-products as the result of generation and air quality control systems – bottom ash, fly ash, and scrubber sludge (commonly know as artificial gypsum). All three products have potential beneficial re-use in the construction industry. For the purposes of permitting and landfill design it has been assumed that all plant by-products will be disposed of on site in a Special Waste Landfill. As the project proceeds the by-products will be marketed to potential users, however it is unlikely that 100% of the wastes can be sold. Anticipated daily quantity is 8,376 tons/day and 3,100,000 tons/year. This volume is approximately 2,600,000 cubic yards per year.

Constituents and quantities of materials to be placed in the Special Waste Landfill are as follows:

Expected or Approximate

Constituent	Annual Quantity (tons)	Daily Quantity (tons)
Bottom Ash	302,560	817
Fly Ash	1,209,620	3,268
Scrubber Sludge	1,687,820	4,290
Total Waste	3,100,000	8,376

2. Waste Management Methods

The coal combustion waste landfill will be constructed in cells each designed to contain approximately five years of waste. The landfill will be lined with an approved HDPE product and constructed to the specifications contained in the permit application as approved by the Division of Waste. The landfill will be equipped with leachate collection

systems, groundwater monitoring wells, and will meet or exceed all permit requirements.

The coal combustion waste products will be conveyed to the landfill where they will be spread in lifts. The conveyors will be covered and water sprays placed at the working face to control any dust. The material, as conveyed, will contain 10-20% moisture thereby minimizing any dust.

Complete operational details are contained in the Special Waste Permit Application available at the Division of Waste Management.

Section 10 (3) (d) Water Withdrawal

The Thoroughbred Generating Company Permit to Withdraw Public Water - Letter of Assurance is attached in Appendix 4. It was issued on September 19, 2002.

1. Source and Quantity

The Green River is the source of make-up water for the Thoroughbred Generating Station. The water will be withdrawn through a wedgewire screen designed to keep the flow velocity below 0.5 ft/sec. The intake will be constructed in the Gibraltar Barge Slip, owned by Peabody Coal, so as not to interfere with boat and barge traffic on the Green River.

Maximum daily water withdrawal will be 30 million gallons. Average anticipated withdrawal will be approximately 20 million gallons per day (mgd).

Projected monthly water withdrawals

Jan	20 mgd	April	22 mgd	July	24 mgd	Oct	22 mgd
Feb	20 mgd	May	22 mgd	Aug	24 mgd	Nov	21 mgd
Mar	21 mgd	June	24 mgd	Sept	23 mgd	Dec	20 mgd

The Thoroughbred Generating Station is prohibited from reducing flows in the Green River to a rate of 514 cfs or less.

2. Water Management Plan

The Thoroughbred Generating Station will construct an on-site water storage reservoir designed to contain approximately eighteen days of average plant water needs. Water will be pumped from the Green River into the storage reservoir and then pumped to the plant's water treatment system as required. Only enough water will be withdrawn each day to keep the reservoir at its full

level. In times of restricted flow on the Green River, water will not be pumped from the river. The reservoir will supply water to the plant during this time, and will be refilled when the Green River returns to normal flow rates.

The plant is designed with cooling towers to maximize the amount of water that is reused. The cooling water cycle is designed for seven times through concentration which minimizes water intake and discharge. The cooling tower blowdown after the seven cycles will be used in other plant processes such as the wet scrubber, the wet ESP, and the coal combustion waste disposal system to minimize the water withdrawn.

Cumulative Environmental Assessment & Conclusion

The Kentucky Natural Resources and Environmental Protection Cabinet also evaluated the impact that Thoroughbred, and the other proposed power plants would have on Kentucky and the surrounding States in their December 17, 2001 report, A Cumulative Assessment of the Environmental Impacts Caused by Kentucky Electric Generating Units. The Cabinet’s analysis indicates that the proposed plant will not create new environmental problems and will not extensively exacerbate existing conditions. This conclusion, according to the cabinet, is supported by the fact that the proposed plants will be required to implement new technologies that reduce their emissions.

The Thoroughbred Generating Station has been designed utilizing state of the art emissions control devices to minimize impacts on the environment and to meet the BACT levels while utilizing Kentucky coal that would otherwise not be mined. Emissions from the plant will be some of the lowest in the U.S. and much lower than current U.S. and Kentucky averages as shown on the chart below.

	SO₂ (lbs/MM Btu)		No_x (lbs/MM Btu)	
	US	KY	US	KY
2000	1.04	1.16	0.44	0.49
2001	1.01	1.07	0.42	0.46
Thoroughbred	0.167		0.08	

Impacts to the Green River from the Thoroughbred Generating Station have been minimized by the use of closed cycle cooling systems and re-cycling of water in various plant systems. This design approach has greatly reduced the volume of plant process water that will be returned to the Green River. Use of the water storage reservoir will insure that stream ecology is protected in times of low river flow.

The onsite special waste landfill takes advantage of previously un-reclaimed surface mine pits. The landfill site is bordered by trees and, therefore, should not be visible for most the year from any public road. The landfill shall be constructed to meet all Division of Waste permit requirements and therefore impacts to the environment should be minimal.

The Thoroughbred Generating Station has been designed to minimize all cumulative impacts on the environment. It will meet all permit requirements and most likely emit less harmful emissions (of all types – air, water, & waste) than the various Kentucky permits would allow.

***** END OF APPLICATION *****