3. GENERAL CONDITIONS

a) This Plan Approval authorizes the construction of a 272 net megawatt waste coal-fired, circulating fluidized bed boiler by Robinson Power Company (RPC), P. O. Box 127, Burgettstown, Washington County. The plant will be located in Robinson Township, Washington County. Other air emission sources at the facility include material handling operations for fuel, ash and limestone as well as an emergency generator, firewater pump and a cooling tower. The proposed facility will include several structures such as the boiler building, turbine building, concrete stack, material storage building, run-of-mine crusher building, coal refuse dryer building and the administrative office buildings. [25 PA Code 127.12b]

b) RPC shall incorporate limestone injection with a polishing spray dryer system for SO_2 emission control, SNCR for NO_x control, and a fabric filter for particulate control. RPC shall advise the Department of the specific make and model of equipment and its design details within 10 business days of issuing the purchase order for the air cleaning devices by submitting appropriate pages of the Plan Approval Application. [25 PA Code 127.12b]

c) This approval to construct shall become invalid if: (1) construction is not commenced (as defined in 40 CFR 52.21(b)(8)) within 18 months after the date of this approval; or, (2) construction is discontinued for a period of 18 months or more; or, (3) construction is not completed within five years. RPC shall submit to the Department a detailed construction schedule for the entire facility within 180 days of issuance of this Plan Approval.

d) The provisions of 40 CFR 60 New Source Performance Standards for fossil fuel-fired steam generators (Subpart Da) and Coal Processing Plants (Subpart Y) are applicable requirements.

i) Subpart Da emission limits for particulate matter, visible emissions and sulfur dioxide are subsumed by the emission limits established in conditions 4(a) and 4(b) below. This facility shall comply with the compliance provisions, emission monitoring, compliance determination procedures and methods, and the reporting requirements in this Subpart.

ii) Subpart Y standards are applicable requirements for the thermal dryer(s), all coal processing and conveying equipment and all coal storage, transfer and loading systems. The facility shall comply with the standards for particulate matter, and those provisions relating to monitoring of operations and test methods and procedures in this Subpart.

iii) Subpart OOO standards are applicable requirements for all limestone and lime grinding/rolling mills, screening/classifying operations, conveying equipment, and silos/storage bins. The facility shall comply with the standards for particulate matter, test methods and procedures, and reporting and record keeping in this Subpart.

iv) In accordance with 40 CFR 60.4 copies of all requests, reports, applications submittals and other communications shall be forwarded to both EPA and the Department at the addresses listed below unless otherwise noted.

Director	Air Quality Program Manager
Air Toxics and Radiation	Pa DEP
US EPA, Region III	Air Quality
1650 Arch Street	400 Waterfront Drive
Philadelphia, Pa. 19103-2029	Pittsburgh Pa. 15222

e) This Plan Approval authorizes temporary operation of the source(s) covered by this Plan Approval provided the following conditions are met. [25 PA Code 127.12b]:

i) The Owner/Operator shall submit written Notice of the Completion of Construction and the Operator's intent to commence operation at least 5 days prior to the completion of construction. The Notice shall state the date when construction will be completed and the date when the Operator expects to commence operation.

ii) Operation of the source(s) covered by this Plan Approval is authorized only to facilitate the start-up and shakedown of sources and air cleaning devices, to permit operations pending the issuance of an Operating Permit, and to permit the evaluation of the source for compliance with all applicable regulations and requirements.

iii) Upon receipt of the Notice of the Completion of Construction from the Owner/Operator the Department shall authorize a 180-day Period of Temporary Operation of the source(s) from the date of commencement of operation. The Notice submitted by the Owner/Operator, prior to the expiration of this Plan Approval, shall modify the Plan Approval expiration date. The new Plan Approval expiration date shall be 180 days from the date of commencement of operation.

iv) Upon determination by the Owner/Operator that the source(s) covered by this Plan Approval are in compliance with all conditions of the Plan Approval the Owner/Operator shall contact the Department's reviewing engineer and schedule the Initial Operating Permit Inspection.

v) Upon completion of the Initial Operating Permit Inspection and determination by the Department that the source(s) covered by this Plan Approval are in compliance with all conditions of the Plan Approval the Owner/Operator shall submit a Title V Operating Permit (TVOP) application, at least 60 days prior to the expiration date of the Plan Approval.

vi) The Owner/Operator may request an extension of the 180-day Period of Temporary Operation if compliance with all applicable regulations and Plan Approval requirements has not been established. The extension request shall be submitted in writing at least 15 days prior to the end of the Period of Temporary Operation and shall provide a description of the compliance status of the source. The extension request shall include a detailed schedule for establishing compliance and the reasons compliance has not been established. This Period of Temporary Operation may be extended for additional limited periods, each not to exceed 120-days, by submitting an extension request as described above.

vii) If, at any time, the Department has cause to believe that air contaminant emissions from the sources listed in this plan approval may be in excess of the limitations specified in, or established pursuant to this plan approval or the permittee's operating permit, the permittee may be required to conduct test methods and procedures deemed necessary by the Department to determine the actual emissions rate. Such testing shall be conducted in accordance with Title 25 PA Code Chapter 139, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.

4. STACK EMISSIONS LIMITATIONS

a) Emissions from the CFB shall be limited as follows[25 PA Code 127.12b]:

CFB Emission Limits

Pollutant	Lbs/mmBtu	Lbs/Hr	Tons/Yr
SOx (as SO_2)****	.245 on a 24 hr avg.	675 on a 24 hr avg. 1115 on a 3 hr avg.	2957
NO_x (as NO_2)	.08* .10 on a 24 hr avg.	222*	972
CO	.15	416	1823
VOC (as Propane)	.006	16.64	72.90
Total PM_{10} (Condensable and Filterable)***	.012	33.6	147.2
Pb	5×10^{-6}	.014	.06
H_2SO_4	0.003	8.31	36.4
HF	2.54×10^{-3}	7.0	29.06
HCl	2.90×10^{-3}	8.0	33.18
Mercury**	1.4 x 10-6 lbs/MW-hr		
NH_3	10 ppm		

*Emissions are based on a 30-day rolling average.

**This emission limit may be revised in accordance with 40 CFR 60 Subpart Da.

*** Filterable PM_{10} based on EPA Method 201 or 201A. Condensable PM based on EPA Method 202.

**** This emission rate is based on a 7.5% blend of mine-run coal.

b) Emissions from the facility in any consecutive 12 month period shall be limited as follows [25 PA Code 127.12b]:

Facility Emission Limits

Pollutant	Total Emissions (tpy)
Sox(as SO_2)	3154.25
NO_x	976.06
CO	1826.09
VOC	72.9
PM_{10}	334.29

c) The Owner or Operator shall not permit the emission to the outdoor atmosphere of visible emissions from the boilers, in such a manner that the opacity of the emission is equal to or greater than 10% for a period, or periods aggregating more than 3 minutes in any one hour, or 30% at any time. The presence of uncombined water is not considered a failure to meet the limitations. [25 PA Code 127.1 and 25 PA Code 127.12(b)].

d) The ammonia slip from the CFB shall not exceed 10 ppmv at stack conditions. Compliance with this condition shall be determined through stack testing in accordance with condition 5 a) below. Continuing compliance with this condition shall be determined by adhering to good operating practices. [25 PA Code 127.1 and 25 PA Code 127.12(b)].

e) Potential emissions of sulfur oxides (SO_2) from the CFB shall be reduced by at least 97% on a 30 day rolling average. Compliance with this requirement shall be demonstrated by calculating daily control efficiencies and averaging them on a 12 month rolling basis using the fuel analysis, waste coal feed rate and the SO_2 CEM. [25 PA Code 127.12b]

f) Particulate matter emissions from any fuel or limestone handling & processing stack may not exceed 0.02 gr/dscf. [25 PA Code 127.12b]

g) Particulate matter emissions from the fuel dryer baghouse stack may not exceed 0.02 gr/dscf. [25 PA Code 127.12b]

h) The Owner or Operator shall secure 1118 tons of NO_x ERCs and 84 tons of VOC ERCs. ERCs shall be properly generated, certified by the Department and processed through the registry in accordance with PA Code Title 25 § 127.206(d)(1). Upon transfer, owner/operator shall provide the Department with documentation specifying the details of the ERC transaction. This facility may not commence operation until the Department certifies the required emissions reductions.

i) The Department will evaluate the actual emission rates and may revise (decrease or increase) the allowable emission rates based upon demonstrated performance (CEM data, stack test results, and/or subsequently promulgated applicable requirements) during the first five years of operation. Any revision of the allowable emission rates shall be accomplished by minor modification provided that the revised allowable emission rates do not exceed levels at which BACT was evaluated, do not exceed the level at which facility impacts were modeled, and that is not a result of a physical change at the facility. [Title 25 PA Code §127.12b].

j) This facility is subject to the Title IV Acid Rain Program of the 1990 Clean Air Act Amendments, and shall comply with all applicable provisions of that Title, including the following:

- 40 CFR Part 72 Permits Regulations
- 40 CFR Part 73 Sulfur Dioxide Allowance System
- 40 CFR Part 75 Continuous Emissions Monitoring
- 40 CFR Part 77 Excess Emissions

k) This facility is subject to the NO_x Budget Trading Program found in Title 25 PA Code §145.

5. TESTING REQUIREMENTS

a) Within 180 days of initial start-up but no later than 60 days of achieving maximum production, stack tests shall be performed on the CFB in accordance with the provisions of Chapter 139 to determine the following pollutant emission rates:

- Total PM_{10}
- HCl
- HF
- H_2SO_4
- NMVOC
- Ammonia
- Arsenic
- Beryllium
- Cadmium
- Chromium Compounds
- Nickel
- Lead

These tests shall be repeated on a yearly basis. The frequency may be reduced in subsequent permits if determined appropriate by the Department. [25 PA Code 139.2].

b) Within 180 days of initial start-up but no later than 60 days of achieving maximum production, a fuel analysis and stack test(s) shall be performed simultaneously on the inlet and outlet of the CFB fabric collector in accordance with the provisions of Chapter 139 to determine the mercury emission reduction [Title 25 PA Code §139.2]

c) The Owner or Operator shall submit a pre-test protocol for review at least 60 days prior to performance of the stack tests. [25 PA Code 139.2].

d) The Owner or Operator shall also notify the Department at least two weeks prior to the stack tests so that an observer may be present at the time of the tests.[25 PA Code 139.2].

e) The Owner or Operator shall submit a stack test report to the Department within 60 days of the completed testing. [25 PA Code 139.2].

6. CONTINUOUS MONITORING

a) The company shall install, certify, maintain and operate a CEM system for monitoring sulfur oxides (as SO_2), NOx (as NO_2), visible emissions (opacity), carbon monoxide (CO), mercury and gas flow from the CFB boiler. Oxygen (O_2) or carbon dioxide (CO_2) shall be monitored at each location where SOx, NOx, CO and mercury are monitored in accordance with the requirements of 25 Pa Code Chapter 139 and 40 CFR 60 Subpart Da.

b) The Owner or Operator shall install, operate and maintain a system and procedures for monitoring as-fired fuel in accordance with the requirements of 40 CFR 60.48a(3) and 25 PA Code Chapter 139. The daily sulfur input rate to the CFB shall be determined and used as a basis in the calculation of the 30 day rolling average SOx control efficiency.

c) The Owner or Operator shall maintain a daily log of:

- hours of operation for each air pollution source
- coal feed rate
- natural gas consumption
- ammonia injection rate
- limestone consumption
- MW/hr produced (gross)

This log shall be maintained on site for a minimum of five years and shall be made available to the Department upon request [25 PA Code 127.12b].

7. NOTIFICATION/REPORTING

a) At least 90 days prior to start-up, the Owner or Operator shall submit information required by Phase I of the Department's "Continuous Source Monitoring Manual", Revision 6, January 1996 to the following address.

Chief, Division of Technical Services & Monitoring
PA Department of Environmental Protection
Rachel Carson State Office Building
400 Market Street (12th Floor)
P.O. Box 8468
Harrisburg, PA 17105-8468

b) The owner or operator shall report each malfunction that poses an imminent and substantial danger to the public health and safety or the environment or which it should reasonably believe may result in citizen complaints to the Department that occurs at this Title V facility. For purposes of this condition a

malfunction is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment or a process to operate in a normal or usual manner that may result in an increase in the emissions of air contaminants [25 PA Code 127.441].

c) The Title V Operating Permit application shall include a CAM submittal prepared in accordance with 40 CFR § 64.4 for applicable units.

8. WORK PRACTICE STANDARDS / MISC.

a) The Department reserves the right to require additional controls (e.g. road paving, process equipment enclosures, conveyor covers, etc.) based on evaluation of the operation after start-up and a determination that the existing controls are inadequate to control fugitive emissions [25 PA Code 127.12b].

b) The truck loading and unloading areas and the plant delivery roads shall be paved with asphalt, concrete, or an equivalent surface approved by the Department [25 PA Code 127.12b].

c) Road dust shall be controlled by a road sweeper or the use of water sprays, oils, or other dust surfactants [25 PA Code 127.12b].

d) A pressurized water truck shall be on site and in use when the facility is operating [25 PA Code 127.12b].

e) The plant shall post a sign stating the requirement that “All loaded trucks entering or exiting plant property shall be properly tarpaulin covered."[25 PA Code 127.12b].

f) The plant shall post a speed limit of 15 mph or less on all plant roads [25 PA Code 127.12b].

g) All conveyor belts shall be partially enclosed, and all screens and crushers shall be fully enclosed so as to prevent fugitive emissions from becoming airborne [25 PA Code 127.12b].

h) Ash silos shall discharge through an ash conditioner which shall moisten the ash before it is loaded into trucks for disposal [25 PA Code 127.12b].

i) Fuel and limestone shall only be stockpiled in areas that are either enclosed or capable of being watered as needed by the pressurized water truck and/or sprinkler system [25 PA Code 127.12b].

j) The baghouse inlet temperature shall not exceed 250ºF. A thermocouple shall be provided to monitor this temperature, which shall be continuously recorded. An audible alarm will sound in the CFB control room if the baghouse inlet temperature exceeds 250ºF [25 PA Code 127.12b].

k) The baghouse shall be designed with an effective air-to-cloth ratio at actual conditions of not more than 3:1 [25 PA Code 127.12b].

l) No waste of any type except for waste bituminous coal, may be burned in the boiler. The owner/operator may not burn residual, municipal, hazardous, hospital, infectious, chemotherapeutic wastes or any other material not specifically identified in the Plan Approval application [25 PA Code 127.12b].

m) The emergency diesel engine and firewater pump shall each be limited to 500 hours per year of operation. The owner/operator shall maintain operational records to determine compliance with this condition.

9. CLASS I MITIGATION [40 CFR Part 52]

The owner/operator will secure Mitigation Reductions of SOx (as SO_2) emissions (TPY) in accordance with the following:

a. The Robinson Power sources herein authorized to be constructed, shall not operate unless and until the Mitigation Reductions are secured.
b. The actual emission reductions which the Mitigation Reductions represent must have occurred and must be established in a Federally enforceable operating permit condition for the generating source(s) prior to operation of the Robinson Power sources.
c. Robinson shall demonstrate through modeling acceptable to the DEP in consultation with the Federal Land Managers, that the combined impact of the Mitigation Reductions and the Robinson Power sources is less than significant with respect to the air quality related values (including visibility) in the Federal Class I areas prior to operation of the Robinson Power sources. This modeling need only include the Robinson Power sources and the generating source(s).
d. For the purposes of this approval the Mitigation Reductions shall be surplus, permanent, quantified and Federally enforceable in accordance with 25 PA Code Section 127.207 (1).
e. For the purposes of this approval the Mitigation Reductions shall be calculated by establishing the baseline in accordance with 25 PA Code 127.207 (4).
f. For the purposes of this approval the Mitigation Reductions shall be generated by the techniques listed under 25 PA Code 127.207 (5).
g. Once the Mitigation Reductions are secured in accordance with this Plan Approval special condition they are no longer available for other uses (internal netting, sale, transfer or exchange for other purposes, ERC's, etc).
h. The mitigation reductions shall be verified by the certified continuous emission monitors at the generating facility or another method approved by the Department.