APPENDIX B Building Assessment



Building Assessment

The following architectural, mechanical and electrical summarys support the site and building assessment summary information contained in Section 2.



Architectural Summary

Building:	Powerhouse - Boiler Bay	Key Plan.	
Primary Use:	Steam Generation (Process)	Area:	561,781
Secondary Use:	Control Room	Area:	10,548
Secondary Use:	*	Area:	2,966

System Summary	Condition Code	Condition Code
Interior Exterior Roof	3/4 3	2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Moderate 5 - Replace

Narrative:

The Boiler Bay and the adjoining Turbo-Generator Bay collectively form the Powerhouse. The Boiler Bay is part of the original plant construction from the early to mid 1950's. There have been minor interior modifications and the addition of various other facilities within the confines of the Boiler Bay, including crew shacks at the basement, second and fourth levels, fire equipment shed at the main level, and a water chemistry lab at level three.

Construction type according to the Standard Building Code is Type IV, unprotected, unsprinklered. At 104 feet high and main floor area of 120,000 square feet, the building does not conform to height and area limitations for the occupancy and building type. Egress from the main level is generally adequate; however egress from the basement, mezzanine, and levels 2 - 5 is non-compliant. Exits and exit access are not well marked.

The building exterior is predominately corrugated metal panels with a 12' high brick base. The exterior appears to be in fair condition, with areas of brick needing cleaning and areas of metal panels needing painting.

The floor at level 1 is quarry tile in fair condition with areas showing patching and repairs with other areas needing repairs. The basement, mezzanine, level 2 and level 4 are concrete slabs and levels 3 and 5 are steel grating. The walls are glazed clay facing tile at level 1, exposed concrete at the basement and mezzanine levels and exposed metal panel construction at levels 2 through 5. Ceilings are exposed construction.



The following occupied spaces occur in the Powerhouse Boiler Bay:

CONTROL ROOMS

Five control rooms; one for every two Units and one for Unit 9; are on level 1. Resilient tile flooring is in fair condition. Plaster, glazed clay facing tile and metal panel walls are in fair condition. Acoustical ceilings are generally in poor condition. The toilets and kitchen units for each control room are in poor condition and should be renovated or replaced.

SHIFT SUPERVISORS OFFICE

The shift supervisors office is located between Units 4 and 5 at level 1. Floors are resilient tile in good condition. Walls are painted plaster in good condition. Ceilings are 12" x 12" acoustical tiles in good condition.

WATER CHEMISTRY LABORATORY

The water chem lab is located on level 3 between Units 5 and 6. It is a fairly recent addition consisting of lab space, an office and a toilet. The resilient tile flooring and painted CMU walls are in fair condition while the 2' x 4' acoustical panel ceiling is in poor condition as a result of being stained from overhead leakage.

OPERATOR CREW SHACKS

There are various crew shacks or "goat shacks" throughout the boiler bay. Three are in the basement between Units 2 and 3, Units 4 and 5, and Units 8 and 9 for Unit Operators. One is on level 2 between Units 5 and 6 for the Soot Blowers Crew. These crew shacks are in poor to fair condition.

OUTAGE CREW SHACKS

Four outage crew shacks are located on level 4 which include office space, tool storage and a crew break room. These areas are considered temporary and were not accessed.

504 REPORT

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Powerhouse-Boiler Bay, including Control Rooms, was not considered a priority for upgrade.



Architectural Summary

Building:	Powerhouse - Turbo Generator Bay	Key Plan:	1
Primary Use:	Power Generation (Process)	Area:	119.035
Secondary Use:		Area:	
Secondary Use:		Area:	
System Sum	Condition mary Code	Conditio 1 - New 2 - Good/ 3 - Fair/M	Minor
Exterior Roof		4 - Poor/N 5 - Replace	Moderate

Narrative:

The Turbo-Generator Bay and the adjoining Boiler Bay collectively form the Powerhouse. The Turbo-Generator is part of the original plant construction from the early to mid 1950's. The structure is one high-bay space at grade level with two levels (basement and mezzanine) below grade. There have been a few minor interior modifications within the Turbo-Generator Bay, including a Resource Group diagnostic center at the mezzanine level, a lunch room and an outage shop area on the main level.

Construction type according to the Standard Building Code is Type IV, unprotected, unsprinklered. At 58 feet high and with a main floor area of 119,000 square feet, the building does not conform to height and area limitations for the occupancy and building type. Egress from the main level is generally adequate, however egress from the basement and mezzanine levels is unsatisfactory.

The building exterior is predominately tan brick and glass block with a gray steel frame. The exterior appears to be in fair shape with areas of brick needing cleaning and areas of steel needing painting. There are also some glass block units broken near Units 3 and 4.

The floor at level 1 is quarry tile in poor to fair condition with areas showing patching and repairs with other areas needing repairs. The basement and mezzanine are concrete slabs in fair condition. The walls are glazed clay facing tile and glass block at level 1, exposed concrete at the basement and mezzanine levels and perforated metal panels at the upper part of the turbogenerator bay all in fair to good condition. Ceilings are exposed construction, painted in the turbogenerator bay in fair condition.



The following occupied spaces occur in the Turbo-Generator Bay:

VENDING/LUNCH ROOM

The vending area under the visitor's balcony is an addition to the original plant. It is a brick/block structure built on the original quarry tiled turbo-generator floor. This floor is in fair condition. The interior walls are painted CMU in fair condition and the exterior brick walls are in good condition with the exception of needing to be cleaned at the base of the wall. The interior ceiling is acoustical panels in fair condition.

DIAGNOSTIC CENTER

The Diagnostic Center, managed by Resource Group, is a fairly new structure built on the mezzanine level between Units 5 and 6. The interior floor, raised off of the mezzanine slab, is carpet in good condition. The walls and ceilings are painted wallboard in good condition. The exterior is corrugated metal panels left unpainted in good condition, although this should eventually be painted to avoid corrosion from the harsh environment.

504 REPORT

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Powerhouse Turbo-Generator Bay was not considered a priority for upgrade.



Mechanical	Summary
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Building: Po	ower House	Key Plans	:1
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling Heating Plumbing Fire Protection	NA NA	3 3 3	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

The cooling system for the control rooms is based on packaged, water cooled air conditioning units located in the control rooms. Supply and return air diffusers and grilles need to be cleaned and adjusted. With proper maintenance they could become more efficient. All control rooms should be under positive pressure to prevent dust penetration from the powerhouse and boiler room.

There is no heating requirement in the control rooms.

The fire protection system consists of fire extinguishers and hose cabinets located outside the control rooms in the power house. The fire protection system provided appears sufficient for these areas.

The plumbing system appears to be sufficient for each control room, but insufficient for the entire powerhouse area. The plumbing fixtures are in fairly poor condition.

Recommendations:

- Upgrade bathroom facilities and provide additional capacity as required.
- Eliminate coal dust penetration into the control rooms by taking inlet air from outside the powerhouse only.
- Upgrade fire protection system to include smoke detectors, fire alarm pull boxes, etc.

Duilding

Master Plan Kingston Fossil Plant

6 - Other Inoperative

Electrical Summary

Dowerhouse

building. <u>1044cm</u>	<u>ouse</u> , .		
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	12 @ 200A each NA NA NA	3 4 None 3	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace

Key Plan:

1

Narrative:

Interior lighting in the control rooms is very poor with an accumulation of dust and inoperative lamps being the primary cause. These rooms need to be upgraded with fixtures designed for this type of application. (Low glare, higher light levels for detail work.) The basement shacks are in immediate need of attention to replace damaged and inoperative fixtures.

Emergency egress lighting, as is in control rooms, should be expanded to other areas. The existing units are approaching their intended life cycle.

Fire alarm notification is via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site. There are areas in the powerhouse where the fire alarm signal cannot be heard. This needs immediate attention.



Architectural Summary

Building: Offi	ce Wing	Key Plan:	2
Primary Use: Offi	Се	Area:	18,304
Secondary Use:		Area:	<u> </u>
Secondary Use:		Area:	
System Summar	Condition y Code	Condition	on Code
Interior Exterior Roof	<u>2/3</u> <u>3</u>	2 - Good 3 - Fair/N 4 - Poor/ 5 - Benia	Moderate Moderate

Narrative:

The Office Wing was part of the original plant design which was constructed in the mid 1950's. It is two stories high and is connected to the Service Bay. There have been a few minor interior modifications to accommodate programmatic changes.

Construction type according to the Standard Building Code is Type IV, unprotected, unsprinklered. There is no separation of occupancies from the Service Bay or Powerhouse, therefore, these structures do not conform to height and area limitations for the occupancy and building type. Egress from the main level is generally adequate, although NFPA standards require rated access corridors. Egress from the second floor is unsatisfactory in that the stairways are not enclosed.

The building exterior is generally in fair to good condition, the main problem being the age of the facility (35-40 years). The first floor is brick veneer in good condition, the second floor is a mixture of metal wall panels and glazed storefront with colored spandrel panels in fair condition. The colored spandrel panels are quite dated.

The floor at lobbies, toilets, corridors and stairways is terrazzo in fair to good condition. Floors in other areas are either resilient tile or carpeting in fair and poor condition respectively. The walls are mostly glazed clay facing tile, metal panels and painted plaster, although there are some renovated spaces constructed with gypsum board on stud framing, all in good condition. Ceilings are generally plaster in lobbies, toilets and corridors in good condition with acoustical ceilings in office areas in fair condition.

504 REPORT

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. Compliance upgrades include public use areas such as Human Resource office, Credit Union, toilets, and telephones, for example, having the highest priority. The extent of compliance for the entire Office Wing rated a secondary priority.



wechanical Summa	y		
Building: Of	fice Wing	Key Plan	: 2
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling Heating Plumbing Fire Protection	106 Tons 400 KW NA NA	4 4 3 4	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

The office wing was built in the early 50's. The main cooling and heating is supplied by the central systems located in the basement mechanical room. These systems serve the assembly room, offices on the 1st and 2nd floors, and public spaces. The system is comprised of the original built-up air handling units. These consist of filters, chilled water cooling coils, steam heating coils and supply air fan. Chilled water is generated from a refrigerant compressor and then pumped into a chilled water storage tank. This equipment appears to be in poor condition, shows evidence of repair, and may require replacement. The total cooling capacity of these systems seem adequate, however because of the age of the equipment the original total cooling capability is not sufficient to satisfy current office wing cooling needs. There are three rooftop air conditioning units serving plant support and computer operations areas on the 2nd floor, which was converted into office space during a renovation. These units appear to be operating efficiently, but require some cleaning and filter changeout on a scheduled basis. Information on the specific heating capacity was not available and has been estimated.

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Mechanical Summary Cont'd:

Supply air is delivered directly into offices. Return air is transferred through door grilles into the corridor and then central return air grilles. This method of returning air through the corridor is in violation with NFPA 90A, 2-3.11.

The fire protection system consists of fire extinguishers, fire hose cabinets, and fire hoses. There are no smoke detectors in the office wing.

The plumbing system consists of toilet rooms on the first and second floors. There is no womens's toilet room on the first floor. Toilet rooms are not equipped with plumbing fixtures for the handicapped. There are no floor drains in the toilet rooms.

Recommendations:

- Replace or renovate air conditioning and heating system.
- Replace plumbing fixtures as required.
- Upgrade fire protection system to include smoke detectors, fire alarm pull boxes, etc.



Elec	ctrica	l Sum	nmary
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Building: Off	ce Wing	Key Plan: 2	
SYSTEM SUMMAR	Y CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergen	130KVA NA NA NA NA	3 2 None 2	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

Interior lighting generally is good. Windows add considerable lighting during the day. There are areas and offices where the lighting needs to have immediate maintenance attention due to inoperative lamps and fixtures. Most offices are equipped with fluorescent fixtures with single prong slim line lamps, which are considerably more expensive than rapid start. The conversion could be cost effective just from the lamp upgrade.

Emergency lighting and exit signs are mainly located in the livewell only and are adequate there. The rest of the building should be brought up to egress lighting codes by the addition of battery packs and exit signs.

Power is adequate for the needs of this building, but any major renovation should include the replacement of all panels and feeders. Age deterioration and coal dust may have made the circuit breakers unreliable. Replacement parts for panels probably do not exist.

In most of the building, fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site. The livewell has its own fire alarm system but at the time of the assessment, the system was turned off due to water leaking into the wiring. This needs to be corrected.

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Architectural Summary

Building:	Service Bay	Key Plan:	3
Primary Use:	Shops	Area:	17.211
Secondary Use:	Stores	Area:	28.805
Secondary Use:	Shared Support	Area:	11.420

System Summary	Condition Code	Condition Code 1 - New
Interior	2/3	2 - Good/Minor
Exterior	3	3 - Fair/Moderate
Roof		4 - Poor/Moderate
NOOI		5 - Replace

Narrative:

The Service Bay was part of the original plant design which was constructed in the mid 1950's. It has one level at grade and a basement level and is connected to the Office Wing. The main level contains shops, power stores and shower/lockers. The basement level is mostly power stores, but also houses the livewell and various building support functions, such as mechanical and electrical rooms. There have been a few minor interior modifications, notably the livewell.

Construction type according to the Standard Building Code is Type IV, unprotected, unsprinklered. There is no separation of occupancies from the Office Wing or Powerhouse; therefore, these structures do not conform to height and area limitations for the occupancy and building type. Egress from the main level is generally adequate, except that some corridors discharge into other non-separated building areas producing excessive travel distances. Egress from the basement livewell center is acceptable, although the remainder of the basement areas is unsatisfactory.

The building exterior is generally in fair to good condition, the main problem being the age of the facility (35-40 years). The exterior is brick veneer with steel trim in fair condition, with aluminum strip windows. The loading dock is generally cluttered with drums, gas tanks and dumpsters.

The floors in the basement are generally exposed concrete, except the livewell, which has carpet. Floors on the main level are epoxy coated concrete for the shops, painted concrete for the power stores area in fair condition, resilient tile for foreman and storekeeper's offices in good condition and terrazzo for corridors and locker areas in fair condition. Basement walls vary greatly, consisting mostly of exposed concrete, CMU and brick in stores areas with painted CMU and gypsum board at the livewell center all in fair to good condition. At the main level, walls are mostly glazed clay facing tile in fair condition. Basement ceilings are generally exposed



structure in fair condition throughout except for acoustical ceiling in the livewell center which is in poor condition in areas where piping has leaked onto them. Ceilings on the first floor are generally exposed structure in shop and stores areas and plaster for office and lockers in fair to good condition.

504 REPORT

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. Compliance upgrades include employee use areas, such as power stores, toolrooms, and medical facilities, and have a secondary priority according to the 504 report. The extent of compliance for the remainder of the Service Bay rated a low priority.



Mechanical	Summary
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Building:	Service Bay	Key Plan	:3
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling Heating Plumbing Fire Protection	30 Tons 1,745,700BTU/HR NA NA	3 3 4 3	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

The service bay was built in the early 50's and consists of several shops and a warehouse.

The cooling system is selectively located throughout the service bay, and serviced by packaged units. These units are located in the foremans office, powerstores, and the maintenance supervisors office. The air conditioning equipment appears to be in fair condition with cleaning and filter changes made on a regular basis.

The heating system is based on several steam unit heaters that are located throughout the service bay. Specific heating system capacity was not available and has therefore been estimated.

The ventilation system is based on supply fans located in the second floor mechanical room adjacent to the overlook corridor, with some exhaust fans located on the roof and in the mechanical room. Supply and exhaust fans located in the mechanical room appear to require replacement. The outside air louver is used for intake and exhaust, which may develop a short circuit between supply and exhaust air streams. The louvers and bird screens are very dirty and require substantial cleaning. There are no filters provided for the supply air. Several of the welding exhaust hoods place the welder in the exhaust air stream and makes him susceptible to breathing contaminated air.

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Mechanical Summary Cont'd:

The fire protection system consists of fire extinguishers, fire hose cabinets, and fire hoses. The stand alone CO_2 fire protection system for the paint shop and the lube storage room appears to be very old and possibly inoperable. The system requires substantial cleaning and regular maintenance.

The plumbing system in the lavatory and shower facilities appears to be in fairly poor condition as they are used extensively. Some of the shower heads and lavatory fixtures are not working. There are no floor drains in the lavatory areas. The plumbing seems to be sufficient for this area.

Recommendations:

- Upgrade plumbing fixtures.
- Upgrade fire protection by installing smoke detectors, fire alarm pull boxes, fire extinguishers, water and halon sprinkler systems, etc.



Electrical Summary

Building: <u>Service</u>	Bay Ke	y Flan	
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	100KVA NA NA NA	3 3 None 3	 New Good/Minor Fair/Moderate Poor/Major Replace Other <u>Inoperative</u>

Narrative:

The lighting levels in most shops are below recommended footcandles. This is due to inoperative lamps and fixtures, surface deterioration, and dirt on louvers. This is also the case in corridors and locker room toilet areas. All these areas need to have the lighting upgraded.

The 120/240 Volt power is supplied to the service bay from a switchboard and transformer on the mezzanine level of the powerhouse. Branch circuit panels are old and circuit breakers are full of coal dust. This makes these units have questionable operational capabilities.

Minimal emergency egress battery units are located throughout this building. These are not sufficient for required lighting levels. Additional battery units and lighted exit signs should be installed.

Fire alarm notification is via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.

4 - Poor/Moderate

5 - Replace



Architectural Summary

Building:]	Fraining Classroom	Key Plan:	4
Primary Use:	Classrooms	Area:	1.344
Secondary Use: _		Area:	
Secondary Use: _		Area:	
System Summ	Condition ary Code	Conditio	n Code
Interior	<u>3</u>	2 - Good/ 3 - Fair/M	

Narrative:

Exterior

Roof

The Training Classroom consists of a double wide trailer located north of the Electrical Control Building. The building does not match the character of the original plant buildings.

Standard Building Code classification is Group B - Business, Type VI, unprotected, unsprinklered. Egress is generally adequate for the occupancy.

Floors are resilient tile throughout in good condition. Walls are wood framed with wood paneling in fair condition. Ceilings are expanded polystyrene boards in fair condition.

A 504 Report prepared in 1991 states that some minimal amount of accessibility should be provided, specifically, a curb cut, ramp, drinking fountain, and toilet grab bars.





Mechanical	Summary
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Building: <u>Training Classroom</u>		Key	Key Plan: 4	
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND	
Cooling Heating Plumbing Fire Protection	6 Tons 60,000 BTU/HR NA NA	3 3 4	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other	

Narrative:

The training facility consist of a single double wide trailer. The trailer is heated and cooled by a pad mounted BARD heat pump unit. The unit does provide adequate heating and cooling capacity according to those interviewed. The exact heating and cooling capacity is unknown, but is assumed to be adequate and has been estimated.

The fire protection system for the trailer consist of a (2) two fire extinguishers.

Recommendations:

 Provide proper and regular maintenance for the heat pump unit to maximize efficiency.



Electrical Summary

Building: <u>Training Classroom</u>		Key Plan: 4		
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND	
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	200A NA NA NA	2 3 None None	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other	

Narrative:

Interior lighting, though fair in condition, is of poor quality and severely inadequate in classrooms. This needs to have immediate attention given before facility is used again.

There is no emergency egress lights or exits signs. This needs to be corrected.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.

5

Koy Dian:



Architectural Summary

Building:	Utility Building	Ney Fian.	
Primary Use:	Shops	Area:	10.127
Secondary Use:	Office	Area:	286
Secondary Use:	Shared Support	Area:	3,283
	Condition		Ondo

System Summary	Code Code	Condition Code
Interior	3/4	1 - New 2 - Good/Minor
Exterior	3	3 - Fair/Moderate
Roof		4 - Poor/Moderate
		5 - Replace

Narrative:

The Utility Building is part of the original plant construction from the mid 1950's. There has been some renovation in the toilet/locker area to connect previously unconnected locker rooms. This change functions poorly in that one must go through two showers to access the second locker room. There has also been a renovation to lengthen the diesel locomotive bay.

Standard Building Code building type is Type IV, unprotected, unsprinklered. Egress is generally adequate from the first floor and unsatisfactory from the second level.

The exterior is in fair condition, with the majority of walls being brick which has become very streaked and dirty from coal dust. The gray steel trim has been recently painted and is in good condition. Steel framed windows are generally in fair condition with the higher clerestory types being fairly dirty.

Floors are concrete or hardened concrete in fair to good condition. Most of the walls are clay facing tile with areas of brick in corridors. All walls are in fair condition. Ceilings are mainly painted exposed structure in fair to good condition with plaster ceilings in the office, toilet/locker rooms and corridors in fair condition.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Utility Building was not considered a priority for upgrade.



Mechanical Summary

Building: <u>Utility B</u>	uilding	Key Plan: 5	
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling Heating Plumbing Fire Protection	8 tons 235 KW NA NA	2 3 3 3	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

The cooling system consists of four (4) thru-wall air conditioning units located throughout the building. The cooling system for the lunchroom, which consists of two thru-the-wall units is insufficient for the area.

The heating system consists of several electric unit heaters located throughout the building. During our visit it was relatively warm, and we were not able to determine if the heaters were working and needed to be replaced or fixed.

The fire protection system consists of a fire hose cabinet, fire extinguishers and a CO_2 system located in the oil storage room of the shop. The CO_2 system is old and may not be fully functional. The rest of the system is in fair condition, but appears to be sufficient for the building.

The plumbing system consists of a water closets, urinals, lavatories and shower facilities. This system appears to be in fair condition and is sufficient for this building.

Recommendations:

- Provide sufficient cooling capacity for the lunchroom area.
- Replace CO₂ system in oil storage room.





Electrical Summary

Building: Utility E	sullaing Key	y Fian	
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	800A NA NA NA	3 4 3 None	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

Interior lighting is poor in quality and needs to be upgraded. Fluorescent lamps are single prong, slim line type, which are consideraby more expensive than rapid start. The conversion could be cost effective just from the lamp upgrade.

There is no emergency egress lights or exits signs. This needs to be corrected.

The lighting and support equipment are sealed mostly from the 240/120 volt switchboard. The board is old but appears adequate with the proper maintenance. Replacement parts for additional loading are probably not available.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.

2 - Good/Minor

5 - Replace

3 - Fair/Moderate

4 - Poor/Moderate



Architectural Summary

System Summar	Condition y Code	Conditio	on Code
Secondary Use:		Area:	
Secondary Use: Cor	ntrol Room	Area:	1,824
Primary Use: Wa	ter Treatment (Process)	Area:	1.047
Building: War	ter Treatment Bldg.	Key Plan:	0

Narrative:

Interior

Exterior

Roof

The Water Treatment Building is part of the original plant construction from the mid 1950's. All of the first floor and some of the second floor is dedicated to water treatment processing; however, there is a control room located on the second floor. One person oversees this control room and the Demineralizer Building.

Standard Building Code building type is Type IV, unprotected, unsprinklered. Egress from the control room is by an unenclosed stairway. A second means of egress does not exist.

The exterior is predominately brick which is in good condition but shows some dirt staining. The steel trim is in good condition while the steel windows and single pane glass are in fair condition needing some cleaning and painting.

The floor in the control room is resilient tile in good condition. The toilet floor is terrazzo in poor condition. All of the walls are clay facing tile in good condition, except in the toilet, where the walls are in fair condition. Ceilings are plaster throughout in fair condition.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Water Treatment Building was not considered a priority for upgrade.



Mechanical Summary

		<u> 6 </u>
ARY CAPACITY	CONDITION CODE	CONDITION LEGEND
NA 39 KW NA NA	4 4 4	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other
	NA 39 KW NA	ARY CAPACITY CONDITION CODE

Narrative:

The control room on the second floor is the only normally occupied personnel area within the water treatment plant. This building was constructed in the early 1950's. There is no cooling system for the control room. Ventilation for the area is provided by air filtration through windows and with roof top ventilation fans and ductwork.

The fire protection system consist of fire extinguishers.

The plumbing system is adequate, but is old and should be replaced.

Recommendations:

- Install cooling system for personnel and equipment within a confined control room area.
- Replace the plumbing fixtures.
- Upgrade the fire protection system. Install halon system, smoke detectors, fire alarm pull boxes, etc.



Electrical Summary

Building: Water 1	reatment Plant	Key Plan:	<u> </u>
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	2 at 200A each NA NA NA NA	3 4 None See Narrative	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

Interior lighting is poor in quality and needs to be upgraded. Fluorescent lamps are single prong slim line type, which are considerably more expensive than rapid start. the conversion could be cost effective just from the lamp upgrade.

The emergency lighting system is a circuit from the 250V DC control backup batteries. The condition of the fixtures makes it questionable whether the lighting is operational. New emergency lighting and exit signs should be installed.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.

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Architectural Summary

Building:	Yard Storage Bldg. #1	Key Plan:	
Primary Use:	Storage	Area:	12,322
Secondary Use:		Area:	
Secondary Use:		Area:	
System Sumn	Condition nary Code	Conditio	n Code
Interior Exterior Roof	3/4 4 	2 - Good/l 3 - Fair/M 4 - Poor/N 5 - Replac	oderate Moderate

Narrative:

Yard Storage Building #1 is part of the original plant construction from the mid 1950's.

Standard Building Code type is Type IV, unprotected, unsprinklered. Egress from the storage bay is marginal because there is only one swing door serving the building. There are two overhead service doors not configured for emergency egress.

The exterior has an 8 ft. high painted CMU base in poor condition. This desperately needs repainting a darker, maintainable color. The remainder of metal panels is in fair condition; the steel windows are in fair condition needing some replacement panes because of breakage.

The floor throughout is concrete in fair condition; however, the toilet floor is in poor condition. All of the walls are CMU and exposed structure in fair condition, except that the CMU toilet walls are in poor condition. Ceilings in the storage area are exposed structure throughout in fair condition. The toilet has a painted concrete ceiling in poor condition.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Yard Storage Building #1 was not considered a priority for upgrade.



Mechanical S	ummary
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Building: Yard St	torage Building N	o. 1 Key Plan	:
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling Heating Plumbing Fire Protection	 NA NA		1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

The Yard Storage Building is a prefabricated metal sided uninsulated structure on a slab, used to house large and slow inventory items.

There is no heating or cooling provided for this building.

The plumbing system for this building consists of a single bathroom facility. The plumbing system has been disconnected for about four years.

The fire protection system consists of four fire extinguishers within the building. These fire extinguishers are not inspected on a regular/routine basis. The last inspection of the fire extinguishers was in 1992.





Electrical Summary

Building: <u>Yard St</u>	orage Building No. 1	Ney Flam.	
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power	225A	4	1 - New
Lighting - Interior	NA	3	2 - Good/Minor
Lighting - Exterior	NA	3	3 - Fair/Moderate
Lighting - Emergency	NA NA	None	4 - Poor/Major
			5 - Replace
			6 - Other

Narrative:

The lighting level in the storage bay is good, but the toilet is in need of replacement. Toilet fixtures are damaged and inoperable.

There is no emergency egress lights or exits signs. This needs to be corrected.

Power distribution is old, rusted, and outdated. New parts for this equipment are probably not available. The reliability of the circuit breakers is questionable.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.



Architectural Summary

Building: G	uardhouse	Key Plan:	8
Primary Use: S	hared Support	_ Area:	420
Secondary Use: _		Area:	
Secondary Use: _		Area:	
System Summa	Condition ary Code	Conditio	n Code
Interior Exterior Roof		2 - Good/ 3 - Fair/M 4 - Poor/M 5 - Replac	oderate Moderate

Narrative:

The Guardhouse constructed in the early 1980's forms the security portal for all visitor and employee traffic. The building does not match the character of the original plant buildings.

Standard Building Code classification is Group B - Business, Type IV, unprotected, unsprinklered. Egress is adequate for the occupancy although the riser to tread ratio for all entry stairs into the building is approximately 4" rise to 16" run, which is an unsafe condition.

The exterior is brick and glass with a low, overhanging flat roof inconsistent with the existing architectural style of the plant. The exterior is generally in good condition. There is an ambulance port on the east side of the building.

Floors are resilient tile throughout in fair condition. Some tile is peeling up in the hallway, presumably from moisture. Walls are painted CMU in good condition. Ceilings are acoustical panels in good condition.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Guardhouse was listed as having a high priority for compliance upgrades. The building presently has stairs rising 2'-4" from grade to floor level. The report suggests a ramp be installed or a buzzer/intercom to inform the public safety officer be provided outside the building where there is a accessible path around the building.



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Building: <u>Guardhouse</u>		Key Plan: 8	
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling Heating Plumbing Fire Protection	5 Tons 60,000 BTU/HR NA NA	2 2 3 3	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

The guardhouse facility is an uninsulated brick and block wall building which was constructed about (6) six years ago. We observed water damage to the ceiling due to heavy rains, which was confirmed by those interviewed. The air conditioning and heating is provided by a roof top mounted pump which was inaccessible. It is assumed to be in good condition, but appears to be under sized. There are large windows and (2) two interior doors in the guardhouse area. This results in substantial heat gain/loss for the area.

Recommendations:

- Eliminate water leaks in roof.
- Maximize cooling and heating capacity of existing unit, assuming it is properly sized, through regular maintenance and elimination of air infiltration.



Electrical Summary

Building:	Guardhouse	Key Plan:	8
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SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power	100A	3	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other
Lighting - Interior	NA	3	
Lighting - Exterior	NA	2	
Lighting - Emergency	NA	None	

Narrative:

Interior lighting is adequate mainly because of the outside lighting through the glass walls. The fixtures are showing signs of surface deterioration and are really in need of change.

There is no emergency egress lights or exits signs. This needs to be corrected.

Power is adequate for current building needs but would probably require changing if space or power additions were made.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.



Architectural Summary

Building: C	rusher Bldg.	Key Plan:	9
Primary Use: Primary Use:	ocess	Area:	7662
Secondary Use: C	onveyor Control	Area:	444
Secondary Use: _		Area:	
System Summa	Condition ary Code	Condition	n Code
Interior Exterior Roof	<u>3/4</u> <u>3/4</u>	2 - Good/M 3 - Fair/Mo 4 - Poor/M 5 - Replace	oderate

Narrative:

The Crusher Building is part of the original plant construction from the mid 1950's. The majority of this building is dedicated to coal processing; however, the main coal handling conveyor control room is located on the upper floor of this building.

Standard Building Code building type is Type IV, unprotected, unsprinklered. Egress from the control room is unsatisfactory, consisting of an unenclosed stair through the hazardous area of the crusher room and two secondary ladders from the roof on the exterior of the building. The north ladder has a cage and discharges at grade level. The south ladder does not have a cage and discharges on the roof of a conveyor, which would have to be traversed to grade.

The exterior is in poor to fair condition. From ground level to approximately 8 feet is brick which has become very streaked and dirty from coal dust. Above 8 feet the exterior walls are metal panels in fair condition. The control room at the top of the building is mostly storefront consisting of single pane glass and colored spandrel panels in fair condition.

Floors for the control room are resilient tile in poor condition. Most of the interior walls for the control room are metal panels in fair condition. Ceilings are also exposed structure and metal panels in fair condition. The toilet is in fair to poor condition and very dirty because of the coal dust from the crushers and conveyors.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Crusher Building was not considered a priority for upgrade.



Mechanical Summary

uilding: <u>Crusher Building</u>		Key Plan: 9		
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND	
Cooling Heating Plumbing Fire Protection	25,000 BTU/HR *76,000BTU/HR NA NA	2 3 4 3	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other	

Narrative:

* There is no information on the size of the electrical heater installed within the control room.

This area in the building is used as a conveyor control room. The cooling is supplied by a thru-wall air conditioning unit. Heating is supplied by electric space heaters. The cooling and heating capacities of these units seem sufficient for this area.

The fire protection system consists of a single fire extinguisher.

The plumbing system is in poor condition, but appears to be sufficient for the control room.

Recommendations:

- Install a roof top mounted heat pump for efficient heat and cooling.
- Upgrade the fire protection system to include smoke detectors, fire alarm pull boxes, and additional fire extinguishers.
- The plumbing fixtures should be renovated or replaced.

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Electrical Summary

Building: <u>Crusher Building</u>		Key Plan: 9		
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND	
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	200A NA NA NA	2 3 None See Narrative	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other	

Narrative:

Interior lighting is poor in quality and needs to be upgraded. Fluorescent lamps are single prong slim line type, which are considerably more expensive than rapid start. The conversion could be cost effective just from the lamp upgrade.

The emergency lighting system is a circuit from the 250V DC control backup batteries. The condition of the fixtures makes it questionable whether the lighting is operational. New emergency lighting and exit signs should be installed.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.

1 - New



Architectural Summary

System Summ	Condition ary Code	Conditio	n Code
Secondary Use: _		Area:	
Secondary Use: \$	Shared Support	Area:	1,291
Primary Use:	Coal Handling (Process)	Area:	3.241
Building: S	Sample and Hopper Bldg. #1	Key Plan:	

Interior 3 2 - Good/Minor Exterior 3 - Fair/Moderate Roof 4 - Poor/Moderate 5 - Replace

Narrative:

The Sample and Hopper Building #1 is part of the original plant construction from the mid 1950's. The majority of this building is dedicated to coal car dumping; however, the attached coal sample prep wing has been converted to a yard crew lunch/break room. This area is generally very dirty with coal dust.

S.B.C. building type is Type IV, unprotected, unsprinklered. Egress from the grade level portions of the building are generally acceptable. Egress from the lower levels around the hopper bunkers is unsatisfactory, consisting of one unenclosed stair through a hazardous area.

The exterior is in fair condition overall. From ground level to approximately 8 feet is brick which has become very streaked and dirty from coal dust. Above 8 feet the exterior walls are metal panels in fair condition.

The floor in the hopper is concrete and steel grating. The break room floor is concrete in fair condition. The toilet/locker area has ceramic tile in fair condition. The interior walls for the hopper bay, toller/lockers and break room are clay facing tile in fair condition. The showers have ceramic tile walls in fair condition. Ceilings are exposed structure for the hopper bay and toilet room in fair condition. The break room has an acoustical ceiling in good condition and the locker/showers have a plaster ceiling in good condition.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Sample and Hopper Building #1 was not considered a priority for upgrade.



Building: Sample	and Hopper Build	ing No.1 Ke	y Plan:10
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling Heating Plumbing Fire Protection	16.5 tons 90 KW NA NA	4 4 3 3	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

The sample area of the Sample and Hopper Building No. 1 has been converted to a lunchroom. The air handling unit to cool and heat the sample wing of the building is inoperative. It has been inoperative for approximately 3 years as raw water supply has been unavailable. Since the air handling system is not available, there is only 1.5 tons of cooling capacity and 45 KW of heating capacity remaining for this building. The roof ventilation system is in fair condition. The building has a heavy infiltration of coal dust which should be eliminated. Supply and return diffusers and grilles are dirty, and the filters need changing.

The plumbing system is the original installation with the exception of the women's toilet facilities, which have been reconditioned. The system is adequate, but is in fair to poor condition.

The fire protection system consists of (5) five fire extinguishers.

Recommendations:

- Repair or replace HVAC system.
- Eliminate dust infiltration in personnel occupied areas.
- Provide appropriate fire protection system equipment.

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Master Plan Kingston Fossil Plant

Electrical Summary

Building: Sample	Building: Sample and Hopper Building No. 1		Key Plan: 10
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	625A at 480V NA NA NA	4 4 2 None	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

Interior lighting is poor in quality and needs to be upgraded. Fluorescent lamps are single prong slim line type, which are considerably more expensive than rapid start. The conversion could be cost effective just from the lamp upgrade.

Panelboards are in poor condition because of the accumulation of coal dust and their reliability is questionable.

There is no emergency egress lights or exits signs. This needs to be corrected.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.

B.37

5 - Replace



Architectural Summary

Building: Ho	pper Bldg. #2	Key Plan:	11
Primary Use: <u>Co</u>	al Handling (Process)	Area:	3,709
Secondary Use:		Area:	
Secondary Use:		Area:	
System Summa	Condition ry Code	Condition	n Code
Interior Exterior Roof	3 3/4	2 - Good/M 3 - Fair/Mo 4 - Poor/M	derate

Narrative:

Hopper Building #2 is part of the original plant construction from the mid 1950's. The majority of this building is dedicated to coal car dumping. This area is generally very dirty with coal dust.

S.B.C. building type is Type IV, unprotected, unsprinklered. Egress from the grade level portions of the building are generally acceptable. Egress from the lower levels around the hopper bunkers is unsatisfactory, consisting of one unenclosed stair through a hazardous area.

The exterior is in poor to fair condition overall. From ground level to approximately 8 feet is brick which has become very streaked and dirty from coal dust. Above 8 feet the exterior walls are metal panels in poor condition.

The floor is concrete and steel grating. The interior walls are clay facing tile. Ceilings are exposed structure. All interior finishes are in fair condition.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. Hopper Building #2 was not considered a priority for upgrade.



	Maste	r Plan
Kingston	Fossil	Plant

Building: <u>Hopper Building No.2</u>		Key Plan:		
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND	
Cooling Heating Plumbing Fire Protection	23 KW NA NA	5 4 4	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other	

Narrative:

The thru wall air conditioning unit is inoperative and should be replaced. The heating of the control rooms is provided by electric space heaters which are in poor condition and should be replaced.

There are no plumbing systems in this building.

The fire protection system consists of (2) two fire extinguishers.

Recommendations:

- Replace thru wall air conditioning unit.
- Replace space heaters.
- Eliminate coal dust penetration into personnel occupied areas.
- Replace control room exhaust fan.
- Provide appropriate fire protection system equipment.

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Building: <u>Hopper</u>	Building No. 2	Key Plan	11
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	225A at 480V NA NA NA	4 4 2 None	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

Interior lighting is poor in quality and needs to be upgraded. Fluorescent lamps are single prong slim line type, which are considerably more expensive than rapid start. The conversion could be cost effective just from the lamp upgrade.

Panelboards are in poor condition because of the accumulation of coal dust and their reliability is questionable.

There is no emergency egress lights or exits signs. This needs to be corrected.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.

3 - Fair/Moderate

4 - Poor/Moderate

5 - Replace



Architectural Summary

Building: <u>G</u> i	uard Shelter	Key Plan: _	12
Primary Use: St	nared Support	Area: _	45
Secondary Use:		_ Area: _	
Secondary Use:		_ Area: _	
System Summa	Condition ary Code	Condition	Code
Interior	3	2 - Good/Mi	nor

Narrative:

Exterior

Roof

The Guard Shelter is located at the south Partner's entrance gate. The building is a small prefabricated cubicle which does not match the architectural character of the original plant buildings.

S.B.C. classification is Group B - Business, Type IV, unprotected, unsprinklered. Egress is adequate for the occupancy.

The exterior is gray metal panels and glass with a low, overhanging flat roof, inconsistent with the existing architectural style. The exterior is in fair condition.

The floor is exposed concrete slab. Walls are painted metal panels. The ceiling is also metal panels. All are in fair condition.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Guard Shelter was not considered a priority for upgrade.





Key Plan: 12 **Guard Shelter** Building: CONDITION CONDITION CAPACITY SYSTEM SUMMARY LEGEND CODE 1 - New 16,000 BTU/HR Cooling 2 - Good/Minor <u>16,000 BTU/HR</u> Heating 3 - Fair/Moderate NA Plumbing 4 - Poor/Major **Fire Protection** NA 5 - Replace 6 - Other ____

Narrative:

The guard shelter is a small pre-fabricated steel and glass lookout station. The guard shelter is heated and cooled with a through wall HVAC unit. The HVAC unit is in fair condition, and seems adequate. There is a small portable electric heater which is probably used as auxiliary heat.

There are no plumbing systems in the guard shelter.

There is no fire protection system in the guard shelter.

Recommendations:

Provide halon fire extinguisher in the guard shelter.



	Maste	r Plan
Kingston	Fossil	Plant

Building:	Guard Shelter	Key Plan:	12

SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergency		2 3 3 None	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

Interior light fixture will need to be changed due to increased surface deterioration.

Power distribution is adequate for current needs.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.

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Architectural Summary

Building:	Asbestos Change Facility	Key Plan:	13
Primary Use:	Shared Support	Area:	1,889
Secondary Use: _		Area:	
Secondary Use:		Area:	
System Summ	Condition ary Code	Condition	n Code
Interior Exterior Roof		2 - Good/M 3 - Fair/Mo 4 - Poor/M 5 - Replace	oderate oderate

Narrative:

The Asbestos Workers Change Facility constructed in the late 1980's connects to the southwest corner of the Powerhouse Boiler Bay. The brick veneer matches that on the Powerhouse base and allows the building to blend quite effectively with the original architectural character of the site.

Standard Building Code classification is Type IV, unprotected, unsprinklered. Egress is adequate for the occupancy.

The exterior is brick with a flat roof in good condition.

Floors are resilient tile and ceramic tile in good condition. Walls are painted CMU in good condition. Ceilings are acoustical panels in good condition.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Asbestos Change Facility was listed as having a low priority for compliance upgrades.



Building: Asbesto	s Change Facility	Key Plan:_	13
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling Heating Plumbing Fire Protection	50,000 BTU/HR 33,000 BTU/HR NA NA	2 2 2 2	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

The cooling and heating is supplied by a roof-top heat pump unit which was inaccessible. The system was installed in 1989 and appears to be operating well, but requires minor adjustments and cleaning. Negative air pressure within the building is achieved with an exhaust fan in the return air ductwork.

The fire protection system consists only of fire extinguishers. This system appears to be sufficient for this building. Additional fire protection capabilities are available from the powerhouse adjacent.

The plumbing system appears to be sufficient for this building. The electric water heater supplies hot water to lavatories and shower facilities.

Recommendations:

- Keep filters clean and replaced on a regular basis.
- Install smoke detectors, fire alarms, and hose racks for this building.

B.45





Building: Asbesto	os Change Facility	Key Plan:	13
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	225A at 480V NA NA NA	2 2 2 2	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

Although most of the interior lighting is good, the toilets need some immediate maintenance to relamp and clean fixtures.

Power is sufficient for the needs of this facility.

Exit signs need some immediate maintenance to relamp fixtures.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.

4 - Poor/Moderate

5 - Replace



Architectural Summary

Building: D	emineralizer Bldg.	Key Plan:	14
Primary Use: M	/ater Treatment (Process)	Area:	3.000
Secondary Use: Q	control	Area:	80
Secondary Use: _		Area:	
System Summa	Condition ary Code	Conditio	n Code
Interior Exterior	2 2	2 - Good/l 3 - Fair/Mo	

Narrative:

Roof

The Demineralizer Building is located next to the water treatment building just north of the Office Wing/Service Bay. The building is a pre-engineered metal building which does not match the character of the original plant buildings.

S.B.C. classification is Type IV, unprotected, unsprinklered. Egress is adequate for the occupancy.

The exterior is cream colored metal panels and a low slope shed roof, inconsistent with the existing architectural context. The exterior is generally in good condition.

The floor is concrete slab. Walls are galvanized metal liner panels up to 8 feet with exposed metal building insulation above 8 feet. The ceiling is also exposed metal building insulation, torn and sagging in some areas. All are in fair to good condition.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Demineralizer Building was not considered a priority for upgrade.





Building: <u>Demir</u>	eralizer Building	Key Plan	:14
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling Heating Plumbing Fire Protection	8 tons 96,000 BTU/HR NA NA	2 2 2 4	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

The Demineralizer Building is a prefabricated building on a slab. The facility seems to have been added after the original plant construction.

The cooling and heating is provided by a slab mounted heat pump unit. This unit appears to be in good condition, and seem adequate for this area.

There are no lavatory or drinking water facilities in this building.

The fire protection system consists of only fire extinguishers.

Recommendations:

- Correct leaks in emergency shower and emergency eye wash piping.
- Add lavatory and drinking water facilities.
- Re-evaluate fire protection system for additional needs, such as halon system, fire alarm pull boxes, smoke detectors, etc.

B.48



	Maste	r Plan
Kingston	Fossil	Plant

Building: <u>Demine</u>	ralizer Building	Key Plan:	14
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	100A NA NA NA	2 2 None None	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

Work space lighting level is severely low for the tasks accomplished, which include log entries and reports. This area needs more light. Existing fixtures are in good condition just not enough quantity.

No emergency egress lights or exits signs. This needs to be corrected.

Power distribution is adequate for current needs.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.

5 - Replace



Architectural Summary

Building: <u>Cont</u>	rol Building	Key Plan:	15
Primary Use: <u>Elect</u>	rical Control	Area:	4.130
Secondary Use: Office)	Area:	1.262
Secondary Use:		Area:	
System Summary	Condition Code	Condition	n Code
	9	1 - New 2 - Good/I	Minor
Interior Exterior	<u>3</u>	3 - Fair/Mo	
Roof		4 - Poor/N	l oderate

Narrative:

Roof

The Electrical Control Building is part of the original plant construction from the mid 1950's.

Standard Building Code building type is Type IV, unprotected, unsprinklered. Egress from the first floor is adequate, although by NFPA standards, it is non-compliant in that the primary egress from the control room and the offices is through an unenclosed stairway open to the basement.

The exterior is mainly brick and metal panels in fair condition. The steel trim in poor condition is rusting and needs painting in areas. The aluminum storefront and single pane glass are in fair condition, needing cleaning.

The floor in the basement is exposed concrete in fair condition. The communications room floor is resilient tile; however, approximately half of tiles have become unglued and missing. This area needs to have flooring replaced throughout. On the first floor, the lobby, public toilets, employee toilets and lockers are terrazzo in fair to good condition. Control room and office floors are resilient tile in good condition.

In the basement all of the walls are concrete, brick or plaster in fair condition. At the first floor, the lobby has brick walls in good condition. The control room and offices have plaster walls in fair condition. Glazed clay facing tile is in the relay room and toilet/lockers in fair condition. The public toilets off the lobby has marble walls in good condition.

Ceilings in the basement are plaster in the communications room and exposed structure throughout the rest of the floor in fair condition. The first floor control room ceiling is a concealed spline acoustical tile in fair condition, although the height of the vaulted space is not conducive to adequate lighting levels and ventilating air flows and should possibly be lowered. The relay room is exposed structure in good condition. The remaining lobby, toilets, and offices are plaster in fair condition.



A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. Compliance upgrades include entrance lobby and public toilets and have a high priority according to the 504 Report. The extent of compliance for the remainder of the Control Building rated a secondary priority.





Mech	anical	Summary	,
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Building: Co	entrol Building	Key Plan	: 15
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling Heating Plumbing Fire Protection		4 4 4 3	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

* Complete information on the heating capacity was not available. The cooling and heating system serving the control room and the offices is the original equipment installed in the 50's. The built-up air handling unit consists of filters, cooling coil, heating coil, a supply air fan and the refrigerant compressor which pumps refrigerant into the cooling coil. These appear to be in poor condition and probably require replacement.

The relay room is ventilated was fresh air through louvers. The heating system for the relay room consists of three 9KW electric heater units. The heating capacity seems sufficient.

The cooling system serving the communication room in the basement is a packaged air conditioning system. The capacity of this unit seems sufficient for this area.

The air flow in the control building should ensure that the building is under positive pressure at all times, to prevent dust penetration.

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Master Plan Kingston Fossil Plant

Mechanical Summary Cont'd:

The air flow in the control building should ensure that the building is under positive pressure at all times, to prevent dust penetration.

The fire protection system consists of fire extinguishers and fire cabinets. There are no smoke detectors provided in this building.

The plumbing system appears to be in fairly poor condition, but seems adequate for this building. There are no provisions for the handicapped.

Recommendations:

- Replace air handling system with heat pumps.
- Reduce control room ceiling height.
- Replace plumbing fixtures.

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Building: <u>Control</u>	Building	Key Plan: 15	
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	400A at 120/24 NA NA NA	40V 3 4 4 See Narrative	 1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

Interior lighting is poor in quality and needs to be upgraded. Fluorescent lamps are single prong slim line type, which are considerably more expensive than rapid start. the conversion could be cost effective just from the lamp upgrade.

The emergency lighting system is a circuit from the 250V DC control backup batteries. The condition of the fixtures makes it questionable whether the lighting is operational. New emergency lighting and exit signs should be installed.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.

5 - Replace



Architectural Summary

Building: Coal L	aboratory	Key Plan:	16
Primary Use: Lab		Area:	1.207
Secondary Use: Office		Area:	268
Secondary Use:		Area:	
System Summary	Condition Code	Condition	n Code
Interior Exterior	2/3 2/3	2 - Good/N 3 - Fair/Mc 4 - Poor/N	oderate

Narrative:

The Coal Laboratory has been recently located in the old Truck Sampler Building which was a late addition to the original plant construction from the late 1950's. There has been considerable renovation to the previous building to achieve the present facility. The first level now houses a sample prep area, office and toilet. The second floor, previously an open bay storage area, now has the coal laboratory, chemical engineer's office, a break area and toilet.

S.B.C. classification is Type IV, unprotected, unsprinklered. Egress from the first floor is adequate, although discharge is through the interior stair from level 2. Egress from level 2 is by the original interior stair, which is enclosed (but not within a rated enclosure); and by a new exterior stair at the opposite end of the building.

The exterior has brick at the base and metal panels above in fair to good condition, similar in style to the original plant buildings. There is a lot of clutter around the building, such as cylinder tanks, an unscreened HVAC unit, bicycles, trash, etc.

Floor finishes for level 1 is painted concrete in fair condition. Level 2 has resilient tile in good condition. Walls at level 1 are clay facing tile and CMU in good and fair condition respectively. Level 2 has painted gypsum board in good condition. Both levels have acoustical ceilings in fair to good condition.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Coal Laboratory has a low priority for upgrade.





Building: <u>Coal La</u>	<u>boratory</u>	Key Plan: 16	
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling Heating Plumbing Fire Protection	94,000 BTU/HR 137,000BTU/HR NA NA	2 2 2 3	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

The coal laboratory is a renovation of the truck scales building which occurred about 2.5 years ago.

Cooling and heating of the building is accomplished by thru-wall heat pump units and a slab mounted heat pump unit. These units are in good condition, seemed to receive routine maintenance, and appear to be adequate for the building.

The plumbing system is in good condition and seems adequate for the building.

The fire protection system for this building consists of three (3) fire extinguishers.

Recommendations:

• Upgrade fire protection system to include smoke detectors and fire alarm pull boxes.

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	Maste	Plan
Kingston	Fossil	Plant

Building: <u>Coal Laboratory</u>		Key Plan: 16		
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND	
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	225A NA NA NA	4 3 5	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other	

Narrative:

Interior lighting needs to be given some maintenance attention to clean and relamp fixtures. There are some very low lighting levels in rooms which needs to be corrected by the installation of additional fixtures.

The main 480 Volt distribution panel needs to be corrected or replaced. There are a number of inoperative circuit breakers, which leads us to believe that others may tend to fail because of age or dust accumulation. The age of the panel may prohibit finding replacement breakers and force the replacement of the entire unit.

Emergency batteries and exit signs need to be fixed or replaced.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.



Architectural Summary

Building:	Truck Coal Sampler Building	Key Plan:	
Primary Use:	Coal Handling (Process)	Area:	819
Secondary Use:	Building Support	Area:	273
Secondary Use:		Area:	
	Condition		

System Summary	Code	Condition Code 1 - New
Interior Exterior Roof	_3/4 3 4	2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Moderate 5 - Replace

Narrative:

The Truck Coal Sampler Building is located at the south end of the yard with other facilities known as the Truck Coal Handling Facilities. The building is a pre-engineered metal building which does not match the character of the original plant buildings. This building was constructed in the early 1980's. The first floor has a sample prep area and toilets, the upper floors provide access to coal handling equipment. It has been abandoned for about 3 years, only recently scheduled to be used again starting in June 1993.

S.B.C. classification is Type IV, unprotected, unsprinklered. Egress is adequate for the first floor and marginal for the upper floors.

The exterior is red colored metal panels and a low slope shed roof, inconsistent with the existing architectural style. There is a section on the lower roof above the toilets which has rusted and needs to be repaired; otherwise, the exterior is generally in fair condition.

The first and second floors are concrete slab. Upper floors are steel grating. Walls at the first floor are steel stud/gypsum board at the toilets, metal panels at the sample prep, and elsewhere, exposed metal building construction. The ceiling at the first floor is acoustical ceilings in poor condition. All other areas ceilings are exposed structure. The interior finishes appearance is dusty and dilapidated from neglect. The plumbing fixtures presently have been disconnected from the water supply.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Truck Coal Sampler Building was not considered a priority for upgrade.



Building: <u>Truck C</u>	Coal Sampler Build	<u>ing</u> Ke	y Plan:17
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling		3	1 - New
Heating			2 - Good/Minor
Plumbing	NA	3	3 - Fair/Moderate
Fire Protection	NA	3	4 - Poor/Major
			5 - Replace
			6 - Other

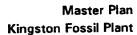
Narrative:

The truck coal sampler building is not in use at this time. As such, all mechanical systems have been shut down. It is assumed that the capacity of the mechanical systems observed are adequate for the area.

There is no evidence of a heating or air conditioning system in this building, only bathroom exhaust ventilation.

The plumbing facilities for men and women appear to be adequate.

The fire protection system for this building consists of four (4) fire extinguishers.





Building: <u>Truck C</u>	oal Sampler Buildin	<u>g</u> ke	y Fian
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergency	600A at 240V NA NA NA	2 4 2 None	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

Interior lighting needs to be replaced due to age and deterioration.

Power to the facility is adequate for its current use.

There is no emergency egress lighting or exit signs. This needs to be corrected.

Fire alarm notification is accomplished via pax telephone system, which is unsupervised and subject to malfunction. Audio and visual devices should be installed in conjunction with a supervised fire alarm system throughout the site.

4 - Poor/Moderate

5 - Replace



Architectural Summary

Building:	Truck Coal Receiving Station	Key Plan:	10
Primary Use:	Unused	Area:	86
Secondary Use:		Area:	
Secondary Use:		Area:	
System Sumn	Condition nary Code	Conditio	n Code
Interior Exterior	3 3	1 - New 2 - Good/ 3 - Fair/M	

Narrative:

Roof

The Truck Coal Receiving Station is located at the south end of the yard with the Truck Coal Handling Facility. The building is a small metal building cubicle which does not match the character of the original plant buildings. This building was constructed in the early 1980's. It has been abandoned for about 3 years.

S.B.C. classification is Group B - Business, Type IV, unprotected, unsprinklered. Egress is adequate for the occupancy.

The exterior is red metal panels and glass with a low shed roof, inconsistent with the existing architectural style. The exterior is in fair condition. The fascia needs to be repainted.

The floor is exposed concrete slab. Walls are painted metal panels. The ceiling is also metal panels. All are in fair condition.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Truck Coal Receiving Station was not considered a priority for upgrade.



Building: Truck (Coal Receiving Stat	tion Ke	y Plan:18
SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling Heating Plumbing Fire Protection	2 tons NA NA	3 3 3 3	1 - New 2 - Good/Minor 3 - Fair/Moderate 4 - Poor/Major 5 - Replace 6 - Other

Narrative:

The truck coal receiving station is not in use at this time. As such, all mechanical systems have been shut down. It is assumed that the capacity of the mechanical systems observed are adequate for the area.

The heating and air conditioning system is assumed to be provided by a thru-wall unit which appears to be in fair condition.

The plumbing system consists of a water cooler which appears to be in fair condition.

The fire protection system consists of an extinguisher and an alarm, which appear to be in fair condition.



	Maste	r Plan
Kingston	Fossil	Plant

Building: Truck Coal Receiving Station Key Plan: 18

SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power Lighting - Interior Lighting - Exterior Lighting - Emergency		3 6 None None	 New Good/Minor Fair/Moderate Poor/Major Replace Other Inoperative

Narrative:

Building not operational at tiem of observation.

Unable to locate source of circuit feeding power to building.



Architectural Summary

Building:]	ruck Coal Scale Station	_ Key Plan:	19
Primary Use: (Control	Area:	136
Secondary Use: _		Area:	
Secondary Use:		Area:	
System Summ	Condition aary Code	Condition	n Code
Interior Exterior Roof	<u>3</u> <u>2</u>	2 - Good/M 3 - Fair/Mo 4 - Poor/M	oderate loderate

Narrative:

The Truck Coal Scale Station is located at the south end of the yard with the Truck Coal Handling Facility. The building is a small metal building cubicle which does not match the character of the original plant buildings. This building was constructed in the early 1980's. It has been abandoned for about 3 years.

S.B.C. classification is Group B - Business, Type IV, unprotected, unsprinklered. Egress is adequate for the occupancy.

The exterior is white metal panels and glass with a low shed roof, inconsistent with the existing architectural style. The exterior is in good condition, its appearance is poor. The truck scales have overgrown and rusted from neglect.

The floor is resilient tile. Walls are painted metal panels. The ceiling is also metal panels. All are in fair condition.

A 504 Report prepared in 1991 identified particular areas of non-compliance and targeted priorities for upgrade through fiscal year 1995. The Truck Coal Scale Station was not considered a priority for upgrade.



	Master	Plan
Kingston	Fossil	Plant

Building:	Truck Coal Scales Station	Key Plan	:19
SYSTEM SUN	MARY CAPACITY	CONDITION CODE	CONDITION LEGEND
Cooling	1.4 tons	3	1 - New
Heating	<u>*</u> 1	3	2 - Good/Minor
Plumbing	<u> </u>	3	3 - Fair/Moderate
Fire Protection	n <u>NA</u>	3	4 - Poor/Major
			5 - Replace
			6 - Other

Narrative:

The truck coal receiving station is not in use at this time. As such, all mechanical systems have been shut down. It is assumed that the capacity of the mechanical systems observed are adequate for the area.

The heating and air conditioning system is assumed to be provided by a thru-wall unit which appears to be in fair condition.

The plumbing system consists of a water cooler which appears to be in fair condition.

There was no evidence of a fire protection system for this station.

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Building: Truck Coal Scales Station Key Plan: 19

SYSTEM SUMMARY	CAPACITY	CONDITION CODE	CONDITION LEGEND
Power	60A	3	 New Good/Minor Fair/Moderate Poor/Major Replace Other <u>Inoperative</u>
Lighting - Interior	NA	6	
Lighting - Exterior	NA	None	
Lighting - Emergency	NA	None	

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Narrative:

nodba

Building not operational at time of observation.

Unable to locate source of circuit feeding power to building.