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Jacksonville, Florida 32202 3139

April 19, 1999



Hamilton S. Oven, Jr., Administrator
Siting Coordination Office
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: SJRPP PPSA Site Certification No. PA-81-13
Postcertification Amendment to Site Certification Application
Regarding Materials Handling Operations

Dear Mr. Oven:

Enclosed for your information and review is a Postcertification Amendment to the Site Certification Application (SCA) for the St. Johns River Power Park (SJRPP), No. PA-81-13, submitted pursuant to Rule 62-17.205, Florida Administrative Code. This letter addresses the issues discussed during your March 19, 1999, meeting with JEA representatives. Thank you for your continued cooperation and attention to this matter.

As you are aware, JEA (formerly the Jacksonville Electric Authority) is in the process of permitting its proposed Northside Generating Station Units 1 and 2 Repowering Project (Northside Repowering).¹ Through our efforts for the Northside Repowering, we have discovered that the SCA for SJRPP has not been fully updated over time to reflect its existing materials handling operations. In addition, the materials handling facilities at SJRPP may be expanded to support the Northside Generating Station (NGS) after the proposed repowering. Therefore, this Postcertification Amendment comprehensively describes the *existing* materials handling operations at SJRPP, including maximum potential throughput rates, and the *proposed* changes to SJRPP's materials handling operations which may be necessary to support the Northside Repowering.²

¹ On February 15, 1999, JEA submitted to the Department a Prevention of Significant Deterioration (PSD) air permit application for the Northside Repowering.

² Because the SCA is a prospective document initially approved prior to any construction, the revisions do not differentiate between the existing and proposed facilities - all are described as proposed to maintain temporal consistency.

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Update of SJRPP's *Existing* Materials Handling Operations

At the time of the original Site Certification in 1982, the conceptual plans for the materials handling facilities included a 1,200 foot long wharf at Blount Island capable of accommodating two ocean vessels simultaneously and the use of shuttle trains to transport materials from the unloading facilities at Blount Island to the plant. The facilities actually constructed were somewhat different and less extensive: the wharf is considerably shorter, accommodating only a single ocean vessel and an enclosed conveyor transports materials to the plant, eliminating the need for additional rail facilities on Blount Island.³ While the necessary modifications to the Conditions of Certification were made at that time to authorize these facilities, the SCA was not comprehensively revised. This Postcertification Amendment revises the text, figures, and tables in the SCA as necessary to reflect the existing materials handling facilities associated with SJRPP.

The existing, corrected emissions points and maximum throughput rates were identified in detail in our application for an updated PSD permit for SJRPP, which is being submitted concurrently to the Department's Bureau of Air Regulation. While comprehensive consideration of emissions points for the materials handling operations at SJRPP did increase the total number of emissions points, the maximum emissions rates for many points have decreased. The net effect is that the maximum potential emissions of particulate matter from materials handling operations have decreased, both on a short-term (lb/hr) and annual basis.

Effects on SJRPP of the *Proposed* Northside Repowering

With the Northside Repowering, JEA is seeking authorization for two alternatives for the delivery of materials (coal, petroleum coke, and/or limestone) to NGS. The "Base Case" relies primarily on a new ship unloading facility near the existing NGS fuel oil dock, with supporting capacity provided by the existing Rotary Railcar Unloader at SJRPP. The Base Case simply requires the construction of an enclosed conveyor system to transport materials from the existing materials handling area at SJRPP to the adjacent NGS. See the new SCA Figure 3.1-1a.

"Alternate 1" entails greater use of facilities at SJRPP in support of the Northside Repowering. Under this scenario, a new ship unloading facility would not be constructed at NGS, so all of the solid fuel and possibly all of the limestone required by NGS would pass through SJRPP. Alternate 1 includes the construction of an

³ Through most of the original Certification process, shuttle trains were proposed to transport materials from Blount Island to SJRPP. However, the final Certification does include the option of an enclosed conveyor in lieu of shuttle trains.

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additional ship unloader at the existing St. John's River Coal Terminal wharf and new associated facilities on Blount Island: an enclosed conveyor leading off the western edge of the wharf, a new materials surge building, and an enclosed conveyor connecting this new building to the existing enclosed conveyor to SJRPP. Features comparable to each of these new facilities were contemplated and authorized during the initial Site Certification. Alternate 1 also includes a slight expansion of the SJRPP materials handling yard and the construction within it of additional materials handling facilities, such as a stacker, reclaimers, and emergency reclaim hopper. This expansion would occur completely within the existing SJRPP rail loop. As with the Base Case, Alternate 1 also requires a new enclosed conveyor system to transport materials from SJRPP to NGS. See the revised SCA Figure 3.10-2 and the new SCA Figure 3.1-1b.

The incremental impacts resulting from the increased throughput of materials at SJRPP to support the Northside Repowering are fully evaluated in the PSD application submitted to the Department on February 15, 1999, for the Northside Repowering. These additional impacts have been found to comply with the applicable state ambient air quality standards and PSD increments for particulate matter.

At this point, JEA considers the Base Case more likely to be implemented, but seeks approval of both scenarios.

Wetlands and Submerged Lands

Impact to Jurisdictional Wetlands

You have asked whether the proposed enclosed conveyor from the SJRPP materials handling yard to NGS could impact jurisdictional wetlands. On March 23, 1999, Department personnel evaluated the wooded, boomerang-shaped area at the southwest corner of the SJRPP site and determined that it does not contain jurisdictional wetlands. This is the only natural area that would be crossed by the proposed enclosed conveyor. However, it was determined that the manmade drainage ditch running along the SJRPP/NGS property boundary may contain jurisdictional wetlands. The enclosed conveyor will span this narrow ditch, i.e., no construction will occur within the ditch or fringing wetlands, so the proposed Northside Repowering will not impact jurisdictional wetlands in this area. There are no other wetlands that would be potentially affected.

Sovereign Submerged Lands

As mentioned above, in the event that JEA pursues Alternate 1, there would be construction at the existing wharf at Blount Island. This would entail extending the western edge of the wharf by approximately 10 feet in order to accommodate the

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new enclosed conveyor, and the construction of the enclosed conveyor which would span from the western edge of the wharf to the uplands behind it. The new enclosed conveyor would run parallel to the existing trestle bridge, and it would be constructed in similar fashion to the existing facility. See revised SCA Figure 3.10-2.

JEA would not require additional authorization from the Board of Trustees of the Internal Improvement Trust Fund (Trustees) to conduct these activities. JEA holds title to the submerged lands landward of the bulkhead line. Title to these submerged lands was originally deeded to the Jacksonville Port Authority by the Trustees in 1967,⁴ and subsequently transferred to JEA. The wharf was constructed completely within the bulkhead line, as shown in the lease between the Trustees and JEA for use of the berthing area adjacent to the wharf. Therefore, the construction activities contemplated under Alternate 1 would occur over submerged lands owned by JEA and would not require authorization by the Trustees.

Modification to the Conditions of Certification is Not Required to Authorize the Existing and Proposed Materials Handling Facilities

The existing materials handling facilities do not exceed or violate any Conditions of Certification for SJRPP. The construction and operation of either the Base Case or Alternate 1 will not exceed or violate any Conditions of Certification for SJRPP. Therefore, no modifications to the Conditions of Certification should be required to authorize the existing and proposed materials handling facilities. Pursuant to Rule 62-17.205(1)(c), F.A.C., the Department has 30 days from the receipt of this Postcertification Amendment to determine whether a modification to the conditions will be required.

Modification to the Conditions of Certification Based on the Revised PSD Permit

Even though JEA believes that a modification to SJRPP's Conditions of Certification is not required to authorize the existing and proposed materials handling facilities, the anticipated issuance of a PSD permit revision for SJRPP may require the Department to modify the Conditions. Rule 62-17.211(4), F.A.C., requires the Department to modify the Conditions to conform to any PSD permit amendment, modification, or renewal issued subsequent to Certification. Therefore, for your consideration and convenience, also enclosed are draft proposed modifications to the Conditions to address the anticipated PSD permit revision for

⁴ By deed number 24653 (2003-16) dated August 11, 1967.

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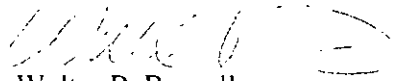
SJRPP. The draft proposed modifications merely delete all Conditions relating to emissions from materials handling operations, as they will be effectively superseded by the revised PSD permit, which can be made applicable by reference.

Conclusion

The enclosed Postcertification Amendments revise the SCA for SJRPP to comprehensively reflect the existing materials handling operations at their maximum capacities and to provide two scenarios for new materials handling facilities at SJRPP to support the Northside Repowering. Modification of the Conditions of Certification for SJRPP is not required to authorize either the existing facilities or the proposed new facilities. However, once the anticipated revised PSD permit for SJRPP is issued, the Department may be required to modify the Conditions to conform with the PSD permit, so we have also provided a draft order of modification to assist you in meeting this requirement. We would appreciate your confirmation of these conclusions at your earliest opportunity.

If you have any questions or require additional information, please don't hesitate to call Bert Gianazza with JEA at 904-665-6247. We sincerely appreciate your willingness to work with us to complete these SCA revisions in a timely manner.

Sincerely,



Walter P. Bussells
Managing Director & Chief Executive Officer

Enclosures

cc: Scott Goorland, Esquire, DEP, OGC
A. A. Linero, DEP, BAR
Syed Arif, DEP, BAR
Cleve Holladay, DEP, BAR
Kathy Carter, DEP Clerk
Rita Felton-Smith, DEP NE District
Robert S. Pace, RESD
Gregg Worley, EPA Region IV
Ellen Porter, USFWS

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Parties to the SJRPP PPSA Site Certification, via certified mail:

Kathryn L. Mennella, Esquire, St. Johns River Water Management District

James Robinson, Esquire, Department of Community Affairs

Bob Elias, Esquire, Florida Public Service Commission

Gregory K. Radlinski, Esquire, Assistant General Council, City of
Jacksonville

W. O. Birchfield, Esquire, Martin, Ade, Birchfield and Mickles

Blount Island

The proposed site layout for the ~~coal~~ materials handling facility on Blount Island is shown in Figure 2.1-7. Major facilities at the site are the ocean vessel ~~coal~~ unloading wharf, ~~the stacker-reclaimer and coal storage pile, the railcar loading area, emergency coal stackout and the runoff holding basin~~ two unloaders, materials surge building, main and connecting conveyors, and a stormwater pond with a capacity of 2.75 million gallons. Figure 2.1-8 shows the surveyed MHW, referenced to the Florida State Plane Grid. The ~~coal~~ unloaders, two connecting conveyors, trestle bridge, and wharf will be the only structures on or outside MHW.

The site will be developed as follows:

- ~~2 13~~ acres for ~~coal storage~~ materials surge building
- 4 acres for ~~holding basin~~ stormwater pond
- ~~2 3~~ acres for the ocean vessel ~~coal~~ unloading wharf
- 1 acre for ~~the railcar loading area~~ buildings
- 1 acre for conveyors
- 2 acres undisturbed salt marsh
- ~~2 1~~ acres for ~~emergency stackout~~ roads and parking lot
- ~~41 31~~ acres not presently designated for use or protection
- 55 acres total

2.1.3 Existing and Proposed Uses

The proposed site, the majority of which is vacant land, consists of fairly young trees and palmetto. Trees, a mixture of hardwoods and pine, increase with size and density near the salt marsh, which occupies the area along the northern, eastern and southern boundaries of the site. The site has recently had large portions of the northern section harvested of pine. The site is currently used for indiscriminate dumping as well as target shooting. Trails on the site are used for off road driving by people with four wheel drive vehicles or motorcycles. A sand drag racing track within the site boundaries was previously used for organized drag racing.

A portion of the site has been proposed as a municipal landfill. No other land uses are currently proposed.

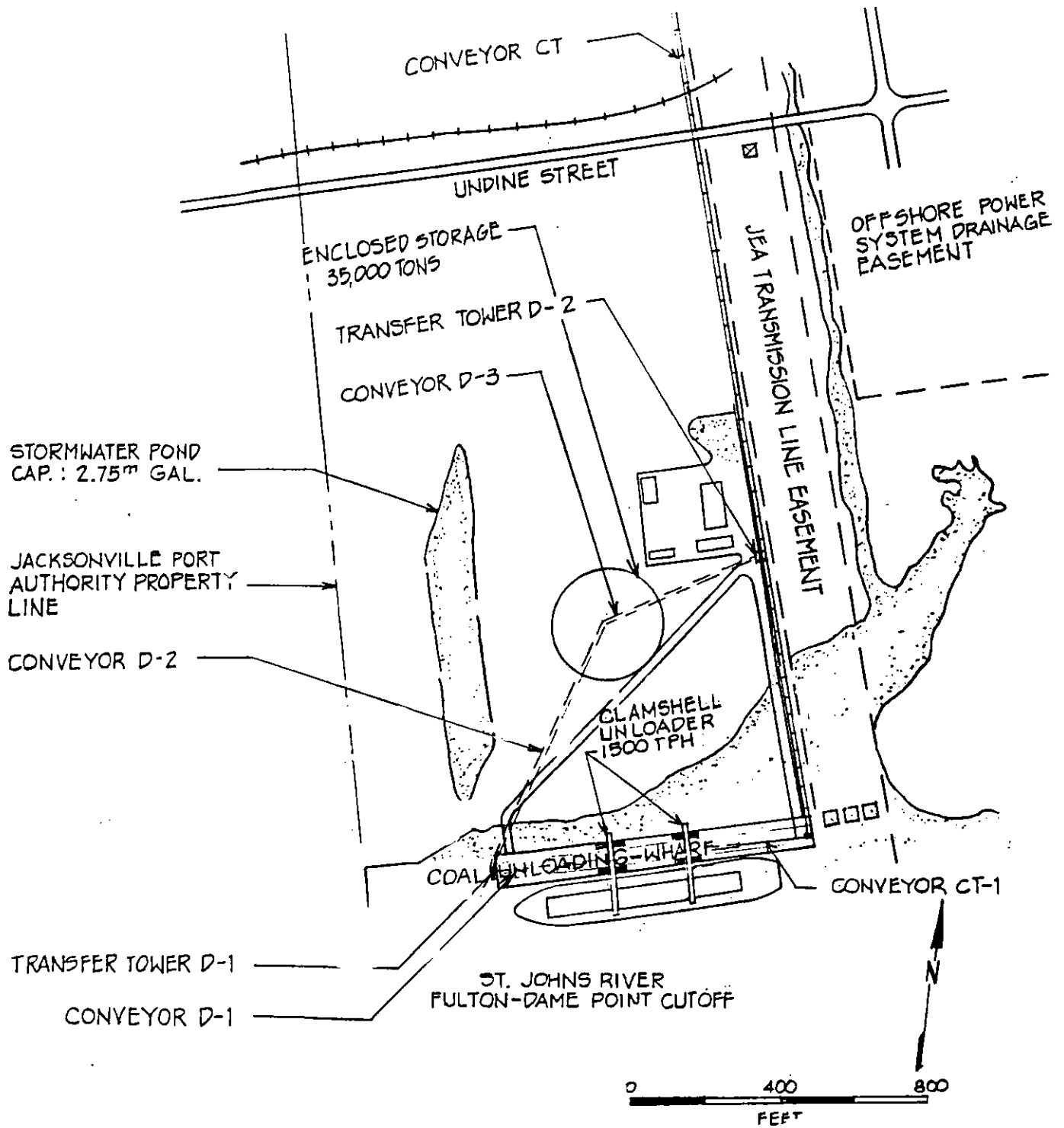


FIGURE 2.1-7 (BLOUNT ISLAND MATERIALS HANDLING FACILITIES)

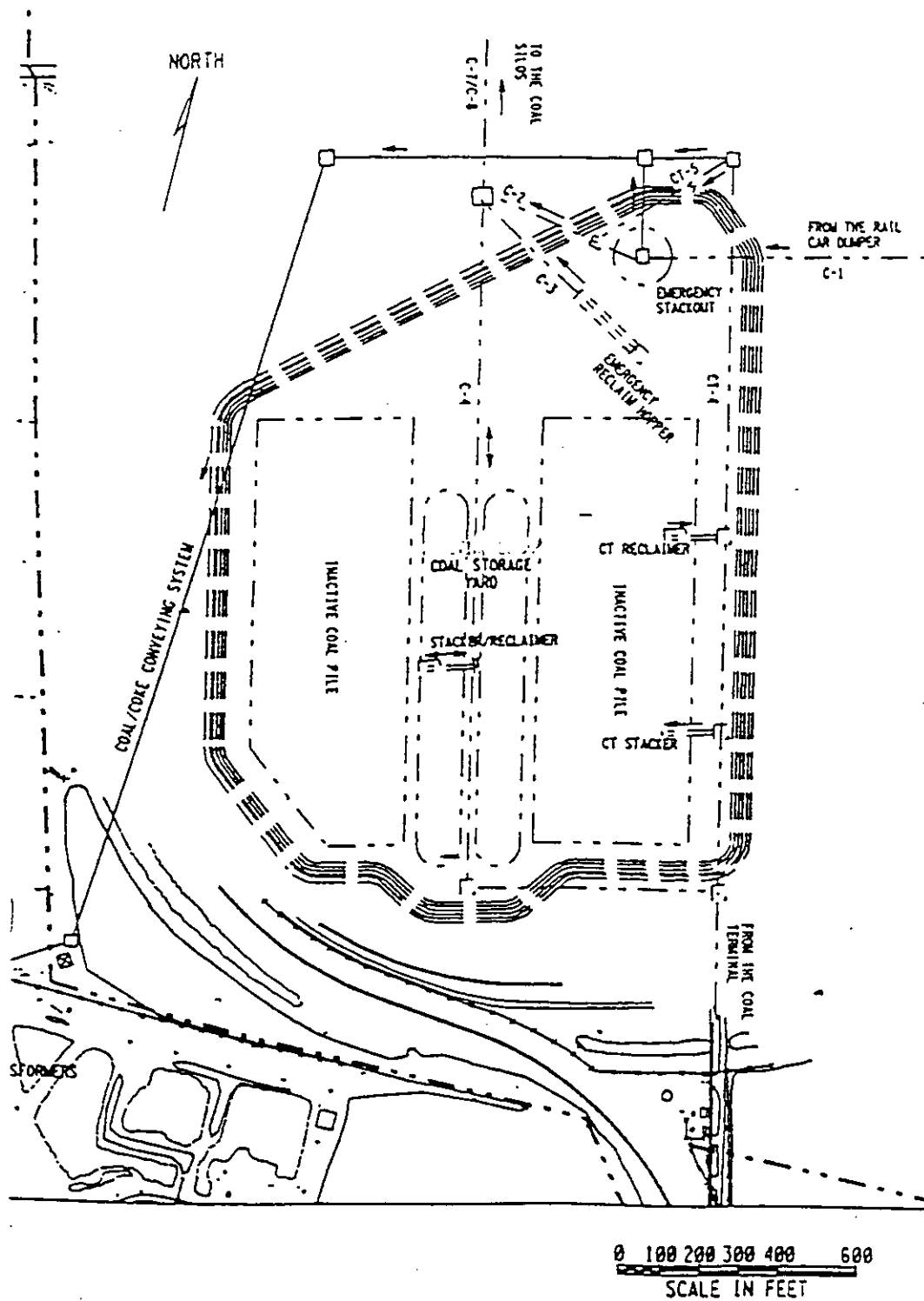


Figure 3.1-1a Material Handling Layout

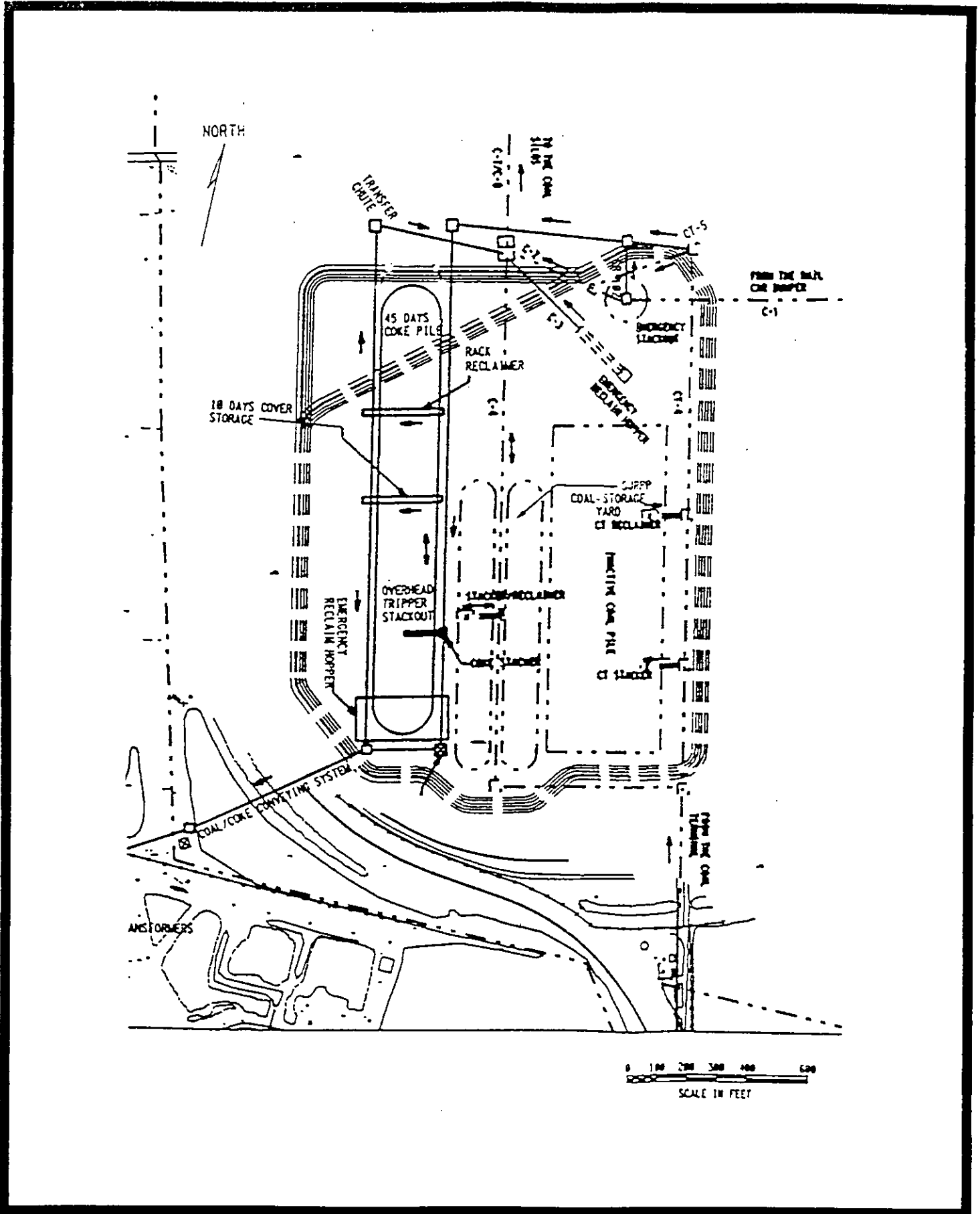


Figure 3.1-1b Material Handling Layout

3.2 FUEL

3.2.1 Fuel Type

The units are planned for petroleum coke and coal-fired operation; however, provisions are being made in the design to allow for possible conversion to oil, gas or refuse firing (Ebasco, 1980a and 1980b). Based on a study of availability of coal, over the anticipated life of the project, east of the Mississippi River (Ebasco, 1980c), there are practical sources of coal adequate to meet the plant's needs (approximately ~~3,500,000~~ 5.2 million tons per year assuming worst-case coal characteristics). The above referenced study has identified coal supplies in Tennessee, Kentucky, and Ohio as the most likely sources. In addition, partial supplies could be obtained from several foreign sources. There are adequate American and foreign supplies of petroleum coke, as well.

The plant is designed to retain the flexibility to change its coal supply (to insure against disruptions in supply, local market upsets and to maintain competitive prices) with the minimum reduction in efficiency and without violating air quality standards. Analyses of potential coal supplies were therefore necessary so that the plant could be designed to accommodate coals with a variety of characteristics. Coals from the above sources were analyzed to determine the ranges of constituents. The coal analyses' specified ranges are listed in Table 2.3-1. The petroleum coke analyses' specified ranges are found in SJRPP's application to authorize the co-firing of petroleum coke (DEP File No. PSD-FL-010(B)).

The air quality control system is designed on a "worst case" basis assuming maximum sulfur (4 percent) and ash (18 percent) in the coal and a minimum heating value (10,500 Btu/lb). This approach assumes the sulfur and ash contents of the coal are 3.8 lb/MMBtu (million Btu) and 17.1 lb/MMBtu, respectively. The ash remaining after the coal is burned is assumed to be 80 percent fly ash and 20 percent bottom ash. The above values were used to develop collection efficiencies, investment estimates and long and short-term ground level ambient air quality concentrations. This approach requires a more sophisticated, complex, efficient and costly air quality control system than would be required on the basis of average coal characteristics.

The solid waste disposal requirements (discussed in Section 3.5.2) have been based on the anticipated average coal characteristics over the 40 year life of the plant. These are 2.3 lb/MMBtu (2.7 percent) and 7.9 lb/MMBtu (9.2 percent) for sulfur and ash contents respectively. Average coal characteristics were used to determine solid waste disposal requirements because average conditions, in the main, will prevail over the plant life, whereas worst case conditions are only a short term phenomenon.

It is anticipated that the steam generator will burn No. 2 fuel oil for light-off and flame stabilization ~~during start-up and low load operation~~. This light oil will be stored on site and pumped to the steam generator as required. Approximately ~~1,000,000~~ 3 million gal/yr will be utilized on an intermittent basis, which represents less than \approx 6 percent (by heat input) of the steam generator annual fuel consumption. The fuel oil is expected to have a maximum sulfur content of 0.76 percent by weight, a maximum ash content of 0.01 percent by weight, and a heating value of 19,000 Btu/lb.

3.2.2 Fuel Handling and Storage

The ~~coal~~ materials handling system will provide for delivery of coal, petroleum coke, and limestone (or equivalent) by ocean vessel to a marine terminal on Blount Island with ~~shuttle train~~ delivery to the plant by enclosed conveyor, as well as rail delivery directly to the plant by unit train or in trainload lots. A rotary car dumper will be used to unload ~~coal~~ fuel from the trains, and a bottom dumper will be used to unload limestone. The system will also include the yard area ~~coal~~ materials storage, transfer system, ~~coal~~ materials silos, and the tripper floor distribution system.

Off-Site Facilities

The ocean vessel ~~coal~~ unloading facility will be located on Blount Island and will be capable of handling up to ~~3,500,000~~ 9.6 million tons of ~~coal~~ solid materials, including coal, petroleum coke, and limestone per year ~~(the entire annual requirement of the plant)~~. A ~~30-acre coal pile~~ materials surge building will be located on Blount Island ~~will be required~~. ~~Coal~~ Materials will be transferred from this facility to the plant site by a ~~shuttle train~~ an enclosed conveyor. Figure 3.10-2 depicts the proposed layout for this facility. Section 3.10 discusses the ocean vessel ~~coal~~ unloading facilities in greater detail.

On-Site Facilities

A train track will be looped around the plant and ~~coal storage materials~~ handling area. The train unloading facility will be capable of handling approximately ~~3,500,000~~ 2.6 million tons of ~~coal materials~~ per year. ~~The coal~~ Fuel will be unloaded at the ~~coal rotary car dump~~ and limestone will be unloaded at the bottom dump, as shown in Figure 3.1-1. Limestone may also be delivered by truck.

The function of the ~~coal~~ handling equipment located in the ~~yard plant's~~ materials handling area is to transport ~~the coal materials~~ from the unloading area to either the plant island coal materials silos, the or to the active materials storage piles, the scrubber, or to both offsite. As indicated on the plant layout, there will be an ~~active coal pile of about 8 acres and two inactive coal piles of about 15 acres each~~ materials handling area of approximately 49 acres for coal, petroleum coke, and limestone. At the present time it is planned to ~~line the coal pile storage area~~ materials handling piles. If the ~~coal~~ leachate characteristics expected for the purchased ~~coal fuels~~ are better than those assumed in the present analysis (Appendix D, Table D-21), the validity of the liner concept will be re-evaluated.

The ~~coal fuel~~ for each unit will be delivered to the tripper floor transfer point which is located in the head structure of the boiler auxiliary bay. Chutes transfer the ~~coal fuel~~ from the materials handling yard conveyors to the two trippers located on the tripper floor. Each tripper will be capable of distributing the ~~coal fuel~~ to the seven coal fuel storage silos of each unit. The ~~coal fuel~~ is then conveyed from the coal fuel storage silos to the pulverizer, and the pulverized coal fuel pneumatically delivered to the furnaces.

The No. 2 fuel oil will be delivered to the plant by barge, rail, or truck and will be stored on site in one 600,000 gallon fixed roof fuel oil storage tank. This tank will be designed to utilize a ~~vapor recovery system~~ submerged filling procedure during refilling operations to minimize hydrocarbon emissions.

Table 3.8-3
FUGITIVE EMISSIONS AND CONTROL SUMMARY

<u>Operation</u>	<u>AQCS</u>	<u>Control Efficiency</u>	<u>PM (lb/hr)</u>	<u>PM10 (lb/hr)</u>	<u>Opacity (%)</u>
Shiphold - New	1, 4, & 6	70.00%	0.544	0.257	10%
Unloader Hopper and Spillage Collector Transfers - New Ship Unloader	1, 3, 4, & 6	85.00%	0.275	0.130	10%
Hopper Belt, Spillage Conveyors, & DC-1 Transfer Points - New Ship Unloader	1, 4, & 6	98.00%	0.133	0.063	10%
Shiphold - Existing	1, 4, & 6	70.00%	0.544	0.257	10%
Unloader Hopper and Spillage Collector Transfers - Existing System	1, 3, 4, & 6	85.00%	0.275	0.130	10%
Hopper Belt, Spillage Conveyors, & CT-1 Transfer Points - Existing Ship Unloader	1, 3, 4, & 6	85.00%	0.996	0.471	10%
Fuel Transfer Building/Emergency Stackout	1, 3 & 4	85.00%	0.654	0.309	5%
Enclosed Storage Pile - 3 Transfer Points	1, 3, 4, & 6	98.00%	0.133	0.063	5%
Enclosed Pile - Vehicle Activities	1, 3, 4, & 6	98.00%	0.036	0.011	5%
Transfer Tower D-1	1, 2, & 4	98.00%	0.044	0.021	5%
Transfer Tower D-2	1, 2, & 4	98.00%	0.044	0.021	5%
Transfer Station No. 1	1, 2, & 4	98.00%	0.044	0.021	5%
Transfer Station No. 2	1, 2, & 4	98.00%	0.044	0.021	5%
Transfer Station No. 3	1, 2, & 4	98.00%	0.046	0.022	5%
Transfer Station No. 4	1 & 4	98.00%	0.044	0.021	5%
Transfer Station No. 5	1 & 4	98.00%	0.044	0.021	5%
Transfer Station No. 6	1 & 4	98.00%	0.044	0.021	5%
Transfer Station No. 7	1 & 4	98.00%	0.044	0.021	5%
New Transfer Tower #1-NGS	1, 2, & 4	98.00%	0.089	0.042	5%
New Transfer Tower #2-NGS	1, 2, & 4	98.00%	0.089	0.042	5%
New Transfer Tower #3-NGS	1, 2, & 4	98.00%	0.083	0.039	5%
New Transfer Tower #4-NGS	1, 2, & 4	98.00%	0.061	0.029	5%
Transfer Tower No. 1A	1, 2, & 4	98.00%	0.089	0.042	5%
Transfer Tower No. 2A	1, 2, & 4	98.00%	0.089	0.042	5%
Transfer Tower No. 3A	1, 2, & 4	98.00%	0.089	0.042	5%
New Reclaim Transfer Tower	1, 2, & 4	98.00%	0.041	0.020	5%
New Blend Hopper	1, 3, & 4	98.00%	0.123	0.058	5%
Coal Pile	1, 2 & 3	90.00%	0.264	0.264	10%
Petroleum Coke Pile	1, 2 & 3	90.00%	0.711	0.711	10%
Stacker/Reclaimer (Stacker Mode)	1 & 3	82.67%	2.286	1.081	10%
Stacker	1 & 3	82.67%	1.151	0.544	10%
Reclaimer	1 & 3	89.67%	0.915	0.433	10%
New Stacker	1, 3, & 4	85.00%	0.664	0.314	10%
New SJRPP Reclaimer	1, 3, & 4	75.00%	0.516	0.244	10%
New NGS Reclaimer	1, 3, & 4	75.00%	0.516	0.244	10%
Railcar Rotary Dumper - Building Emissions	1, 3, 4, & 6	97.00%	0.145	0.069	10%
Rotary Railcar Dumper, Fuel Transfer Points (DC-1)	1, 4, & 5	99.50%	0.174	0.082	5%
Petroleum Coke Reclaimer System	1	60.00%	0.685	0.324	10%

<u>Operation</u>	<u>AQCS</u>	<u>Control Efficiency</u>	<u>PM (lb/hr)</u>	<u>PM10 (lb/hr)</u>	<u>Opacity (%)</u>
Emergency Reclaim Hoppers – Loadout	1	75.00%	0.605	0.286	10%
Limestone Railcar Dumper	1, 2, 3, & 4	97.00%	0.010	0.005	10%
Limestone Loadout	1 & 3	97.00%	0.010	0.005	10%
Limestone Truck Loadout & Transfer	1	75.00%	0.209	0.099	10%
Limestone Storage Pile #1 – Existing	1 & 3	90.00%	0.255	0.255	10%
Limestone Storage Pile #2 - Fuel Yard	1, 2 & 3	90.00%	0.118	0.118	10%
Limestone Reclaim Hopper	1	42.50%	0.289	0.137	10%
Fly Ash loadouts 1A	1 & 3	97.00%	0.060	0.028	10%
Fly Ash loadouts 1B	1 & 3	97.00%	0.060	0.028	10%
Fly Ash loadouts 2A	1 & 3	97.00%	0.060	0.028	10%
Fly Ash loadouts 2B	1 & 3	97.00%	0.060	0.028	10%
Bottom Ash Loadouts 1A	1	0.00%	0.089	0.042	10%
Bottom Ash Loadouts 1B	1	0.00%	0.089	0.042	10%
Bottom Ash Loadouts 2A	1	0.00%	0.089	0.042	10%
Bottom Ash Loadouts 2B	1	0.00%	0.089	0.042	10%
Gypsum Dewatering Building	1	0.00%	0.042	0.020	5%
Gypsum Storage Pile (Non-Commercial)	1	85.00%	0.074	0.074	5%
Transfer Point 9GC-04 to 9GC-05	1	0.00%	0.007	0.003	5%
Gypsum Storage Enclosure	1	0.00%	0.008	0.004	5%
Gypsum Truck Loadout	1	0.00%	0.275	0.130	5%
Solid Waste Disposal Area	1 & 2	90.00%	0.307	0.307	10%
Unpaved Road, By-Product Transport	1 & 2	75.00%	0.577	0.151	10%
Fuel Handling Building (DC-3)	1, 4, & 5	99.50%	0.237	0.112	5%
Unit #1 Fuel Storage Bins (DC-4)	1, 4, & 5	99.50%	0.018	0.008	5%
Unit #2 Fuel Storage Bins (DC-5)	1, 4, & 5	99.50%	0.018	0.008	5%
Railcar Unloader, Limestone Transfer Points (LDC-1)	1, 4, & 5	99.50%	0.024	0.012	5%
Limestone Loadout Facility (LDC-2)	1, 4, & 5	99.50%	0.012	0.006	5%
Limestone Reclaim Hopper, Transfer Points (3DC-01)	1, 4, & 5	99.50%	0.001	0.0003	5%
Limestone Silo (1DC-01)	1, 4, & 5	99.50%	0.001	0.0003	5%
Limestone Silo (2DC-01)	1, 4, & 5	99.50%	0.001	0.0003	5%
Quick Lime Silo	4 & 5	99.50%	0.023	0.023	5%
Non-Saleable Ash Silo U#1-A	4 & 5	99.50%	0.017	0.017	5%
Non-Saleable Ash Silo U#2-A	4 & 5	99.50%	0.017	0.017	5%
Saleable Ash Silo 1A	4 & 5	99.50%	0.034	0.034	5%
Saleable Ash Silo 1B	4 & 5	99.50%	0.034	0.034	5%
Saleable Ash Silo 2A	4 & 5	99.50%	0.034	0.034	5%
Saleable Ash Silo 2B	4 & 5	99.50%	0.034	0.034	5%
Conveyor C-3 Tunnel Ventilation – 6,400 cfm	4 & 5	98.00%	0.032	0.015	5%
Conveyor C-3 Tunnel Ventilation – 6,400 cfm	1, 3, & 4	98.00%	0.032	0.015	5%
Conveyor C-3 Tunnel Ventilation – 21,600 cfm	1 & 4	98.00%	0.109	0.052	5%

Air Quality Control Systems (AQCS)

1 – Conditioned Materials

2 – Wet Suppression

3 – Water Sprays

4 – Enclosures

5 – Dust Collection Systems

6 – Best Operating Practices

3.10 DIRECTLY ASSOCIATED FACILITIES

The ocean vessel ~~coal~~ unloading facility is directly associated with the proposed plant. It will be designed with the capability to unload colliers and barges and store and load coal materials into ~~shuttle or unit trains enclosed conveyors~~ for transport to the plant site. The terminal will be located on the north bank of the Fulton-Dames Point Cutoff on the St. Johns River, adjacent to the Jacksonville Port Authority (JPA) Facility area on the south side of Blount Island as shown in Figure 3.10-1.

3.10.1 General Description

The facility will be designed to unload coal materials at an average rate of 3,000 tons/hour using two bucket-type unloaders. It will take about 22 hours to unload a typical ocean vessel carrying 65,000 tons of coal materials if both unloaders are used on a single vessel. The coal materials will be conveyed from the unloaders to the materials handling yard at the plant or to the materials surge building on Blount Island for later conveyance to the plant. The materials surge building will be capable of temporarily storing 35,000 tons of material. ~~a stacker-reclaimer in an area capable of storing up to 70,000 tons. It will then be transferrable to rail cars also at a rate of 3,000 tons/hour via the rail car loading building. An emergency stackout and reclaim system is also provided for use when the stacker-reclaimer or rail car loading systems are not available or operational. Distribution to the stacker-reclaimer and emergency stackout from the unloaders will be routed by the coal handling building which will also include sampling and iron separation equipment. The emergency reclaim system is provided to feed the rail car loading building when the stacker-reclaimer is not operational. These facilities are shown in Figure 3.10-2.~~

3.10.1.1 Unloading System

A wharf with a 40-year design life will be provided. The wharf will be capable of docking large colliers, sea-going barges, and river barges. It will be fitted with bumpers, bits, and cleats for docking. The wharf deck will carry two rails, each designed for 60 ton wheel loads. The rails will be parallel to the river, with a span of ~~115~~ 60 feet, and with one rail

10 feet from the river side of the wharf. The proposed wharf will be approximately ~~1,200~~ 820 feet long, ~~and will be able to accommodate two vessels at a time for coal unloading.~~

Two 1,500 ton per hour grab-bucket type unloaders will be provided. The unloaders can be used either one or both to a vessel, depending upon the unloading requirements. These will be rope-trolley machines with onboard receiving bins, bin discharge feeders and transverse conveyors discharging to a gathering conveyor parallel to the river.

The unloading rate was established as a function of ship usage (optimum turn around time). This unloading rate of 3,000 tons per hour enables about six times as much ~~coal~~ fuel to be unloaded in an hour as the plant will consume during that time (500 tons per hour), assuming two unit operation burning performance coal at 90 percent load. As unloading progresses, the rate that the unloaders can achieve gradually diminishes. At the end of the process, wheel unloaders will be placed into the shiphold to assist the operation of the grab bucket unloaders.

3.10.1.2 Conveying System

The conveying system will consist of the following components:

Two Gathering Conveyors at Wharf

~~Elevating Conveyor from Coal Handling Building to Emergency Stackout~~

~~Elevating Conveyor from Coal Handling Building to Rail Car Loading Building~~

~~Stacker-Reclaimer Yard Belt to Coal Handling Building~~

~~Emergency Reclaim Conveyor to Coal Handling Building~~

~~Stacker-Reclaimer Yard Belt~~

~~Stacker-Reclaimer Transfer Belt~~

Main Conveyor to Plant

Connector Conveyor to Surge Building

Connector Conveyor from Surge Building to Main Conveyor

~~Both the normal conveying system and the emergency conveying components will have a capability to operate at 3,000 tons per hour. Each unloader will have a dedicated conveyor sized for 1500 tons per hour running along the length of the wharf. The main conveyor to the plant will also be sized for 1500 tons per hour.~~

All conveyor galleries will be enclosed, except for the gathering conveyor ~~and yard belt~~. Conveyor galleries will be provided with service water for wash down and fire protection, and with vacuum cleaning systems.

3.10.1.3 Rail Car Loading Building Materials Surge Building

A totally enclosed materials surge building capable of holding up to 35,000 tons of material will be provided to receive materials unloaded by one of the 1500 ton per hour unloaders. This building will allow the main conveyor to the plant to be sized for the average unloading rate of 1500 tons per hour, rather than for the maximum combined rate of 3000 tons per hour when both unloaders operate simultaneously.

The materials surge building will be equipped with an automated stacker and reclaimer, each sized for 1500 tons per hour. The temporary storage capacity provided by this building will allow both unloaders to operate at their maximum capacity when the shiphold is full. As the rate of the unloaders decreases due to less efficient recovery from the shiphold, materials will be reclaimed from the materials surge building to maintain transfer to the SJRPP materials handling yard at 1500 tons per hour.

~~The rail car loading building will discharge coal to rail cars after receiving coal via the coal handling building from the stacker-reclaimer, emergency reclaim, or unloaders.~~

~~The Rail Car Loading System will be designed to accurately load each car with its design capacity of coal.~~

3.10.1.4 Stacker-Reclaimer System

~~The stacker-reclaimer system consists of the stacker-reclaimer machine, the reversing yard conveyor, reversing boom conveyor, tripper conveyor, two crane rails mounted on two concrete grade beams, and suitable manual and automatic controls, including a small programmable logic controller. It will be capable of 70,000 tons of active storage.~~

~~The machine will stack out coal as received from the unloading system at a maximum rate of 3,000 tons per hour. At this rate, the active storage area can be filled in about the same time as a typical ocean vessel is unloaded. The machine will reclaim coal for loading into rail cars at a rate of 3,000 tons/hour. Flow rate will be modulated to maintain a level in the surge bins over the granular feeders in the coal handling building.~~

3.10.1.5 Emergency Reclaim System

~~The emergency reclaim system will include an elevating conveyor and two reclaim pits, each consisting of a grizzly, stainless steel hopper, stainless steel slide gate, and belt feeder. Each grizzly, hopper, gate and feeder will be enclosed in a reinforced concrete pit, which will be drained by sump pumps which will discharge to a sedimentation pond located on-site on Blount Island.~~

~~Where below grade, the elevating conveyor will be enclosed in a reinforced concrete tunnel. The emergency reclaim system will operate at a reclaim rate of 2,000 tons per hour.~~

~~This system will be used to reclaim coal from storage when the conventional systems are not operational. Coal will be reclaimed from the storage piles using dozers, front-end loaders, etc., then dumped into the emergency reclaim hoppers. From there, it will be transported via the feeder and elevating conveyor to the rail car loading building.~~

~~3.10.1.6 Emergency Stackout System~~

~~The emergency stackout system will include a motorized stainless steel flop gate at the end of the elevating conveyor from the unloading system, a concrete lowering well, and an elevating conveyor from the coal handling building. It will be capable of stacking out 3,000 tons per hour of coal. The total active storage capacity will be 10,000 tons, or sufficient capacity to allow for mobilization of mobile equipment. At the maximum rate of operation, the storage area will be filled in a slightly more than 3 hours.~~

~~Normal operation will bypass the emergency stackout system. If the coal handling system downstream is out of service during unloading, the emergency stackout system will then be utilized. Coal will be transported back into the system using the bulldozers or front-end loaders.~~

~~3.10.1.7 Coal Handling Building~~

~~This building will include chutes and gates to distribute coal to the stacker-reclaimer or emergency stackout systems, a primary sample cutter for each incoming conveyor, a single sampling system capable of accepting coal from each primary sample cutter and magnetic separators to remove tramp iron from each incoming conveyor.~~

~~Normal operations of the coal handling building will be to accept coal from the unloading system, while simultaneously transporting coal to loadout or active storage systems. Alternatively, coal would be directed to the emergency stackout system.~~

3.10.2 Water and Wastewater Management

3.10.2.1 Water Requirements

Water requirements at the ocean vessel coal unloading facility will be potable water and service water. Water supply will be from the existing Jacksonville Port Authority (JPA) facilities located on Blount Island.

Approximately 400 gpd of potable water and ~~an average of 20 gpm (200 gpm maximum)~~ 40 million gallons per year of service water will be required. Service water uses include coal dust suppression and occasional equipment washing. ~~Water from the treatment facility to be constructed on the island will be reused whenever available for coal dust suppression.~~

3.10.2.2 Wastewater Management

Wastewater generated at the facility will consist of sanitary wastes, rainfall runoff, and area drainage resulting from coal dust suppression and equipment washing operations.

Area drainage is expected to average 5 gpm with a maximum flow of 50 gpm. This wastewater will be similar to that generated at the main plant's coal materials handling area and will require treatment for solids removal and pH adjustment. Oil and grease concentrations may be above acceptable levels due to contributions from equipment washing, in which case oil-water separation would be required.

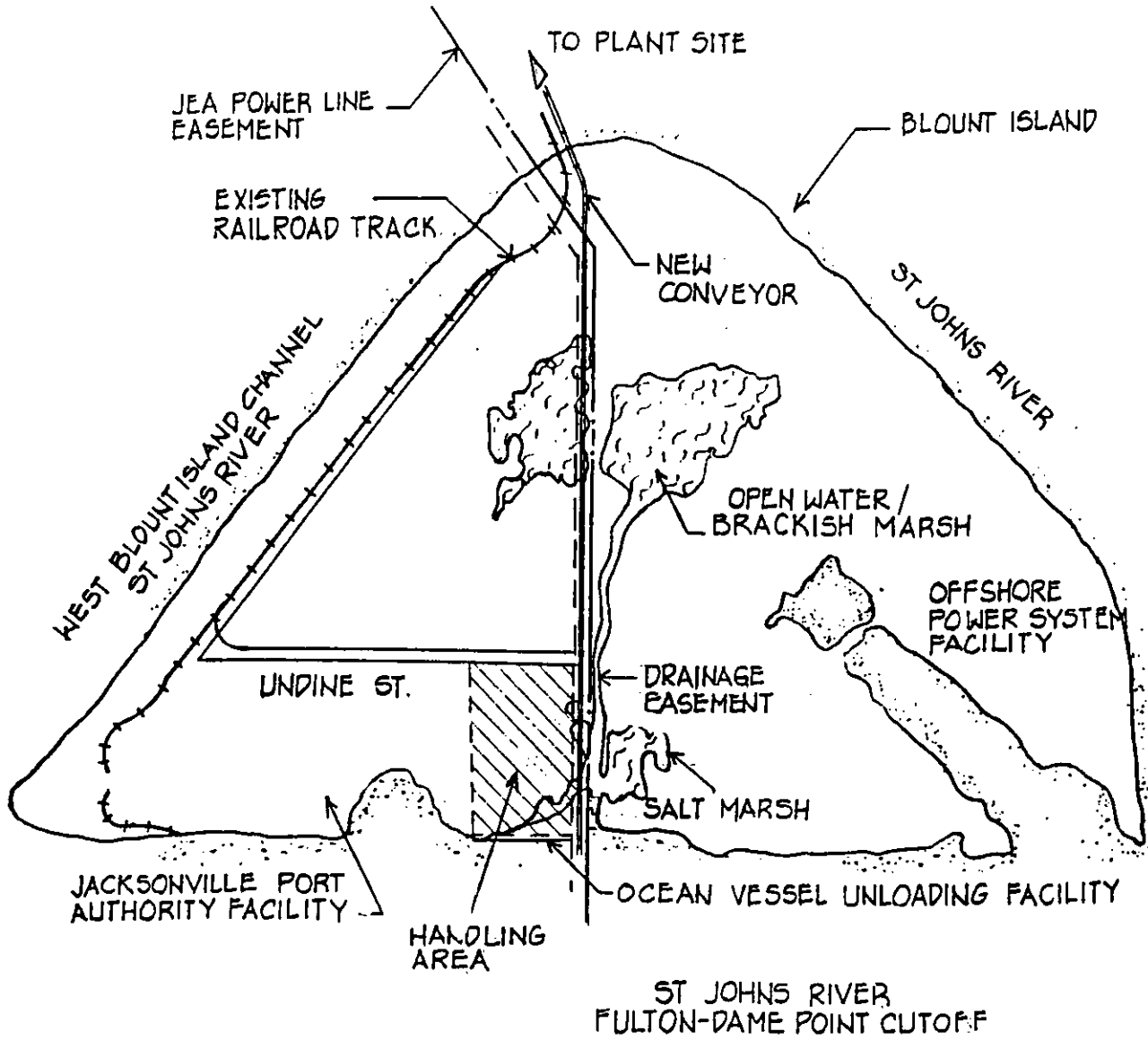


FIGURE 3.10-1

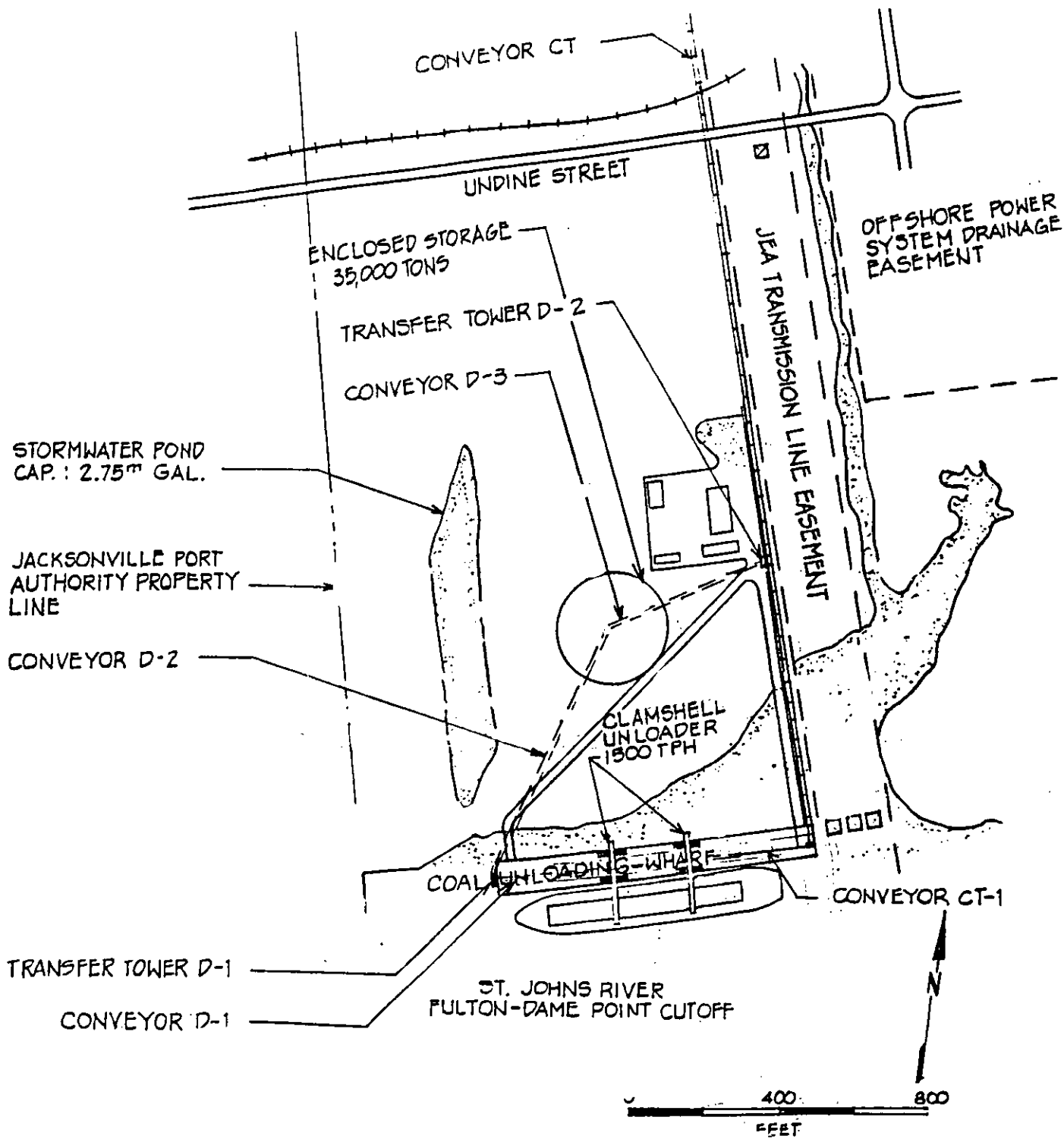


FIGURE 3.10-2 (BLOUNT ISLAND MATERIALS HANDLING FACILITIES)

4.4 CONSTRUCTION OF OTHER ASSOCIATED FACILITIES

Figures 4.4-1 through 4.4-3 show the location and layout of the proposed coal unloading facility on Blount Island. The facility, ~~excluding new trackage,~~ will occupy a total of approximately 55 acres, and will include an unloading wharf, ~~stacker-reclaimer, active and emergency coal~~ materials surge building, ~~stackout areas and rail car loading facility~~ and enclosed conveyors (see Chapter 3, Section 3.10). The ~~railroad loop track~~ approximately 3-mile-long enclosed conveyor will connect with the plant's ~~materials handling area and the existing rail line to the Jacksonville Port Authority facilities.~~

The wharf will be a pile-supported structure, faced with a sheet pile wall and parallel to the existing channel. All piling will be driven, anchored and capped prior to any dredging activity. Figure 4.4-2 shows the proposed dredge cut and quantities (a description of the offshore borehole program by which these quantities were determined is contained in Appendix E). ~~Figure 4.4-3 is an extension of the facility layout showing the railroad loop as it exits the facility along an existing drainage easement and JEA transmission line.~~

Figure 4.4-2 presents dredging estimates for the proposed coal unloading facility on the Fulton-Dame Point Cutoff side of Blount Island. Of the approximately 551,000 cubic yards of material removed, 170,000 cubic yards will be spoil and the remaining 381,000 cubic yards will be used as fill on the proposed site. Dredged material will be removed with a suction dredge to minimize the generation of turbidity and release of other pollutants to the St. Johns River. Spoil material will be pumped to receiving area(s) on Quarantine Island via a submerged pipeline. This area, shown in Figure 4.4-4, was used previously by the U.S. Army Corps of Engineers (COE) as a spoiling area. The pipeline will follow bottom contours such that accidental rupture by ship traffic is precluded. Settling pond dikes and earthen berms will be modified to COE specifications. The spoil site and settling pond(s) will be designed by the COE. Overflow from the settling pond will be released to the St.

Island Channel adjacent to the NGS under the conditions that the excess water, after sufficient settling to meet turbidity guidelines, be pumped back to the St. Johns River to avoid any impact on San Carlos Creek. A similar procedure will be followed for maintenance dredging, with the type of dredge and deposition location to be determined. ~~This procedure will also be followed during the coal unloading facility maintenance dredging, as required.~~

4.4.1 Effects on Vegetation, Wildlife and Aquatic Life

4.4.1.1 Vegetation

Direct Losses

Construction of the proposed coal unloading facility and the associated rail loop enclosed conveyors on Blount Island will disturb approximately 86 acres of the vegetation community types identified on Table 4.4-2. The two community types with the largest total areas that would be disturbed are the Baccharis shrub and grassy scrub types. Approximately 14 acres of the Baccharis shrub community will be disturbed (Figure 4.4-6). This acreage represents 22 percent of the total area of this community type on Blount Island. Baccharis is considered to be a transitional species commonly found on disturbed areas. The loss of this amount of Baccharis shrub type is not considered to be a significant impact.

Approximately 46 acres of the grassy scrub type would be disturbed, representing 50.2 percent of the site. However, this acreage is only 8.2 percent of the total areal extent of the grassy scrub vegetation type on Blount Island. The grassy scrub vegetation type is comprised largely of weedy species on an area disturbed by spoil disposal. The loss of this vegetation type is not considered to be a major impact.

The 4.4 acres of Myrica shrub community that would be disturbed by construction of the coal unloading facility is 9.6 percent of the total area of this type on Blount Island and only 5.1 percent of the proposed coal unloading facility site. The Myrica shrub community type is not

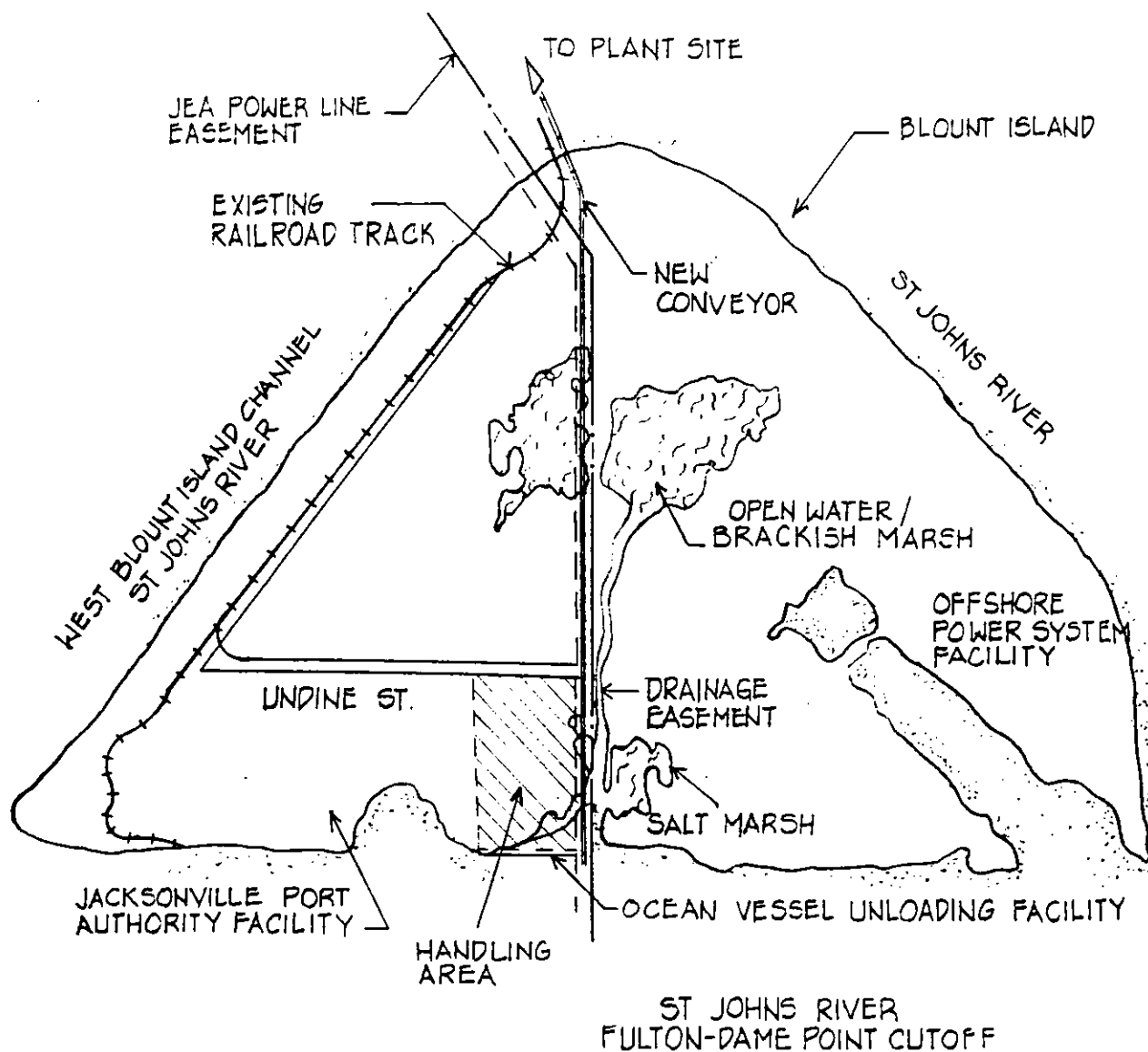


FIGURE 4.4-1 (OVERVIEW OF BLOUNT ISLAND)

Figure 4.4-3 Coal Unloading Facility Trackage

This figure, which showed proposed shuttle train facilities, has been deleted.

Because the projected noise level at the nearest residence is more than 10 decibels below the existing noise level at the residence [$L_{eq}(24) = 55$ dB(a), Chapter 2, Table 2.10-1], normally there should be no impact on the noise environment due to operation of the proposed plant. Furthermore, the land use plan through the year 2005 (Jacksonville Area Planning Board, 1979) indicates that all land adjacent to the proposed plant will be reserved for industrial use or protected open marsh; thus precluding residential development in closer proximity to the plant.

Primary sources of noise at the proposed Blount Island unloading coal handling facility are the two ship unloaders, listed in Table 5.6-6 ~~along with their respective noise level of each. The loudest source of noise will be the two diesel powered dozers and one front end loader which will be used approximately 8 hours per week during the normal day shift for maintenance of the coal pile at Blount Island.~~

Actual noise measurements were taken at a similar coal handling facility of ~~a stacker-reclaimer~~, a ship unloader and the conveyors. The loudest operation at that facility was the ship unloader dropping a 15 ton bucket of coal into an unshielded hopper. A peak impulse of 98 dB(a) was produced. Because of this high noise level, the hoppers at the proposed coal unloading site will utilize an enclosure of sound-deadening material.

The ship unloaders, ~~stacker-reclaimer~~ and conveyors will be powered by electric motors which are inherently quieter than diesel engines. ~~The~~ Each ship unloader is expected to produce 71 dB(A) ~~and the stack-reclaimer, 68 dB(a)~~ at 100 feet. The rubber belt conveyors ~~and the railcar loader, enclosed in a building,~~ will be quiet in comparison to other machinery and will, therefore, not add significantly to noise level projections off-site.

Projected maximum noise levels at the nearest residences (~~Beacon Hills~~), located approximately ~~7,000 feet~~ 1/2 mile southeast of the proposed Blount Island coal materials handling facilities, will be approximately ~~43~~ 50 dB(A) during

operation assuming ~~all equipment is~~ both unloaders are operating simultaneously and at their maximum noise output levels. This level is below the existing L_{eq} (24) of 52 dB(A) (Chapter 2, Table 2.10-1). It is also below the applicable levels of 55 dB(A) and higher pursuant to the Noise Pollution Control Rule of the Jacksonville Environmental Protection Board.

The transmission lines leading from the plant will at times produce an audible low level, low frequency hum. This hum is generally noticeable only where ambient noise levels are much lower than those measured around the site area (Section 2.10.1). Because of the low levels and the fact that the transmission lines will parallel existing transmission lines, the impact of the noise is expected to be minimal.

5.6.2.3 Aesthetics

Proposed Plant

An artist's rendering of the proposed plant appears on the cover of this report. The proposed plant will be an addition to the visual environment or viewshed and as such will have an aesthetic impact on the viewer. It is difficult to analyze such an impact precisely because it is of a highly subjective nature. A number of factors, however, can be measured. Among these factors are the number of people to be visually impacted, the duration of the average visual impact, and the visual quality of the surrounding area and its relationship to the proposed plant.

The most prominent features of the proposed plant that will affect the visual environment are the stack (640 feet above ground level), the cooling towers (425 feet above ground level), and the boiler building (256 feet above ground level). As mentioned in Chapter 2, Section 2.10.2, the visual impact will be influenced by two factors. First, the proposed plant is near the boundary of industrial land use areas and tidal marshes. This is significant because the openness of these areas will allow an unobstructed view of plant facilities from the east. The second factor is the three

West

Two miles to the west, the only major view will come from Heckscher Drive just before and as it crosses Dunn Creek. The number of potential viewers at this point is 16,136 consisting primarily of local commuters in transit. With the shrubs in foreground and trees in the background near the proposed plant plus the distance of just over 2 miles, the impact will be minimal.

North

The only major view from the north will be where Boney Road intersects Cedar Point Road. At this point, the view toward the proposed plant is across a large pasture, as can be seen in Figure 5.6-2. The stacks will appear just over the tree tops in the middle background at a distance of about 2.5 miles. From this viewpoint, considering the changing scenery of the pasture and the intermittent nature of the view, the visual impact is expected to be only slightly significant.

Proposed ~~Coal~~ Unloading Facilities

The ~~coal~~ unloading facilities proposed for Blount Island will not have a significant impact on the viewshed. The most significant structures will be the ~~coal~~ unloaders (180 feet high) and the ~~coal-pile~~ materials surge building (to 150 feet high). A summary of the aesthetic impact in a 5-mile area is presented in Table 5.6-8. Figure 5.6-1 shows the viewpoints from which the proposed unloading facilities will be visible.

Fort Caroline is located across the St. Johns River to the southeast of the proposed facilities at a distance of about 2 miles. The view from Fort Caroline will be screened due to the slight bend in the river. In addition, the large gantry crane maintained at the Offshore Power Systems site would be an imposing feature located directly between the fort and the proposed ~~coal~~ unloading facilities. Due to the crane, existing

Table 5.6-6

PROJECTED OPERATIONAL NOISE LEVELS OF MAJOR COMPONENTS
OF BLOUNT ISLAND ~~COAL~~ MATERIALS HANDLING FACILITIES

<u>Component</u>	<u>Noise Level (dBA)</u>	<u>@ Feet</u>	<u>Total Number of Units</u>	<u>Combined Level at Near Field (dBA)</u>	<u>Attenuated Level at Nearest Residence^{nb} (dBA)</u>
Ship Unloaders	71 ^a	100	± 2	71 74	29 50
Stacker-Reclaimer	68^a	100	1	68	26
Bulldozer	80^a	50	2	83	41
Front End Loader	79^a	50	1	79	37

Total ~~coal~~ materials handling facility noise level projected to nearest potential residence is ~~43~~ 50 dB(A)

^a Actual measurements of units manufactured by Dravo

^b ~~USEPA, 1971~~

^{nb} ~~Beacon Hills Residential areas~~ located ~~1.35~~ approximately 1/3 miles south across St. Johns River (See Figure 2.10-1)

**BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

In Re: JEA)	
St. Johns River Power Park)	DEP Case No. PA-81-13
Modification of Conditions)	
of Certification)	OCG Case No. ____
Duval County, Florida)	

**- DRAFT -
FINAL ORDER MODIFYING
CONDITIONS OF CERTIFICATION**

On June 29, 1982, the Governor and Cabinet, sitting as the Siting Board, issued a final order approving certification for the JEA (formerly the Jacksonville Electric Authority) and Florida Power & Light Company's St. Johns River Power Park (SJRPP) Units 1 and 2. That certification order approved the construction and operation of two 600 MW (net) coal fired units and associated facilities in Duval County, Florida.

On February 15 and April 19, 1999, JEA filed applications to revise the existing Prevention of Significant Deterioration (PSD) air quality permit (PSD-FL-010) applicable to SJRPP. These applications update the existing materials handling facilities at SJRPP and its associated materials unloading facility on Blount Island, the St. Johns River Coal Terminal (SJRCT). They also describe two scenarios for augmenting the materials handling facilities at SJRPP and SJRCT in order to provide materials handling support to JEA's Northside Generating Station Units 1 and 2 Repowering Project. The Department of Environmental Protection (Department) issued a revised PSD permit (PSD-FL-010(C)) for SJRPP on MONTH XX, 1999, which accounts for all existing and proposed materials handling emissions points and maximum throughput rates.

Rule 62-17.211(4), Florida Administrative Code, requires the Department to modify Conditions of Certification to conform to any amendments, modifications, or renewals of PSD

permits issued by the Department subsequent to initial Site Certification. This Final Order Modifying Conditions of Certification fulfills this requirement by eliminating from the Conditions all emissions limitations for particulate matter imposed on materials handling operations, and replacing them with a cross-reference to the emissions limitations provided in the revised PSD permit for SJRPP. All emissions limits applicable to the materials handling facilities at SJRPP and SJRCT either remain the same or are made more stringent.

Copies of the Department's proposed modifications were made available for public review on MONTH XX, 1999. On MONTH XX, 1999, a Proposed Modification of Power Plant Certification was published in the Florida Administrative Weekly. As of MONTH XX, 1999, all parties to the original proceeding had received copies of the intent to modify. The notice specified that a hearing would be held if a party to the original certification hearing objected within 45 days from the receipt of the proposed modification or any other person, whose interests would be substantially affected, objected in writing within 30 days after the issuance of public notice. No written objection to the proposed modification has been received by the Department in accordance with Section 403.516(1)(b), Florida Statutes (1997). Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to the Conditions of Certification for SJRPP relating to the materials handling operations as described above are **APPROVED**. Pursuant to Section 403.516(1)(b), F.S., the Conditions of Certification for SJRPP are **MODIFIED** as follows:

- I.A.3. Particulate emissions ~~from the coal~~ limits for all materials handling facilities: are contained in PSD-FL-010(C).

~~a. The permittee shall not cause to be discharged into the atmosphere from any coal processing or conveying equipment, coal storage system, or coal transfer and loading system processing coal, visible emissions which exceed 10 percent opacity. Particulate emissions shall be controlled by the use of control devices.~~

~~b. a. The permittee must submit to the Department within thirty (30) days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal handling facility. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device if the Department determines the selected control device to be inadequate to meet the emission limits specified in 3.a. above. Such disapproval shall be issued within 30 days of receipt of the technical data.~~

4. Particulate emissions limits for from limestone and flyash handling ~~shall not exceed the following: facilities are contained in PSD-FL-010(C).~~

~~a. Limestone silos - 0.050 lb/hr.~~

~~b. Limestone hopper/transfer conveyors - 0.65 lb/hr.~~

~~c. Flyash handling system - 0.2 lb/hr.~~

5. Visible emissions ~~from the following facilities shall be limited to 10% opacity: limits for all materials handling facilities are contained in PSD-FL-010(C).~~

~~a. Limestone and flyash handling system~~

~~b. Limestone day silos~~

~~c.~~ Flyash silos

Any party to this Notice has the right to seek judicial review of this Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000 and by filing a copy of the Notice of Appeal accompanied by the applicable filing fee with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that this Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this _____ day of _____, 1999, in Tallahassee, Florida.

STATE OF FLORIDA, DEPARTMENT OF
ENVIRONMENTAL PROTECTION

David B. Struhs
Secretary
Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000
Telephone: (904) 488-1554



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

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JUN 07 1999

JUN 03 1999

BUREAU OF
AIR REGULATION

4APT-ARB

Mr. M.D. Harley, P.E., DEE
P.E. Administrator
Emissions Monitoring Section
Bureau of Air Monitoring and
Mobile Sources
Department of Environmental Protection
Division of Air Resources Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: Alternative Sampling Procedure Requests for Units 1 and 2 at Jacksonville Electric Authority Northside Generating Station, Jacksonville, Florida

Dear Mr. Harley:

The purpose of this letter is to provide you with a written determination regarding several alternative sampling procedure (ASP) requests contained in the enclosed letter that the Jacksonville Electric Authority (JEA) sent to the U.S. Environmental Protection Agency (EPA) on April 16, 1999. As part of a repowering project for Units 1 and 2 at the Northside Generating Station, JEA will be installing two new circulating fluidized bed boilers, and these boilers will be subject to 40 C.F.R. Part 60, Subpart Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978). Based upon our review of the ASP requests from JEA, we have determined that they are all acceptable if certain conditions are met, and details about the specific requests and the basis for our conclusions are provided in the remainder of this letter.

The first request in the letter from JEA was that they be allowed to determine compliance with the applicable nitrogen oxides (NO_x) and sulfur dioxide (SO₂) standards in Subpart Da using data from continuous emission monitoring systems (CEMS) that will be installed and certified on Units 1 and 2. According to the letter from JEA, the company wants approval to determine compliance with these monitors as an alternative to determining compliance using reference stack test methods. After reviewing this first request, we have determined that using CEMS to demonstrate NO_x and SO₂ compliance under Subpart Da does not actually constitute an ASP since 40 C.F.R. §60.48a requires that CEMS be used for demonstrating compliance with the NO_x and SO₂ standards in this regulation. Since the compliance approach that JEA refers to as alternative to stack testing is actually the compliance method specified in the applicable rule, EPA approval of this approach as an ASP is unnecessary.

The second request from JEA is that they be allowed to use EPA Method 29 test results to demonstrate compliance with the applicable particulate standard in Subpart Da. Method 29, which is a method used for measuring the concentrations of various metals in flue gases, would be an ASP in this instance since 40 C.F.R. §60.48a(e) identifies Methods 5, 5B, and 17 as the ones that are to be used for determining compliance with the particulate emission standard in Subpart Da. Based upon the fact that Section 1.1 of Method 29 indicates that this method can be used for determining particulate emissions if prescribed procedures and precautions are followed, we have determined that the second ASP requested by JEA is acceptable. Specific analytical procedures to follow so that Method 29 can be used to measure particulate emissions in addition to metals emissions are promulgated in Sections 5.3.1.1 and 5.3.2 of the method. So long as JEA follows these procedures, using Method 29 instead of Methods 5, 5B, or 17 to measure particulate emissions from Units 1 and 2 would be acceptable.

The third issue addressed in the letter from JEA is the approach that the company wants to use for determining compliance with the applicable opacity standard during the initial performance test on Units 1 and 2. According to its letter, JEA wants to demonstrate compliance with the applicable opacity standard in Subpart Da using results from the continuous opacity monitors that will be installed and certified on Units 1 and 2. This would be an alternative to using the EPA reference test method for opacity (Method 9) to determine compliance, but the approach proposed by JEA is acceptable since it is an option allowed under 40 C.F.R. §60.11(e)(5) if the owner or operator of an affected facility provides notification at least 30 days in advance of the test.

If you have any questions about the issues addressed in this letter, please contact Mr. David McNeal of my staff at 404/562-9102.

Sincerely,



R. Douglas Neeley
Chief
Air and Radiation Technology
Branch
Air, Pesticides and Toxics
Management Division

cc: Al. Linero, FDEP ✓
Syed Arif, FDEP

AL

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JUN 03 1999

BUREAU OF
AIR REGULATION

21 West Church Street
Jacksonville, Florida 32202-3139



June 2, 1999

Clair H. Fancy, Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

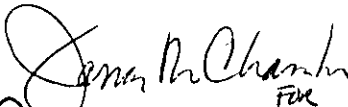
RE: Comments on Proposed Permit for JEA Northside Units 1 and 2
Repowering Project 0310045-003-AC/PSD-FL-265

Dear Mr. Fancy:

JEA would like to thank you and your staff, especially Mr. Syed Arif, for your cooperation and assistance in this permitting effort. We were pleased with the proposed permit that the Department issued on May 12, 1999, and we look forward to receiving the final permit within the next few weeks. We had only one minor comment regarding the proposed permit: In Condition 40 (page 15) regarding compliance testing for mercury, the word "only" should be inserted after the word "tests" to be consistent with Conditions 37, 38, and 39 and to avoid any ambiguity that its omission might suggest. Otherwise, the proposed permit is acceptable and we have no further comments.

If you have any questions, please call Bert Gianazza with JEA at 904-665-6247, and we thank you and your staff again for your cooperation and assistance.

Sincerely,


Walter P. Bussells
Managing Director & Chief Executive Officer

cc: A. A. Linero, DEP
Syed Arif, DEP
Cleve Holladay, DEP
Hamilton S. Oven, Jr., DEP Siting

Mr. Clair H. Fancy

June 2, 1999

Page 2 of 2

Scott Goorland, DEP OGC

Rita Felton-Smith, DEP NE District

Robert S. Pace, Jacksonville RESD

Gregg Worley, EPA Region IV

Ellen Porter, U. S. Fish and Wildlife Service

Jerry Hebb, U. S. Department of Energy

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MAY 25 1999

BUREAU OF
AIR REGULATION

FLORIDA PUBLISHING COMPANY
Publisher
JACKSONVILLE, DUVAL COUNTY, FLORIDA

STATE OF FLORIDA /
COUNTY OF DUVAL /

Before the undersigned authority personally appeared _____

Steven L. Smith, who on oath says that he is

Legal Advertising Representative of The Florida Times-Union,

a daily newspaper published at Jacksonville in Duval County, Florida; that the

attached copy of advertisement, being a Legal Advertisement

in the matter of Public Notice of Intent to Issue PSD Permit

in the _____ Court.

was published in THE FLORIDA TIMES-UNION in the issues of _____

May 18, 1999

Affiant further says that the said The Florida Times-Union is a newspaper published at Jacksonville, in and Duval County, Florida, and that the said newspaper has heretofore been continuously published in said Duval County, Florida, The Florida Times-Union each day, has been entered as second class mail matter at the postoffice in Jacksonville, in said Duval County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement, and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing that advertisement for publication in said newspaper

Sworn to and subscribed before me
this 21st day of

May, A.D. 19 99

Veronica J. Williams
Notary Public
Commission # 00569906
Expires Jun. 1, 2000
Bonded thru
Atlanta Bonding Co., Inc.

DA 444

PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DSP Fla. No. 8918045-005-AC (PSD-PL-36)

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit under the requirements for the Prevention of Significant Deterioration of Air Quality (PSD permit) to AEA. The permit is to construct two new main and auxiliary side-blast circulating fluidized bed (CFB) broken and associated auxiliary equipment and processes at the existing Northside Generating Station in Duval County, Florida. There are two units at the existing Northside Generating Station: Unit 1 and 2 (795.2 MW each). A new, dual-fuel (gas and coal) boiler will be added to the facility for storage facilities (including three basins), a new fly ash, gypsum, ammonia, storage, including landfills, alternative preprocessor or fabric filter baghouses, and ash removal and storage facilities. A new Ammonia Control Technology (ACT) denitrification unit, required for particulate matter (TSP/PM10), oxides of nitrogen (NOx), volatile organic compounds (VOC), carbon monoxide (CO), hydrofluorocarbon (HFC), and sulfur dioxide (SO2) emissions from Unit 1, 2, and 3. The applicant's name and address are: AEA, 21 Wood Church Street Jacksonville, Florida 32202 1103. The Northside Generating Station is located at 4377 Necker Drive, Jacksonville, Duval County, Florida.

Particulate matter (TSP/PM10) emissions from Units 1 and 2 will be controlled by fabric filter (HEPA) baghouses or electrostatic precipitators. Oxides of nitrogen emissions from Units 1 and 2 will be controlled through the use of a selective non-catalytic reduction (SNCR) system. Carbon monoxide and volatile organic compound emissions from Units 1 and 2 will be controlled through good combustion practices, and hydrogen fluoride and mercury emissions will be controlled by the use of air quality control systems and sulfur dioxide. The Ammonia dryer emissions will be controlled through fabric filter baghouses, low NOx burners, good combustion practices, and the use of low sulfur fuel. The methanol handling operations will utilize wet impingement technologies, partial and total enclosures, conditioned materials, and fabric filter baghouses, on materials, to control particulate matter (TSP/PM10) emissions.

EA has requested emission caps on Units 1 and 2 as well as raising Unit 3 to sulfur dioxide, oxides of nitrogen, and particulate matter (TSP) to assure a non-precipitation before January 1, 1999. PSD Class 1 emission levels (Unit 1 and 2) are represented. Therefore, in the future, emissions of these three pollutants from Units 1, 2 and 3 combined will be less than the PSD permitting while electrical output from Units 1, 2 and 3 will be about two and a half times greater than historical levels as a result of retrofits.

The net emissions increase due to the retrofits of Units 1 and 2 for PSD permitting purposes are summarized below (in tons per year):

Pollutant	Net Emissions Increase	PSD Significant Emission Rate
PM10	199	13
NOx	871	100
CO	3,043	100
VOC	107	40
Hg	8.02	3
SO2	0.24	0.1

An air quality impact analysis was conducted. Emissions from the facility will not significantly contribute to or cause a violation of any state or federal ambient air quality standards. The maximum predicted PSD Class 1 increments of NO2 and PM10 (covered by all sources in the area, including this project) will be as follows:

Applicable Hour	Maximum Increment/mo	Increment Community/yr	Annual Community
PM10			
24 HOUR	36	24 +	81
Annual	17	13.8	81
NO2			
Annual	75	1.4	6

Maximum predicted impacts are less than the applicable PSD Class 1 significant impact level at the Oklawaha National Wetlands Area for PM10 and NO2.

The Department will accept written comments and requests for a public hearing concerning the proposed permit issuance order by a period of 30 (thirty) days from the date of publication of the Public Notice of Intent to Issue PSD Permit. Written comments and requests for a public hearing should be provided to the Department's Bureau of Air Regulation, 2000 State Road, Mail Stop # 8550, Tallahassee, Florida 32399 7400. Any written comments filed shall be made available for public inspection.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.56F and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed in the Office of General Counsel of the Department, 2000 Commonwealth Boulevard, Mail Stop # 33, Tallahassee, Florida 32399 3000. Petitions filed by any person other than the permittee must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any person other than the permittee must be filed within fourteen (14) days of the date of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60C2, however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall send a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.56F and 120.57, Florida Statutes, in its interests in the proceeding and participate as a party. If any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28.104.705 of the Florida Administrative Code.

A petitioner that disputes the material facts on which the Department's action is based must contact the following information: The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name, address, and telephone of the petitioner's representative, if any; and (c) The address for service purposes during the course of the proceeding and explanation of how the petitioner's substantial interests will be affected by the agency determination; (d) A statement of how and when petitioner received notice of the agency action or proposed action; (e) A statement of all disputed issues of material fact; (f) These are none, the petition must so indicate; (g) A concise statement of the material facts alleged, as well as the rules and statutes which apply to the petitioner's case; and (h) A demand for relief.

A petitioner that does not dispute the material facts upon which the Department's action is based shall state that on such facts it is to dispute and otherwise shall contain the same information as set forth above, as required by Rule 28.104.705 of the Florida Administrative Code.

Because the administrative hearing process is designed to facilitate final agency action, the filing of a petition means that the Department's final action may be different from the petition taken by it in its name. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:
Department of Environmental Protection, Department of Environmental Protection
Bureau of Air Regulation, Northside District Office
111 South Magnolia Drive, 7823 Baymeadows Way, Suite 2008
Tallahassee, Florida 32301 Jacksonville, Florida 32216-7390
Telephone: 904-498-1344 Telephone: 904-448-0300
Fax: 904-492-8779 Fax: 904-448-0368

Jacksonville Regulatory and Environmental Services Department
117 West Duval Street
Suite 225
Jacksonville, Florida 32202
Telephone: 904-430-2444
Fax: 904-430-3428

The complete project file includes the Draft Permit, the application and the information submitted by the responsible applicant, exclusive of confidential records under Section 605.111, Florida Statutes. Interested persons may contact the New Business Service Section at 111 South Magnolia Drive, Tallahassee, Florida 32301, or call 904-488-0114, for additional information.

CC: Sybil Arif
AED
EPA
NPS
Duval Co.

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTIONS 120.60(1), (3) AND 403.0876, FLORIDA STATUTES

License (Permit, Certification) Application No. PSD-FL-265(C), JEA, Northside Units 1 & 2
Repowering Project

Applicant's Name: JEA
21 West Church Street
Jacksonville, FL 32202

With regard to the above referenced application, the applicant hereby with full knowledge and understanding of applicant's rights under Sections 120.60(1), (3) and 403.0876, Florida Statutes, waives the right to have the application finally approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed by law. Representatives of the Department have stated that the "proposed" action to issue or deny the request permit (Intent, Public Notice of Intent, and Proposed Permit) shall occur 16 days prior to the 90th day. Said waiver is made freely and voluntarily by the applicant, with full knowledge, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Protection.

This waiver for final issuance or denial of the requested permit shall expire on the 30th day of May, 1999, and is made with the assumption that the Department's proposal to issue or deny the permit will be made by May 14, 1999 (Intent, Public Notice of Intent, and Proposed Permit).

The undersigned is authorized to make this waiver on behalf of the applicant.

Dated: April 27, 1999



Signature

Walter P. Bussells, Managing Director
and Chief Executive Officer of JEA

RECEIVED

APR 29 1999

BUREAU OF
AIR REGULATION

REFORDER 060849076-95 CITY 100



Shipment Airwaybill
1-800-CALL-DHL
in USA only
WEB ADDRESS: http://www.dhl.com

7751316790

3/17/99

1 From (Shipper)

Account no. 360849076
Shipper's reference ACTIVITY 5200

Company name JFA

Shipper's name EDUCATION
LOCATION: B. Gianazza, T-8

Address
21 W CHURCH ST
JACKSONVILLE FL

Zip code (required) 32202-3155
Phone/Fax/E-mail 904-445-6247

2 To (Recipient)

Company name Florida Department of Environmental Protection

Attention
Syed Arif

Delivery address
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida

Zip/Postcode (required) 32399-2400
Phone/Fax/E-mail (904) 488-1344

5 Shipper's authorization and signature

Signature (required) Patricia O. Eastman
Date 04/28/99



775 1316 790

3 Shipment details

Domestic Services
 USA OVERNIGHT
International Services
 INT'L DOCUMENT EXPRESS
 WORLDWIDE PRIORITY EXPRESS
 WORLDWRIGHT
WorldMail Services
 1st class
 2nd class
 Other
Special Services
 SATURDAY DELIVERY
 POD
Payment Options not all options available to all countries
 Shipper's account
 Recipient
 Third party
Account No.

Full description of contents
Permitting Corr.

International non document shipments only
Attach original and four copies of a Commercial Invoice
Declared value for customs (in US \$) Export License No./Symbol (if applicable)

Harmonized Sched. B No. (if applicable)
Type of export
 Permanent
 Temporary
 Repair/Return

Shipper's EIN/SSN
These commodities, technology or software were exported from the United States in accordance with the export administration regulations (E-warson controls) to U.S. live abroad/see

Destination duties taxes (if left blank recipient pays duties taxes)
 Recipient
 Shipper
 Other

ORIGIN JAX DESTINATION: TLA

4 Pcs/Weight/Size

No. of pieces 1

Weight if DHL Express Document packaging is used enter XD
XD lb

Dimensions (inches)

Pieces length width height

DIMENSIONAL/CHARGED WEIGHT

lb

CODES CHARGES Services

Special services

Insurance

Drop Box Exp Center

TOTAL

TRANSPORT COLLECT STICKER No

PICKED UP BY 008

Date 4/28

Time

Day