



# Department of Environmental Protection

## Division of Air Resource Management APPLICATION FOR AIR PERMIT - LONG FORM

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BUREAU OF AIR REGULATION

### I. APPLICATION INFORMATION

**Air Construction Permit** – Use this form to apply for an air construction permit for a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

**Air Operation Permit** – Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

**Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option)**  
– Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

#### Identification of Facility

1. Facility Owner/Company Name: <b>Jacksonville Electric Authority</b>	
2. Site Name: <b>St. Johns River Power Park/Northside Generating Station</b>	
3. Facility Identification Number: <b>0310045</b>	
4. Facility Location...: Street Address or Other Locator: <b>11201 New Berlin Road</b> City: <b>Jacksonville</b> County: <b>Duval</b> Zip Code: <b>32226</b>	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

#### Application Contact

1. Application Contact Name: <b>Jay A. Worley, Group Leader, Bulk Materials</b>	
2. Application Contact Mailing Address... Organization/Firm: <b>St. Johns River Power Park</b> Street Address: <b>11201 New Berlin Road</b> City: <b>Jacksonville</b> State: <b>FL</b> Zip Code: <b>32226</b>	
3. Application Contact Telephone Numbers... Telephone: <b>(904)665-8729</b> ext. Fax: <b>(904)665-8719</b>	
4. Application Contact Email Address:	

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Project Number(s):	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

## APPLICATION INFORMATION

### Purpose of Application

**This application for air permit is submitted to obtain: (Check one)**

#### **Air Construction Permit**

Air construction permit.

#### **Air Operation Permit**

Initial Title V air operation permit.

Title V air operation permit revision.

Title V air operation permit renewal.

Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

#### **Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)**

Air construction permit and Title V permit revision, incorporating the proposed project.

Air construction permit and Title V permit renewal, incorporating the proposed project.

**Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:**

I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

### Application Comment

See attached letters. Application fee not applicable.

**APPLICATION INFORMATION**

**Scope of Application**

<b>Emissions Unit ID Number</b>	<b>Description of Emissions Unit</b>	<b>Air Permit Type</b>	<b>Air Permit Proc. Fee</b>
023	Coal Storage Yard and Transfer Systems	ACIF	NA

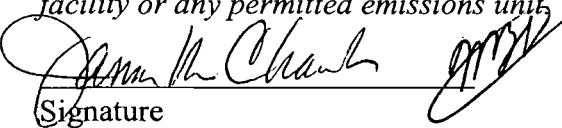
**Application Processing Fee**

Check one:  Attached - Amount: \$ \_\_\_\_\_  Not Applicable

# APPLICATION INFORMATION

## Owner/Authorized Representative Statement

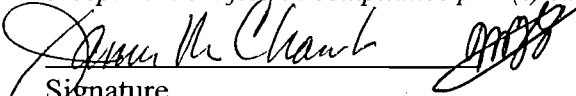
Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name : <b>James Chansler, Vice President, Operations and Maintenance</b>
2. Owner/Authorized Representative Mailing Address... Organization/Firm: <b>Jacksonville Electric Authority</b> Street Address: <b>21 West Church Street</b> City: <b>Jacksonville</b> State: <b>FL</b> Zip Code: <b>32202</b>
3. Owner/Authorized Representative Telephone Numbers... Telephone: (    ) ext. Fax: (    )
4. Owner/Authorized Representative Email Address:
5. Owner/Authorized Representative Statement:  <i>I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.</i>   Signature _____ Date <u>3.9.04</u>

**APPLICATION INFORMATION**

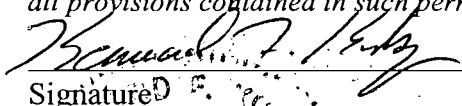
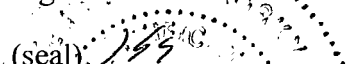
**Application Responsible Official Certification**

**Complete if applying for an initial/ revised/ renewal Title V permit or concurrent processing of an air construction permit and a revised/ renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."**

1. Application Responsible Official Name: <b>James Chansler, Vice President, Operations and Maintenance</b>
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input checked="" type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source.
3. Application Responsible Official Mailing Address... Organization/Firm: <b>Jacksonville electric Authority</b> Street Address: <b>21 Church Street</b> City: <b>Jacksonville</b> State: <b>FL</b> Zip Code: <b>32202</b>
4. Application Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
5. Application Responsible Official Email Address:
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i>  Signature _____ Date <u>3.9.04</u>

**APPLICATION INFORMATION**

**Professional Engineer Certification**

1. Professional Engineer Name: <b>Kennard F. Kosky</b> Registration Number: <b>14996</b>
2. Professional Engineer Mailing Address... Organization/Firm: <b>Golder Associates Inc.**</b> Street Address: <b>6241 NW 23<sup>rd</sup> Street, Suite 500</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32653-1500</b>
3. Professional Engineer Telephone Numbers... Telephone: <b>(352) 336-5600</b> ext. <b>516</b> Fax: <b>(352) 336-6603</b>
4. Professional Engineer Email Address: <b>kkosky@golder.com</b>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input checked="" type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  Signature _____ Date <u>3/1/04</u>  (seal):

\* Attach any exception to certification statement.

\*\* Board of Professional Engineers Certificate of Authorization #00001670

## **ATTACHMENTS**

**Golder Associates Inc.**

6241 NW 23rd Street, Suite 500  
Gainesville, FL 32653-1500  
Telephone (352) 336-5600  
Fax (352) 336-6603



September 12, 2003

0137630

Mr. Jay A. Worley, Group Leader Bulk Materials  
St. Johns River Power Park (SJRPP)  
11201 New Berlin Road  
Jacksonville, Florida 32226

RE: NORTHSIDE GENERATING STATION/SJRPP  
TITLE V PERMIT 0310045-008-AV; PSD-FL-10  
ROTARY DUMPER BAGHOUSE REMOVAL

Dear Jay:

This correspondence provides emission calculations regarding the removal of the rotary dumper baghouse. Currently, there are four transfer points within the rotary dumper building that are serviced by a baghouse. However, prior to the transfer of coal from the building by conveyor, particulate matter is controlled using wet suppression. This control technique is identified in Title V and PSD permits. SJRPP desires to remove the baghouse since PM can be effectively controlled using wet suppression making the baghouse unnecessary. Wet suppression will be added to the transfer points within the building in the event additional PM control is needed.

Since the transfer points are completely enclosed within the rotary dumper building, there are no directly applicable emission factors. However, emission estimates using EPA emissions factors for outdoor activities can theoretically be used to estimate emissions by assuming controls are provided by and within the building (i.e., the combined effects of the building and wet suppression). Together particulate control from wet suppression and building enclosure would result in 97% control efficiency. This level of control was initially assumed in the PSD application for the SJRPP and is believed to represent worst case emissions. Based on the maximum potential coal unloaded from rail cars at SJRPP, the removal of the existing rotary dumper baghouse would result in conservatively estimated annual particulate emissions equal to 4.97 and 2.35 tons/year, for PM and PM<sub>10</sub> respectively. The calculations are contained in Table 1. It should be noted that these emissions are probably already included in the total PM emission allocated for the rotary dumper.

Since there is a change in the emissions and control device, a change in the existing Title V and PSD permits will be required. It should be noted however that the magnitude of PM emissions in Table 1 is less than that for a generic exemption from permitting pursuant to F.A.C. 62-210.300 (3) (b) F.A.C. and would otherwise be considered an insignificant activity.

Please call me if there are any questions on the information contained herein.

Sincerely,  
GOLDER ASSOCIATES INC.

Kennard F. Kosky, P.E.  
Principal  
Professional Engineer Registration No. 14996

KFK/jkw  
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**JRPP Rotary Dumper Emission Estimates**

ms:

332 trains	per year	from SJRPP
33 train cars	per hour	from SJRPP
30,000 train cars	per year	from SJRPP (Worst case scenario if 100% fuel by rail)
107 tons	coal per train	from SJRPP
6.9 %	moisture of DTE	from SJRPP
1 mph	average wind speed	Estimate based on enclosed building.
0.74	particle size multiplier (k)	Estimate, assumes aerodynamic particle size < 30 um, AP-42
0.35	particle size multiplier (k)	Estimate, assumes aerodynamic particle size < 10 um, AP-42
<b>Control:</b>		
90 %	emission control with wet suppression, AP-42 13.2.4.4	
70 %	emission control with building enclosed rotary dumper, engineering estimate	
97 %	total emission control; same as original PSD	

Calculations:

3,531 ton/hr	Maximum
366 ton/hr	Based on Maximum Annual Average; 8760 hr/yr
3,210,000 tons/year	Both Units

AP-42 13.2.4 Aggregate Handling and Storage Piles

$$E = k (0.0032) (U/5)^{1.3} / (M/2)^{1.4}$$

where:

- E = emission factor (lb/ton)
- k = particle size multiplier (dimensionless)
- U = mean wind speed (mph)
- M = material moisture content (%)

E = 5.16E-05  
 tons/yr = E\*(ton/hr)\*8760 uncontrolled  
 tons/yr = 165.68 uncontrolled

ton/yr = 4.97 PM controlled with wet suppression and building enclosure  
 2.35 PM<sub>10</sub> controlled with wet suppression and building enclosure

### **St. Johns River Power Park (SJRPP) - Material Handling Facilities**

St. Johns River Power Park (SJRPP) requests that the Department modify certain provisions of PSD-FL-010(C) regarding PM<sub>10</sub> emissions and to address the visible emission testing requirements for emission points associated with the material handling operations. In addition, several of the emission points associated with the materials handling operations have been eliminated. As a result, SJRPP would like to have these points eliminated from further consideration.

To better describe the fugitive and minor point source emission units, Table 1 was prepared. Table 1 was based on the emission units listed in Table 6 of PSD-FL-010(C). The emission unit number identified in Table 1 was provided in the application for PSD-FL-010(C) in Figure SJRPP01 (copy attached). Table 1 includes the type of PM source, the estimated PM emissions and opacity limits, the request to eliminate PM<sub>10</sub> emissions, the request for the frequency of any subsequent VE testing, and a rationale for the testing request. Also identified in Table 1 are several emission units not included in Table 6 of PSD-FL-010(C). These units are identified in *italics* in Table 1. The paragraphs that follow provide further discussion for the request.

#### PM/PM<sub>10</sub> Emissions for Fugitive Emission Units:

SJRPP requests that the Department delete the PM<sub>10</sub> emissions listed in Table 6 of PSD-FL-010(C) and not include these emissions in the Title V permit. The PM<sub>10</sub> emissions expressed in pounds/hour (lb/hr) in Table 6 are an artifact of the air dispersion modeling performed of the Northside Repowering Project when the PSD approval was modified to include several new emission units at SJRPP associated with the material handling [see PSD-FL-010(C); July 28, 1999]. SJRPP requests that the PM<sub>10</sub> emissions be deleted since PM<sub>10</sub> emissions have not been regulated at SJRPP. There were also no changes made to the material handling systems at SJRPP associated with the Northside Repowering Project and no change in the emission points that would require consideration of PM<sub>10</sub> emissions. Table 1 lists the emission points associated with the coal storage yard and transfer systems where the reference to PM<sub>10</sub> emission limits should be eliminated. The list of emission points in Table 1 includes all those listed in Table 6 of PSD-FL-010(C).

#### Visible Emission Standards:

SJRPP requests that the Department modify specific conditions of the PSD-FL-010(C) and the Title V Permit related to the performance of visible emissions (VE) tests for the coal storage yard and transfer systems. The current Title V permit for the coal storage yard and transfer systems included a VE standard of 10 percent (Condition E.4.). In the original PSD permit issued by EPA in 1982, the VE standard was the primary performance standard for these emissions units. The only exception included in the PSD approval was the requirement that a PM test using EPA Method 5 would be required if the VE standard is exceeded for emission units that exhaust through a stack or vent. Neither the original PSD approval nor the Title V Permit specifically identifies the frequency of VE testing.

Table 1 presents a list of the emission points associated with the materials handling operations and the requested frequency for VE testing. This table also includes the rationale for the requested frequency of VE testing. The request is based on the operational experience at SJRPP for over the last 15 years as well as the many inspections by the compliance authority for SJRPP (i.e., the City of Jacksonville, Environmental Resource Management Department).

Table 1 includes three categories for VE testing frequency: upon request, upon Title V permit renewal and annually. The emission locations where VE testing would be conducted upon request are fugitive sources with no stack or vent, making such observations extremely difficult. For these locations, there is no practicable way to properly view VE emissions. Indeed, many of these locations are either

enclosed (such as transfer stations) or very large areas (such as the coal pile). It is often not practicable to properly view VE emissions from these locations. In addition, emission locations associated with handling wet byproducts and with no vent, stack, and emission point would be VE tested upon request. For those emission points that have an identified vent and without a control device, VE testing is proposed to be conducted prior to renewal of the Title V application.

Since the beginning of operation, VE has been observed annually for several areas or emission points. Many of these emission points have dust collectors (fabric filters) and include fuel storage silos, limestone silos, and fly ash silos. VE measurements for these emission points would be conducted on an annual basis.

Eliminated Sources:

Table 1 lists several emission points that have been eliminated. These should be deleted from Table 6 of PSD-FL-10(C).

Table 1 Requested Changes to PSD-FL-010(C), St. Johns River Power Park Materials Handling Facilities

Emission Unit No.	MATERIAL HANDLING SOURCE	Type Source	PM Emission (lb/hr)	Opacity Limit (%)	Emission Changes from Table 6	Proposed VE Changes	Rationale
023a	Rail Rotary Dumper Building	Fugitive	0.15	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions vent, minor emissions
023b	Conveyor C-3 Tunnel Ventilation-6,400 cfm, No control	Vent	0.32	5	Eliminate PM <sub>10</sub>	Upon Renewal of Title V	Provides tunnel ventilation only, minor emissions
023b	Conveyor C-3 Tunnel Ventilation-6,400 cfm, No control	Vent	0.32	5	Eliminate PM <sub>10</sub>	Upon Renewal of Title V	Provides tunnel ventilation only, minor emissions
023b	Conveyor C-3 Tunnel Ventilation-21,600 cfm, No control	Vent	0.32	5	Eliminate PM <sub>10</sub>	Upon Renewal of Title V	Provides tunnel ventilation only, minor emissions
023c	Shiphold	Fugitive	0.54	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions vent, minor emissions
023d	Unloaded Hopper and Spillage Collector Transfers	Fugitive	0.28	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions vent, minor emissions
023d	Ship unloaded hopper to Transfer CT-1, Spillage Conveyor	Fugitive	1	10	Eliminate PM <sub>10</sub>	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 1	Fugitive	0.04	5	Eliminate PM <sub>10</sub>	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 2	Fugitive	0.04	5	Eliminate PM <sub>10</sub>	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 3	Fugitive	0.04	5	Eliminate PM <sub>10</sub>	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 4	Fugitive	0.04	5	Eliminate PM <sub>10</sub>	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 5	Fugitive	0.04	5	Eliminate PM <sub>10</sub>	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 6	Fugitive	0.04	5	Eliminate PM <sub>10</sub>	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 7	Fugitive	0.04	5	Eliminate PM <sub>10</sub>	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Point 9GC-04 to 9GC-05	Fugitive	0.007	5	Eliminate PM <sub>10</sub>	Upon Request	No emissions vent, minor emissions (gypsum)
023f	Stacker/Reclaimed (Stacker Mode)	Fugitive	2.29	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions vent, minor emissions
023f	Stacker	Fugitive	1.15	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions vent, minor emissions
023f	Reclaimed	Fugitive	0.43	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions vent, minor emissions
023g	Petroleum Coke Reclaimed System	Fugitive	0.32	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions vent, minor emissions
023g	Emergency Reclaim: Hoppers-load out	Fugitive	0.29	10	Eliminate PM <sub>10</sub>	Upon Request	Same as other reclaim systems, not typically used
50	Limestone Reclaim Hopper with Fabric Filter (DLC-01)	Vent	0.14	10	Eliminate PM <sub>10</sub>	Annually	Vent with minor emissions
023h	Limestone Rail Dumper	NA	0.005	10	NA	NA	Source eliminated
023i	Limestone Load out	NA	0.005	10	NA	NA	Source eliminated
023j	Limestone Truck Load out & Transfer	Fugitive	0.1	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions vent, minor emissions
023k	Limestone Storage Pile #1 - Existing	Fugitive	0.26	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions location, minor emissions
023k	Limestone Storage Pile #2 - Fuel yard	Fugitive	0.71	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions location, minor emissions, not currently used
023k	Limestone Load out	Fugitive	None	10	NA	Upon Request	Minor emissions
51	Limestone Silos with Fabric Filters (DLC-01 and DDC-01)	Vent	See Rationale	10	NA	Annually	Minor emissions, PM emission limited to 0.05 lb/hr in Title V
023k	Coal Pile	Fugitive	0.26	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions location, minor emissions
023k	Petroleum Coke Pile	Fugitive	0.71	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions location, minor emissions
023l	Gypsum Storage Pile (Non-Commercial)	Fugitive	0.07	10	NA	NA	Source eliminated
023l	Fly Ash Load out for Silo 1A (metal structure)	Fugitive	0.06	10	Eliminate PM <sub>10</sub>	Upon Request	Emissions vented back to Saleable Ash Silo
023l	Fly Ash Load out for Silo 1B (metal structure)	Fugitive	0.06	10	Eliminate PM <sub>10</sub>	Upon Request	Emissions vented back to Saleable Ash Silo
023l	Wet Fly Ash Load out 1A/1B	Fugitive	See Rationale	10	NA	Upon Request	Wet byproduct w/insignificant emissions, Total PM emissions limited to 0.2 lb/hr in Title V
023l	Fly Ash Load out for Silo 2A (metal structure)	Fugitive	0.06	10	Eliminate PM <sub>10</sub>	Upon Request	Emissions vented back to Saleable Ash Silo
023l	Fly Ash Load out for Silo 2B (metal structure)	Fugitive	0.06	10	Eliminate PM <sub>10</sub>	Upon Request	Emissions vented back to Saleable Ash Silo
023l	Wet Fly Ash Load out 2A/2B	Fugitive	See Rationale	10	NA	Upon Request	Wet byproduct w/insignificant emissions, Total PM emissions limited to 0.2 lb/hr in Title V
54	Saleable Fly Ash Silo 1A with Fabric Filter (concrete structure)	Vent	See Rationale	10	NA	Annually	Vent with minor emissions, Total PM emissions limited to 0.2 lb/hr in Title V
54	Saleable Fly Ash Silo 1B with Fabric Filter (concrete structure)	Vent	See Rationale	10	NA	Annually	Vent with minor emissions, Total PM emissions limited to 0.2 lb/hr in Title V
54	Saleable Fly Ash Silo 2A with Fabric Filter (concrete structure)	Vent	See Rationale	10	NA	Annually	Vent with minor emissions, Total PM emissions limited to 0.2 lb/hr in Title V
54	Saleable Fly Ash Silo 2B with Fabric Filter (concrete structure)	Vent	See Rationale	10	NA	Annually	Vent with minor emissions, Total PM emissions limited to 0.2 lb/hr in Title V
53	Non-Saleable Fly Ash Silo Line 1 with Fabric Filter (concrete structure)	Vent	See Rationale	10	NA	Annually	Vent with minor emissions, Total PM emissions limited to 0.2 lb/hr in Title V
53	Non-Saleable Fly Ash Silo Line 2 with Fabric Filter (concrete structure)	Vent	See Rationale	10	NA	Annually	Vent with minor emissions, Total PM emissions limited to 0.2 lb/hr in Title V
023l	Bottom Ash Load outs 1A/1B	Fugitive	0.09	10	Eliminate PM <sub>10</sub>	Upon Request	Wet byproduct w/insignificant emissions
023l	Bottom Ash Load outs 2A	NA	NA	NA	NA	NA	Source does not exist
023l	Bottom Ash Load outs 2A/2B	Fugitive	0.09	10	Eliminate PM <sub>10</sub>	Upon Request	Wet byproduct w/insignificant emissions
023l	Bottom Ash Load outs 2B	NA	NA	NA	NA	NA	Source does not exist
023m	Gypsum Dewatering Building	Fugitive	0.04	5	Eliminate PM <sub>10</sub>	Upon Request	Wet byproduct w/insignificant emissions
023n	Gypsum Storage Enclosure	Fugitive	0.008	5	Eliminate PM <sub>10</sub>	Upon Request	Wet byproduct w/insignificant emissions
230	Gypsum Truck Load out	Fugitive	0.28	5	Eliminate PM <sub>10</sub>	Upon Request	Wet byproduct w/insignificant emissions
023p	Solid Waste Disposal Area	Fugitive	0.31	10	Eliminate PM <sub>10</sub>	Upon Request	Wet byproduct w/insignificant emissions
023q	Unpaved Road, By-Product Transport	Fugitive	0.58	10	Eliminate PM <sub>10</sub>	Upon Request	No emission vent, reasonable Precautions conducted (watering)
43	Rotary Railcar Unloaded, Fuel Transfer Point (formally DC-1)	Fugitive	0.17	5	Eliminate PM <sub>10</sub>	Upon Request	No emissions vent, minor emissions, enclosed source w/spray bar
023c	Fuel Transfer Building	Fugitive	0.65	10	Eliminate PM <sub>10</sub>	Upon Request	No emissions vent, minor emissions, enclosed source
46	Fuel Handling Building with Fabric Filter (DC-3)	Vent	0.24	5	Eliminate PM <sub>10</sub>	Annually	Vent with minor emissions
47	Unit #1 Fuel Storage Bins with Fabric Filter (DC-4)	Vent	0.009	5	Eliminate PM <sub>10</sub>	Annually	Vent with minor emissions
47	Unit #2 Fuel Storage Bins with Fabric Filter (DC-5)	Vent	0.009	5	Eliminate PM <sub>10</sub>	Annually	Vent with minor emissions
48	Rail Unloaded, Limestone Transfer Points (LDC-1)	NA	0.02	NA	NA	NA	Source eliminated
49	Limestone Load out Facility (LDC-2)	NA	0.006	NA	NA	NA	Source eliminated
52	Quick Lime Silo with Filter Vent (used for water treatment)	Vent	None	NA	NA	Upon Renewal of Title V	Minor emission source, low volume material handling, 15 min VE suggested

Italics indicates that the emission point was not included in Table 6 of PSD-FL-010(C) but is associated with the material handling at SJRPP

Annually

Permit Renewal

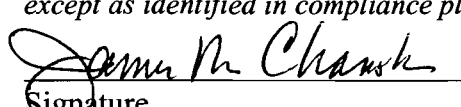
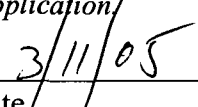
Upon Request

Source eliminated

**APPLICATION INFORMATION**

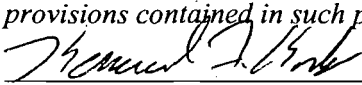
**Application Responsible Official Certification**

**Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the “application responsible official” need not be the “primary responsible official.”**

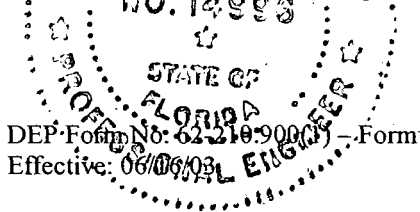
1. Application Responsible Official Name: James M. Chansler, P.E., D.P.A., Vice President, Operations & Maintenance
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):  <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input checked="" type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input checked="" type="checkbox"/> The designated representative at an Acid Rain source.
3. Application Responsible Official Mailing Address... Organization/Firm: Street Address:  City: Jacksonville                      State: FL                      Zip Code: 32202
4. Application Responsible Official Telephone Numbers... Telephone: (904) 665 - 4433                      ext. Fax: (904) 665 - 7376
5. Application Responsible Official Email Address: chanjm@jea.com
6. Application Responsible Official Certification:  <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i>   Signature _____  Date _____

**APPLICATION INFORMATION**

**Professional Engineer Certification**

1. Professional Engineer Name: <b>Kennard F. Kosky</b> Registration Number: <b>14996</b>
2. Professional Engineer Mailing Address... Organization/Firm: <b>Golder Associates Inc.**</b> Street Address: <b>6241 NW 23<sup>rd</sup> Street, Suite 500</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32653</b>
3. Professional Engineer Telephone Numbers... Telephone: <b>(352) 336-5600</b> ext. <b>516</b> Fax: <b>(352) 336-6603</b>
4. Professional Engineer Email Address: <b>kkosky@golder.com</b>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;">               _____              Signature         </div> <div style="text-align: center;">             3/3/05              _____              Date         </div> </div>

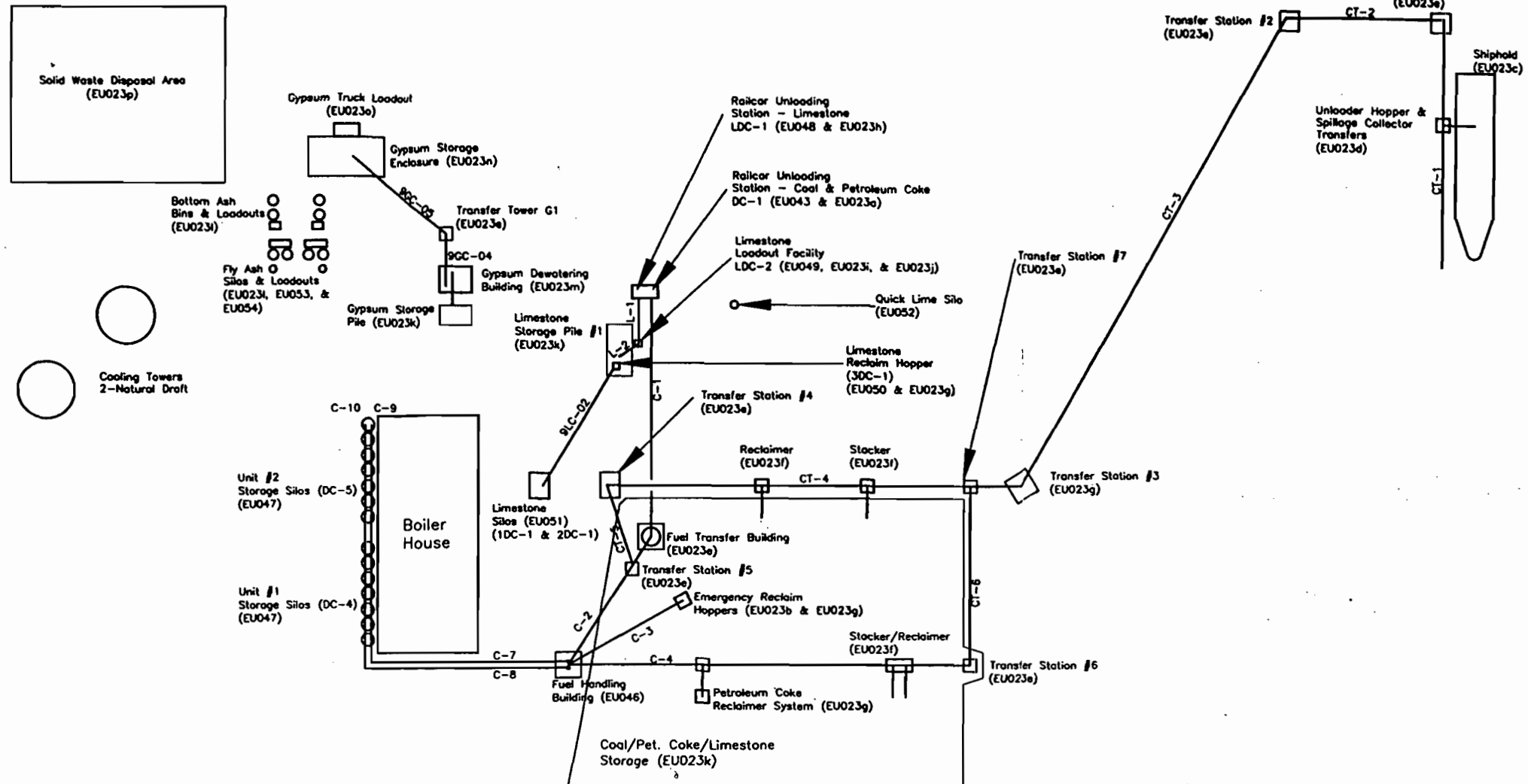
\* Attach any exception to certification statement.  
 \*\* Board of Professional Engineers Certificate of Authorization #00001670



# Figure SJRPP01

## SJRPP Materials Handling & Storage Operations Layout Schematic - Not To Scale

Fugitive Dust Sources	EU ID#	AQCS	Control Efficiency	PM10 (lb/yr)	PM10 (TPY)	Opacity (%)
Shiphold	023c	1, 4, & 6	70.00%	0.257	0.478	10%
Unloader Hopper and Spillage Collector Transfers	023d	1, 3, 4, & 6	85.00%	0.130	0.240	10%
Ship Unloader Hopper, Transfer to CT-1, Spillage Conveyor	023d	1, 3, 4, & 6	85.00%	0.471	0.870	10%
Transfer Station No. 1	023e	1, 2, & 4	98.00%	0.021	0.039	5%
Transfer Station No. 2	023e	1, 2, & 4	98.00%	0.021	0.039	5%
Transfer Station No. 3	023e	1, 2, & 4	98.00%	0.022	0.041	5%
Transfer Station No. 4	023e	1 & 4	98.00%	0.021	0.038	5%
Transfer Station No. 5	023e	1 & 4	98.00%	0.021	0.027	5%
Transfer Station No. 6	023e	1 & 4	98.00%	0.021	0.027	5%
Transfer Station No. 7	023e	1 & 4	98.00%	0.021	0.027	5%
Fuel Transfer Building (DC-2)	023e	1, 3, & 4	85.00%	0.309	0.198	5%
Stacker/Reclaimer (Stacker Mode)	023f	1 & 3	82.67%	1.081	0.893	10%
Stacker	023f	1 & 3	82.67%	0.544	1.005	10%
Reclaimer	023f	1 & 3	89.67%	0.433	0.554	10%
Petroleum Coke Reclaimer System	023g	1	60.00%	0.324	1.420	10%
Emergency Reclaim Hoppers - Loadout	023g	1	75.00%	0.298	0.367	10%
Limestone Railcar Dumper	023h	1, 2, 3, & 4	97.00%	0.005	0.004	10%
Limestone Loadout	023i	1 & 3	97.00%	0.005	0.004	10%
Limestone Truck Loadout & Transfer	023j	1	75.00%	0.089	0.089	10%
Limestone Storage Pile #1 - Existing	023k	1 & 3	90.00%	0.255	0.018	10%
Limestone Storage Pile #2 - Fuel Yard	023k	1, 2 & 3	90.00%	0.118	0.008	10%
Coal Pile	023k	1, 2 & 3	90.00%	0.284	0.008	10%
Petroleum Coke Pile	023k	1, 2 & 3	90.00%	0.711	0.042	10%
Limestone Reclaim Hopper	023l	1	42.50%	0.137	0.137	10%
Fly Ash loadouts 1A	023l	1 & 3	97.00%	0.028	0.125	10%
Fly Ash loadouts 1B	023l	1 & 3	97.00%	0.028	0.125	10%
Fly Ash loadouts 2A	023l	1 & 3	97.00%	0.028	0.125	10%
Fly Ash loadouts 2B	023l	1 & 3	97.00%	0.028	0.125	10%
Bottom Ash Loadouts 1A	023l	1	0.00%	0.042	0.184	10%
Bottom Ash Loadouts 1B	023l	1	0.00%	0.042	0.184	10%
Bottom Ash Loadouts 2A	023l	1	0.00%	0.042	0.184	10%
Bottom Ash Loadouts 2B	023l	1	0.00%	0.042	0.184	10%
Gypsum Dewatering Building	023m	1	0.00%	0.020	0.022	5%
Gypsum Storage Pile (Non-Commercial)	023n	1	85.00%	0.074	0.004	5%
Transfer Point 9GC-04 to 9GC-05	023e	1	0.00%	0.003	0.015	5%
Gypsum Storage Enclosure	023n	1	0.00%	0.004	0.016	5%
Gypsum Truck Loadout	023o	1	0.00%	0.130	0.273	5%
Solid Waste Disposal Area	023p	1 & 2	90.00%	0.307	0.018	10%
Unpaved Road, By-Product Transport	023q	1 & 2	75.00%	0.151	0.663	10%
Point Sources	EU ID#	AQCS	Control Efficiency	PM10 (lb/yr)	PM10 (TPY)	Opacity (%)
Rotary Railcar Unloader, Fuel Transfer Points (DC-1)	043	1, 4, & 5	99.50%	0.0825	0.0529	5%
Fuel Handling Building (DC-3)	046	1, 4, & 5	99.50%	0.1122	0.0719	5%
Unit #1 Fuel Storage Bins (DC-4)	047	1, 4, & 5	99.50%	0.0042	0.0108	5%
Unit #2 Fuel Storage Bins (DC-5)	047	1, 4, & 5	99.50%	0.0042	0.0108	5%
Railcar Unloader, Limestone Transfer Points (LDC-1)	048	1, 4, & 5	99.50%	0.0115	0.0017	5%
Limestone Loadout Facility (LDC-2)	049	1, 4, & 5	99.50%	0.0058	0.0004	5%
Limestone Reclaim Hopper, Transfer Points (3DC-01)	050	1, 4, & 5	99.50%	0.0003	0.0003	5%
Limestone Silo (1DC-01)	051	1, 4, & 5	99.50%	0.0003	0.0003	5%
Limestone Silo (2DC-01)	051	1, 4, & 5	99.50%	0.0003	0.0003	5%
Quick Lime Silo	052	4 & 5	99.50%	0.0225	0.0988	5%
Non-Saleable Ash Silo U#1-A	053	4 & 5	99.50%	0.0169	0.0739	5%
Non-Saleable Ash Silo U#2-A	053	4 & 5	99.50%	0.0169	0.0739	5%
Saleable Ash Silo 1A	054	4 & 5	99.50%	0.0338	0.1478	5%
Saleable Ash Silo 1B	054	4 & 5	99.50%	0.0338	0.1478	5%
Saleable Ash Silo 2A	054	4 & 5	99.50%	0.0338	0.1478	5%
Saleable Ash Silo 2B	054	4 & 5	99.50%	0.0338	0.1478	5%
Railcar Rotary Dumper - Building Emissions	023a	4 & 5	97.00%	0.2746	0.1780	10%
Conveyor C-3 Tunnel Ventilation - 6,400 cfm	023b	4 & 5	98.00%	0.0153	0.0197	5%
Conveyor C-3 Tunnel Ventilation - 6,400 cfm	023b	1, 3, & 4	98.00%	0.0153	0.0197	5%
Conveyor C-3 Tunnel Ventilation - 21,600 cfm	023b	1 & 4	98.00%	0.0518	0.0664	5%



Air Quality Control Systems (AQCS)	
1. Conditioned Materials	
2. Wet Suppression	
3. Water Sprays	
4. Enclosures (Total, Partial, Covers, & Wind Screens)	
5. Dust Collection Systems	
6. Best Operating Practices	

**JEA**  
ST JOHNS RIVER POWER PARK  
PSD PERMIT UPDATE

Materials Handling and Storage Operations  
Equipment Layout

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE N/A	PREPARED DJG	CAD FILE NO. PPOA.dwg
DATE: 04/09/99	CHECKED MAE	FIGURE NO. SJRPP01
	APPROVED DJF	