

F.J. GANNON STATION

**FUEL YARD CRUSHER MODIFICATION
CONSTRUCTION PERMIT APPLICATION**



MAY 1998

RECEIVED
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AIR REGULATION

INTRODUCTION

The Tampa Electric Company (TEC) F.J. Gannon Station located in Tampa, Hillsborough County, Florida is a nominal 1,317 megawatt (MW) electric steam generating facility. The F.J. Gannon Station consists of six steam boilers (units 1 through 6), six steam turbines, one simple-cycle combustion turbine (CT No. 1), a once-through cooling water system, solid fuels, fluxing material, fly ash and slag storage and handling facilities, fuel oil storage tanks, and ancillary support equipment. Unit Nos. 1 through 6 are all fired with coal, which may be supplemented with up to 48 gal/min of used oil, including liquid oil and oil-contaminated solids. No. 2 fuel oil is used for ignition during startup. In addition, TEC is test-firing Unit No. 3 and 4 using a wood-derived fuel (WDF)/coal blend per Florida Department of Environmental Protection (FDEP) approval.

This construction permit application is for one change to fuel yard operations as currently allowed under FDEP Permit AO29-216480. The change involves:

- The addition of two fine grind crushers to the existing crusher house. These crushers will be rated at 600 tons per hour each.

(This construction permit application does not consider the pending construction permit application [Reference No. 0570040-006-AC] which includes an increase to the annual fuel yard throughput.)

This application presents the required general information needed to obtain a construction permit. In addition, specific information regarding the crusher addition is provided in Document II.E.6 of this application.

The potential respirable particulate matter (PM_{10}) emissions associated with this crusher addition are summarized in Document II.E.6. The emission calculation worksheets are provided in Appendix B.

Department of
Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT
APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

1. Facility Owner/Company Name : Tampa Electric Company	
2. Site Name : F.J. Gannon Station	
3. Facility Identification Number : 0570040 [] Unknown	
4. Facility Location : F.J. Gannon Station - Steam Electric Generating Facility Street Address or Other Locator : Port Sutton Road City : Tampa County : Hillsborough Zip Code : 33619-	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No

0570040-007-AD
Rec'd 28 May '98

I. Part 1 - 1

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : Charles.R. Black
Title : Vice-President Energy Supply

2. Owner or Authorized Representative or Responsible Official Mailing Address :

Organization/Firm : Tampa Electric Company
Street Address : 702 North Franklin Avenue
City : Tampa
State : FL Zip Code : 33602-____

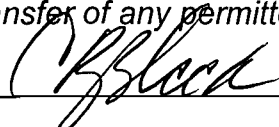
3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone : (813)228-1767 Fax : (813)228-4290

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. 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. 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 any permitted emissions units.*

Signature



Date

5-27-98

* Attach letter of authorization if not currently on file.

I. Part 2 - 1

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
009	Solid Fuel Handling and Storage	ACIF

Purpose of Application and Category

Category I : All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain :

Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

- Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

Category II : All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain :

- Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

- Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed :

- Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

- Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

I. Part 4 - 2

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Current operation permit number(s), if any :
AO29-216480

- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

- Air construction permit for one or more existing, but unpermitted, emissions units.

4. Professional Engineer Statement :

I, the undersigned, hereby certified, except as particularly noted herein, that :*

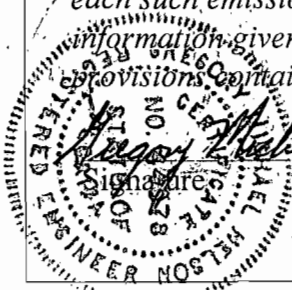
(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(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.

If the purpose of this application is to obtain a Title V source air operation permit (check here [] 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 schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X] 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.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions 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.



Gregory Michael Nelu _____
Signature

5/26/98 _____
Date

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact : Name : Theresa J.L. Watley Title : Consulting Engineer
2. Application Contact Mailing Address : Organization/Firm : Tampa Electric Company Street Address : 6499 U.S. Highway 41 North City : Apollo Beach State : FL Zip Code : 33572-9200
3. Application Contact Telephone Numbers : Telephone : (813)641-5034 Fax : (813)641-5081

Application Comment

Facility Regulatory Classifications

1. Small Business Stationary Source?	N
2. Title V Source?	Y
3. Synthetic Non-Title V Source?	N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	Y
5. Synthetic Minor Source of Pollutants Other than HAPs?	N
6. Major Source of Hazardous Air Pollutants (HAPs)?	Y
7. Synthetic Minor Source of HAPs?	N
8. One or More Emissions Units Subject to NSPS?	Y
9. One or More Emission Units Subject to NESHAP?	N
10. Title V Source by EPA Designation?	N
11. Facility Regulatory Classifications Comment :	

II. Part 2 - 1

B. FACILITY REGULATIONS

Rule Applicability Analysis

Not applicable

B. FACILITY REGULATIONS

List of Applicable Regulations

The lists are presented in Appendix A, Tables A-1 and A-2.

II. Part 3b - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
NOX	A
PM	A
PM10	A
CO	A
VOC	A
H106	A
SO2	A
H107	A
HAPS	A

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information

Pollutant 1

1. Pollutant Emitted :	SO2	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :	A multi-unit or facility-wide cap is not requested as part of this construction permit application.	

II. Part 4b - 7

D. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	DOC.II.E.1
2. Facility Plot Plan :	DOC.II.E.2
3. Process Flow Diagram(s) :	DOC.II.E.3
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	DOC.II.E.4
5. Fugitive Emissions Identification :	DOC.II.E.5
6. Supplemental Information for Construction Permit Application :	DOC.II.E.6

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities :	NA
8. List of Equipment/Activities Regulated under Title VI :	NA
9. Alternative Methods of Operation :	NA
10. Alternative Modes of Operation (Emissions Trading) :	NA
11. Identification of Additional Applicable Requirements :	NA
12. Compliance Assurance Monitoring Plan :	NA
13. Risk Management Plan Verification :	NA
14. Compliance Report and Plan :	NA
15. Compliance Certification (Hard-copy Required) :	NA

EU.1

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1

Solid Fuel Handling and Storage

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

- [X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- [] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? Check one :

- [] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- [] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- [X] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. Part 1 - 1

Emissions Unit Information Section 1

**B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)**

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Solid Fuel Handling and Storage		
2. Emissions Unit Identification Number : 009 [] No Corresponding ID [] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : This emissions unit is designated No. 009 in the F.J. Gannon Station Title V Air Operation Permit application. Fugitive emissions are associated with solid fuel handling. This construction permit application addresses only fugitive emission sources FH-032 through FH-035. Fluxing agent may also be handled by the equipment within this emission unit.		

Emissions Unit Information Section 1
Solid Fuel Handling and Storage

Emissions Unit Control Equipment 1

1. Description :	
Dust supression by chemical stabilizers or wetting agents	
2. Control Device or Method Code :	62

Emissions Unit Information Section 1
Solid Fuel Handling and Storage

Emissions Unit Control Equipment 2

1. Description :	
Process enclosed	
2. Control Device or Method Code :	54

III. Part 3 - 2

**D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

Emissions Unit Information Section

1

Solid Fuel Handling and Storage

Rule Applicability Analysis

Not applicable

III. Part 6a - 1

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

Emissions Unit Information Section
Solid Fuel Handling and Storage

1

List of Applicable Regulations

The lists are presented in Appendix A, Tables A-1 and A-2.

III. Part 6b - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

Solid Fuel Handling and Storage

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	See DOC.II.E.2
2. Emission Point Type Code :	4
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) FH-032 through FH-035	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Not applicable	
5. Discharge Type Code :	
6. Stack Height :	feet
7. Exit Diameter :	feet
8. Exit Temperature :	77 °F
9. Actual Volumetric Flow Rate :	acfm
10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate :	dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates :	
Zone : 17	East (km) : 360.000
	North (km) : 3087.500
14. Emission Point Comment : Nonstack emission point height (Field 12) is different for each emission source. See Figure II.E.6.2 in DOC.II.E.6 for specific height information.	

III. Part 7a - 1

DEP Form No. 62-210.900(1) - Form

Effective : 3-21-96

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

Solid Fuel Handling and Storage

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Solid fuel handling and storage	
2. Source Classification Code (SCC) : 3-05-101-03	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 1,600.00	5. Maximum Annual Rate : 2,850,000.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : Maximum hourly rate is for the crusher house only. See Appendix B for detailed maximum hourly rates.	

III. Part 8 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

**G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)**

Emissions Unit Information Section 1
Solid Fuel Handling and Storage

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	054	062	WP

III. Part 9a - 1.

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Solid Fuel Handling and Storage

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : PM			
2. Total Percent Efficiency of Control :		%	
3. Potential Emissions :		lb/hour	tons/year
4. Synthetically Limited? [X] Yes [] No			
5. Range of Estimated Fugitive/Other Emissions:		1 1.00	to 5.00 tons/year
6. Emissions Factor : Reference :			
7. Emissions Method Code :			
8. Calculations of Emissions :			
9. Pollutant Potential/Estimated Emissions Comment : Emissions unit throughput limited to 2850000 tpy.			

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Solid Fuel Handling and Storage

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	Normal Conditions : 5 % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	EPA Reference Method 9
5. Visible Emissions Comment :	Opacity testing shall be conducted annually on the following affected fugitive emission locations: FH-034 or FH-035. Basis for allowable opacity is FDEP Rule 62-296.711(2)(a), F.A.C., per Specific Condition No. 2 of Permit AO29-216480.

III. Part 10 - 1

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Solid Fuel Handling and Storage

Visible Emissions Limitation : Visible Emissions Limitation 3

1. Visible Emissions Subtype :	20
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	Normal Conditions : 20 % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	Method 9
5. Visible Emissions Comment :	Opacity testing shall be conducted annually on the following affected fugitive emission locations: FH-034 or FH-035. Basis for allowable opacity is EPA Rule 40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation Plants. Please note that the opacity limits of this rule are less restrictive than FDEP Rule 62-296.711, F.A.C.

**K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT
TRACKING INFORMATION**

Emissions Unit Information Section

1

Solid Fuel Handling and Storage

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

- [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [X] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

III. Part 12 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

2. Increment Consuming for Nitrogen Dioxide?

- The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :		
PM :	SO2 :	NO2 :
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		
Only the new crushers are increment consuming for PM.		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

Solid Fuel Handling and Storage

Supplemental Requirements for All Applications

1. Process Flow Diagram :	DOC.II.E.3
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	NA
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	DOC.III.L.7
8. Supplemental Information for Construction Permit Application :	DOC.II.E.6
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alternative Modes of Operation (Emissions Trading) :	NA

III. Part 13 - 1

12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA
14. Acid Rain Application (Hard-copy Required) :	
NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

DOCUMENT II.E.1

AREA MAP SHOWING FACILITY LOCATION

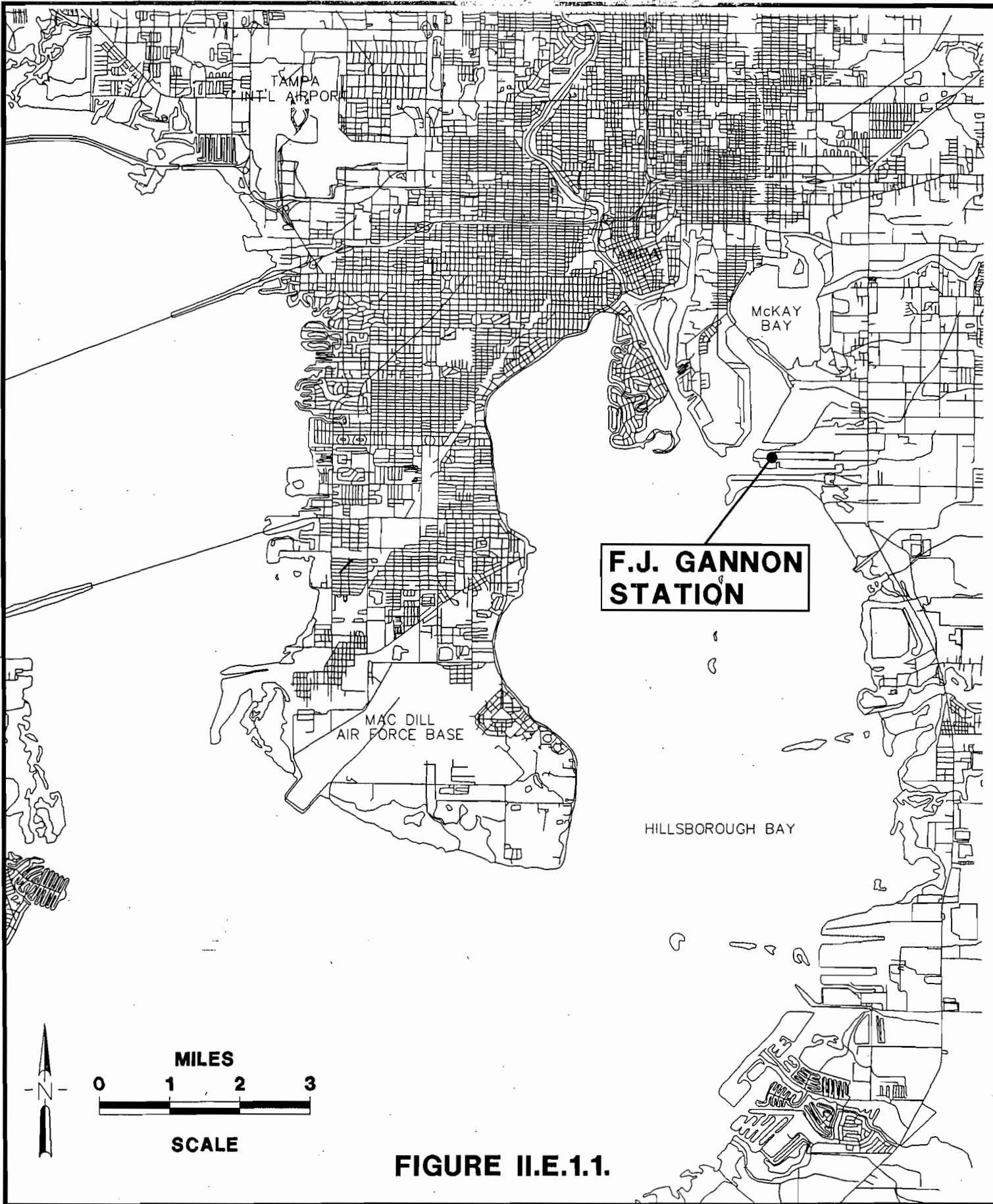


FIGURE II.E.1.1.



**F.J. GANNON STATION
AREA MAP**

DESIGNED BY RMG	CHECKED BY TW	APPROVED BY TW
DATE 5/98	JOB NO. 930-28	
FILE NAME GSAM	DWG. NO. -	

DOCUMENT II.E.2
FACILITY PLOT PLANS

Fuel Handling and Storage Sources (FH)

Description	Source ID	Figure No.
Barge to East Clamshell (Spillage) *	FH-001	II.E.2.2.
Barge to West Clamshell (Spillage) *	FH-002	II.E.2.2.
Barge to Continuous Unloader (Spillage) *	FH-003	II.E.2.2.
East Clamshell to East Hopper *	FH-004	II.E.2.2.
West Clamshell to West Hopper *	FH-005	II.E.2.2.
Continuous Unloader to Conveyor A *	FH-006	II.E.2.2.
Conveyor A to Continuous Feeder *	FH-007	II.E.2.2.
East Hopper to Conveyor B *	FH-008	II.E.2.2.
West Hopper to Conveyor B *	FH-009	II.E.2.2.
Conveyor B to Conveyor C *	FH-011	II.E.2.2.
Conveyor C to Conveyor D1/D2 (Flux to Flux Storage Pile)	FH-012	II.E.2.2.
Railcar to Hopper *	FH-013	II.E.2.2.
Hopper to Conveyor L *	FH-014	II.E.2.2.
Conveyor L to Conveyor D1/D2 (Flux to Flux Storage Pile)	FH-015	II.E.2.2.
Conveyor D1 to Conveyor M1	FH-016	II.E.2.2.
Conveyor D2 to Conveyor M2	FH-017	II.E.2.2.
Conveyor M1 to Conveyor E1	FH-018	II.E.2.2.
Conveyor M2 to Conveyor E2	FH-019	II.E.2.2.
Conveyor E1 to Storage Pile	FH-020	II.E.2.2.
Conveyor E2 to Storage Pile	FH-021	II.E.2.2.
North Storage Pile	FH-022	II.E.2.2.
East Portion of South Storage Pile	FH-023a	II.E.2.2.
West Portion of South Storage Pile	FH-023b	II.E.2.2.
Underground Reclaim System to Conveyor F1	FH-024	II.E.2.2.
Underground Reclaim System to Conveyor F4	FH-025	II.E.2.2.
Underground Reclaim System to Conveyor F3	FH-026	II.E.2.2.
Underground Reclaim System to Conveyor F2	FH-027	II.E.2.2.
Conveyor F1 to Conveyor G1/G2	FH-028	II.E.2.2.
Conveyor F4 to Conveyor G1/G2	FH-029	II.E.2.2.
Conveyor F3 to Conveyor G1/G2	FH-030	II.E.2.2.
Conveyor F2 to Conveyor G1/G2	FH-031	II.E.2.2.
Conveyor G1 to Hammermill Crusher 3A *	FH-032	II.E.2.2.
Hammermill Crusher 3A to Conveyor G1 *	FH-032a	II.E.2.2.
Conveyor G1 to Hammermill Crusher 1A1B *	FH-032b	II.E.2.2.
Conveyor G2 to Hammermill Crusher 3B *	FH-033	II.E.2.2.
Hammermill Crusher 3B to Conveyor G2 *	FH-033a	II.E.2.2.
Conveyor G2 to Hammermill Crusher 2A2B *	FH-033b	II.E.2.2.
Hammermill Crusher 3A to Conveyor H1 *	FH-034a	II.E.2.2.
Hammermill Crusher 3B to Conveyor H2 *	FH-035a	II.E.2.2.
Hammermill Crusher 1A1B to Conveyor H1 *	FH-034	II.E.2.2.
Hammermill Crusher 2A2B to Conveyor H2 *	FH-035	II.E.2.2.
Conveyors H1/H2 to Conveyors J1/J2, Conveyors J1/J2 to Bunker 1 *	FH-036	II.E.2.2.
Conveyors J1/J2 to Bunker 2 *	FH-037	II.E.2.2.
Conveyors J1/J2 to Bunker 3 *	FH-038	II.E.2.2.
Conveyors J1/J2 to Bunker 4 *	FH-039	II.E.2.2.
Conveyors J1/J2 to Bunker 5 *	FH-040	II.E.2.2.
Conveyors J1/J2 to Bunker 6 *	FH-041	II.E.2.2.
Conveyor D1 to Conveyor G1/G2 (By-Pass Storage) *	FH-042	II.E.2.2.
Conveyor D2 to Conveyor G1/G2 (By-Pass Storage) *	FH-043	II.E.2.2.
Storage Pile Maintenance	FH-044	II.E.2.2.

* THIS EQUIPMENT MAY ALSO BE USED TO TRANSFER FLUX.

FIGURE II.E.2.1.



F.J. GANNON STATION EMISSION SOURCE IDENTIFICATION KEY SHEET

DESIGNED BY RMG	CHECKED BY TW	APPROVED BY TW
DATE 5/98	JOB NO. 930-28	
FILE NAME EMSRKS	DWG. NO.	



N.T.S.

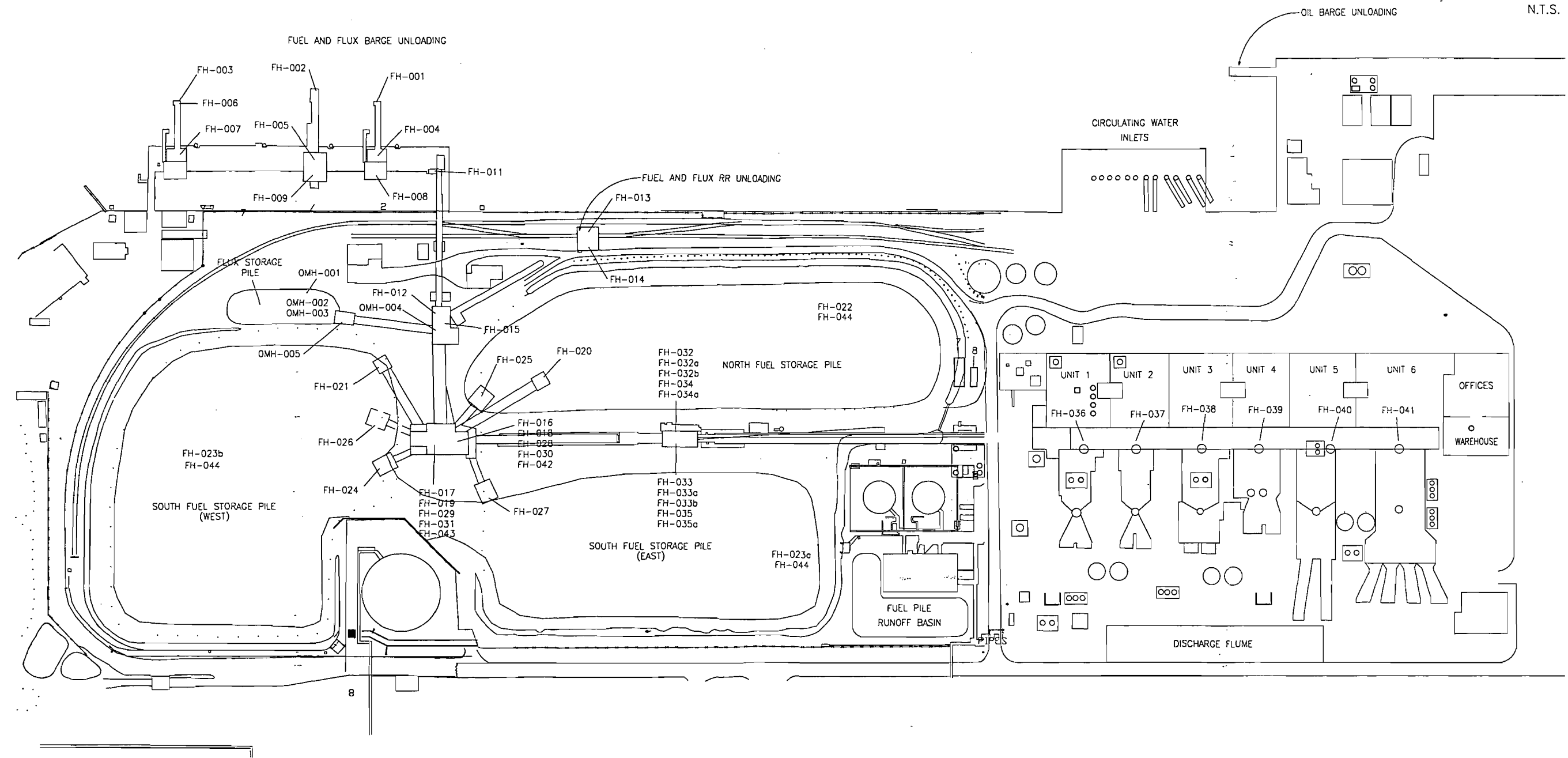


FIGURE II.E.2.2.



**F.J. GANNON STATION
FUEL AND OTHER MATERIAL HANDLING
AND STORAGE EMISSION SOURCES**

DESIGNED BY RMG	CHECKED BY TW	APPROVED BY TW
DATE 5/98	JOB NO. 930-28	
FILE NAME TWPFD2	DWG. NO.	

**DOCUMENT II.E.3
PROCESS FLOW DIAGRAMS**

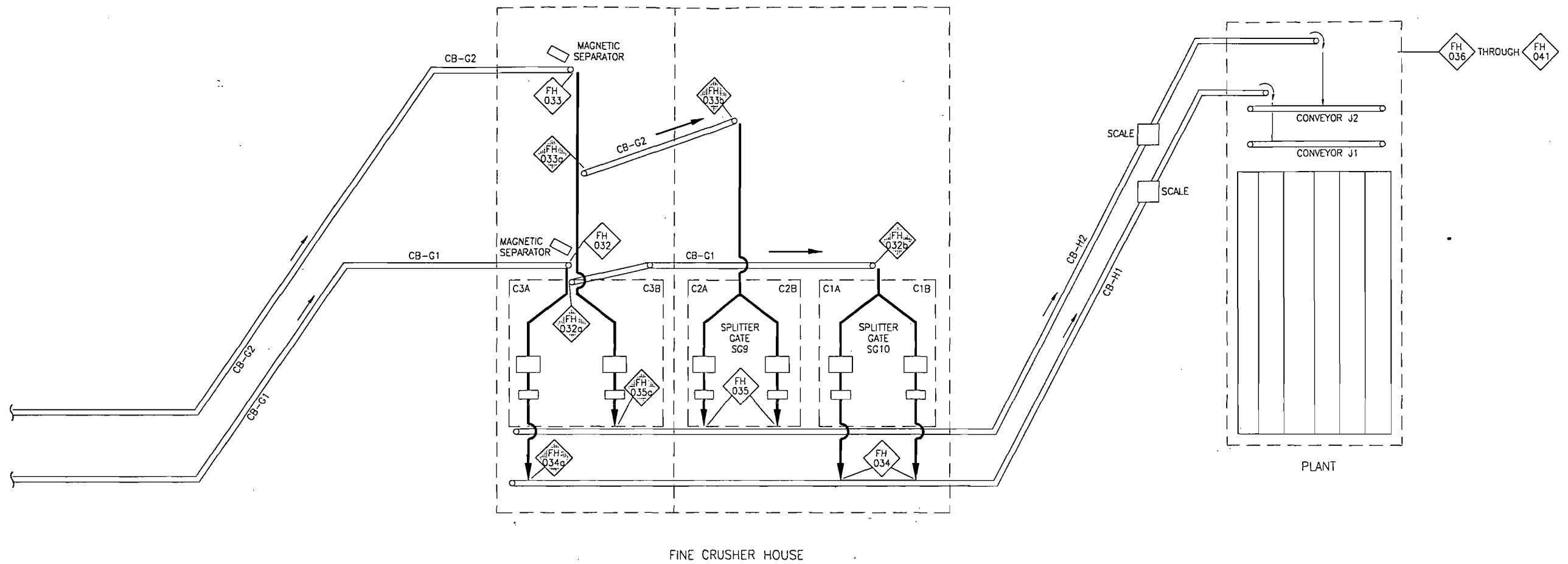




FIGURE II.E.3.1

LEGEND

-  EXST. EMISSION POINT
-  NEW EMISSION POINT
- - - ENCLOSURE



F.J. GANNON STATION
FUEL AND FLUX HANDLING AND STORAGE
PROCESS FLOW DIAGRAM

DESIGNED BY RMG	CHECKED BY TW	APPROVED BY TW
DATE 5/98	JOB NO. 930-28	
FILE NAME CRUSHPFD		DWG. NO.

DOCUMENT II.E.4

PRECAUTIONS TO PREVENT EMISSIONS OF
UNCONFINED PARTICULATE MATTER

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Unconfined particulate matter emissions that may result from operations include:

- Vehicular traffic on paved and unpaved roads.
- Wind-blown dust from yard areas.
- Periodic abrasive blasting.

The following techniques will be used to prevent unconfined particulate matter emissions on an as needed basis:

- Chemical or water application to:
 - ◇ Unpaved roads
 - ◇ Unpaved yard areas
- Paving and maintenance of roads, parking areas and yards.
- Landscaping or planting of vegetation.
- Confining abrasive blasting where possible.
- Other techniques, as necessary

Table II.E.4.1. Permitted Sources of Unconfined PM Emissions at F.J. Gannon Station

<u>Emission Source Description</u>	<u>Source ID</u>
Barge to East Clamshell	FH-001*
Barge to West Clamshell	FH-002*
Barge to Continuous Unloader	FH-003*
East Clamshell to East Hopper	FH-004*
West Clamshell to West Hopper	FH-005*
Continuous Unloader to Conveyor A	FH-006*
Conveyor A to Continuous Feeder	FH-007*
East Hopper to Conveyor B	FH-008*
West Hopper to Conveyor B	FH-009*
Conveyor B to Conveyor C	FH-011*
Conveyor C to Conveyor D1/D2 (fluxing agent to storage)	FH-012
Railcar to Hopper	FH-013*
Hopper to Conveyor L	FH-014*
Conveyor L to Conveyor D1/D2 (fluxing agent to storage)	FH-015
Conveyor D1 to Conveyor M1	FH-016
Conveyor D2 to Conveyor M2	FH-017
Conveyor M1 to Conveyor E1	FH-018
Conveyor M2 to Conveyor E2	FH-019
Conveyor E1 to Storage Pile	FH-020
Conveyor E2 to Storage Pile	FH-021
North Storage Pile	FH-022
East Portion of South Storage Pile	FH-023a
West Portion of South Storage Pile	FH-023b
Underground Reclaim System to Conveyor F1	FH-024
Underground Reclaim System to Conveyor F4	FH-025
Underground Reclaim System to Conveyor F3	FH-026
Underground Reclaim System to Conveyor F2	FH-027
Conveyor F1 to Conveyor G1/G2	FH-028
Conveyor F4 to Conveyor G1/G2	FH-029
Conveyor F3 to Conveyor G1/G2	FH-030
Conveyor F2 to Conveyor G1/G2	FH-031
Conveyor G1 to Hammermill Crusher 3A	FH-032
Hammermill Crusher 3A to Conveyor G1 **	FH-032a
Conveyor G1 to Hammermill Crusher 1A1B **	FH-032b
Conveyor G2 to Hammermill Crusher 3B	FH-033
Hammermill Crusher 3B to Conveyor G2 **	FH-033a
Conveyor G2 to Hammermill Crusher 2A2B **	FH-033b
Hammermill Crusher 1A1B to Conveyor H1	FH-034
Hammermill Crusher 3A to Conveyor H1 **	FH-034a
Hammermill Crusher 2A2B to Conveyor H2	FH-035
Hammermill Crusher 3B to Conveyor H2 **	FH-035a
Conveyor D1 to Conveyor G1/G2 (Storage Bypass)	FH-042
Conveyor D2 to Conveyor G1/G2 (Storage Bypass)	FH-043
Storage Pile Maintenance	FH-044
Truck Dump to Flux Storage Pile	OMH-001

Table II.E.4.1. Permitted Sources of Unconfined PM Emissions at F.J. Gannon Station (Continued, Page 2 of 2)

<u>Emission Source Description</u>	<u>Source ID</u>
Flux Storage Pile Maintenance	OMH-002
Flux Storage Pile	OMH-003
Conveyor S to Conveyor D1/D2	OMH-004
Underground Reclaim System to Conveyor S	OMH-005
Units 1 through 4 Flyash Silo to Tanker Truck	FA-002
Units 5 and 6 Flyash Silo to Tanker Truck	FA-004
Units 5 and 6 Flyash Silo Pugmill	FA-005
Unit 4 Economizer Flyash Silo to Tanker Truck	FA-007

*This equipment may also be used to receive fluxing agents.

**This document is the initial construction permit application for this source.

DOCUMENT II.E.5

FUGITIVE EMISSIONS IDENTIFICATION

IDENTIFICATION OF FUGITIVE EMISSIONS F.J. GANNON STATION

Fugitive emission sources located at F.J. Gannon Station consist of activities associated with the storage and handling of fuel, flux, and flyash. The following sections discuss how the fugitive emission sources are addressed in the application form.

Fuel Handling and Storage Fugitive Emission Sources

All fuel handling and storage fugitive emission sources are addressed as one emissions unit identified as Emission Unit 9 in the previously submitted F.J. Gannon Station Title V Air Operation Permit Application. The equipment comprising this emission unit may also be used to transfer fluxing agents. This emission unit includes fugitive emission sources FH-001 through FH-035 and FH-042 through FH-044.

Figure II.E.2.1, F.J. Gannon Station Emission Source Identification Key Sheet, provides a description of each fuel handling and storage fugitive emission source.

Flyash Handling and Storage Fugitive Emission Sources

All flyash handling and storage fugitive emission sources are addressed as one emissions unit identified as Emission Unit 13 in the previously submitted F.J. Gannon Station Title V Air Operation Permit Application. This emission unit includes fugitive emission sources FA-002, FA-004, FA-005, and FA-007.

Other Material Handling and Storage Fugitive Emission Sources

All exclusive flux handling and storage point and fugitive emission sources are addressed as one emissions unit identified as Emission Unit 14 in the previously submitted F.J. Gannon Station Title V Air Operation Permit Application. This emission unit includes fugitive emission sources OMH-001 through OMH-005.

DOCUMENT II.E.6

**SUPPLEMENTAL INFORMATION FOR
CONSTRUCTION PERMIT APPLICATION**

Document II.E.6.1

Summary of PM₁₀ Emission Changes

DOC.II.E.6.1 - SUMMARY OF PM10 EMISSION CHANGES

Emission Point Description	PM10 Emission			
	Emission Point ID	Actual (tpy)	Future Actual (tpy)	Change (tpy)
Conveyor G1 to Crusher 3A	FH-032	0.03	0.03	0.00
Crusher 3A to Conveyor G1	FH-032a	0.00	0.02	0.02
Conveyor G1 to Crusher 1	FH-032b	0.00	0.02	0.02
Conveyor G2 to Crusher 3B	FH-033	0.03	0.03	0.00
Crusher 3B to Conveyor G2	FH-033a	0.00	0.02	0.02
Conveyor G2 to Crusher 2	FH-033b	0.00	0.02	0.02
Crusher 1 to Conveyor H1	FH-034	0.03	0.02	-0.01
Crusher 3A to Conveyor H1	FH-034a	0.00	0.02	0.02
Crushers 2 to Conveyor H2	FH-035	0.03	0.02	-0.01
Crushers 3B to Conveyor H2	FH-035a	0.00	0.02	0.02
PM10 Emission Summary		0.12	0.22	0.10

Notes:

1. Actual emissions based on average of 1996 and 1997 actual fuel throughput equally divided among transfer points.
2. Future actual emissions based on permitted throughput limit equally divided among transfer points.
3. See Appendix B for emission calculation detail.

Document II.E.6.2

Overview of Hammermill Crusher Additions

Document II.E.6.2

Overview of Hammermill Crusher Additions

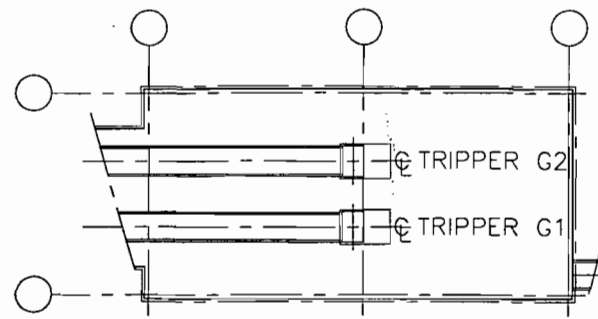
Two new fine grind crushers will be installed in the existing crusher house. Crusher 3A will receive coal from belt G1, and Crusher 3B will receive coal from belt G2. Any portion of the coal directed to Crusher 3A may instead be routed to existing Crusher 1 via a G1 belt extension. Likewise, any portion of coal directed to Crusher 3B may instead be routed to existing Crusher 2 via a G2 belt extension.

Belts H1 and H2 will be extended to accommodate the new crushers. These new Crushers 3A and 3B will each be rated at 600 tons per hour and will feed to belts H1 and H2, respectively. The existing Crushers 1 and 2 are each rated at 800 tons per hour and will continue to feed to belts H1 and H2, respectively.

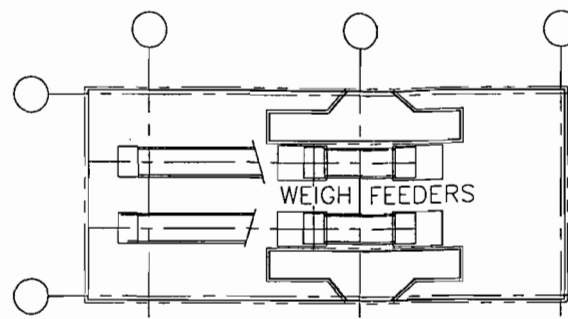
Please refer to Figure II.E.3.1 - Process Flow Diagram and Figure II.E.6.2. - Hammermill Crusher Additions.

Figure II.E.6.2

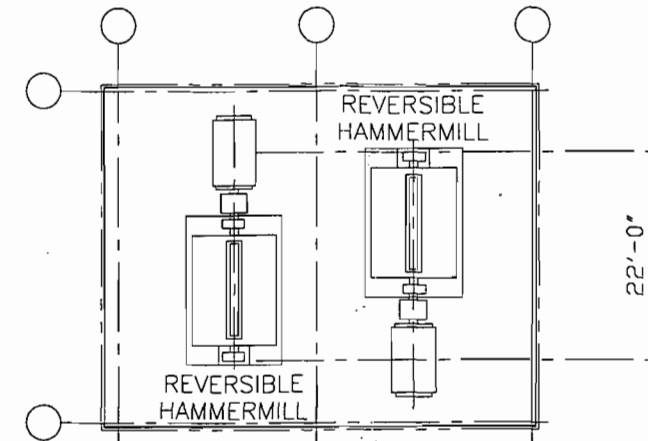
Drawing of Hammermill Crusher Additions



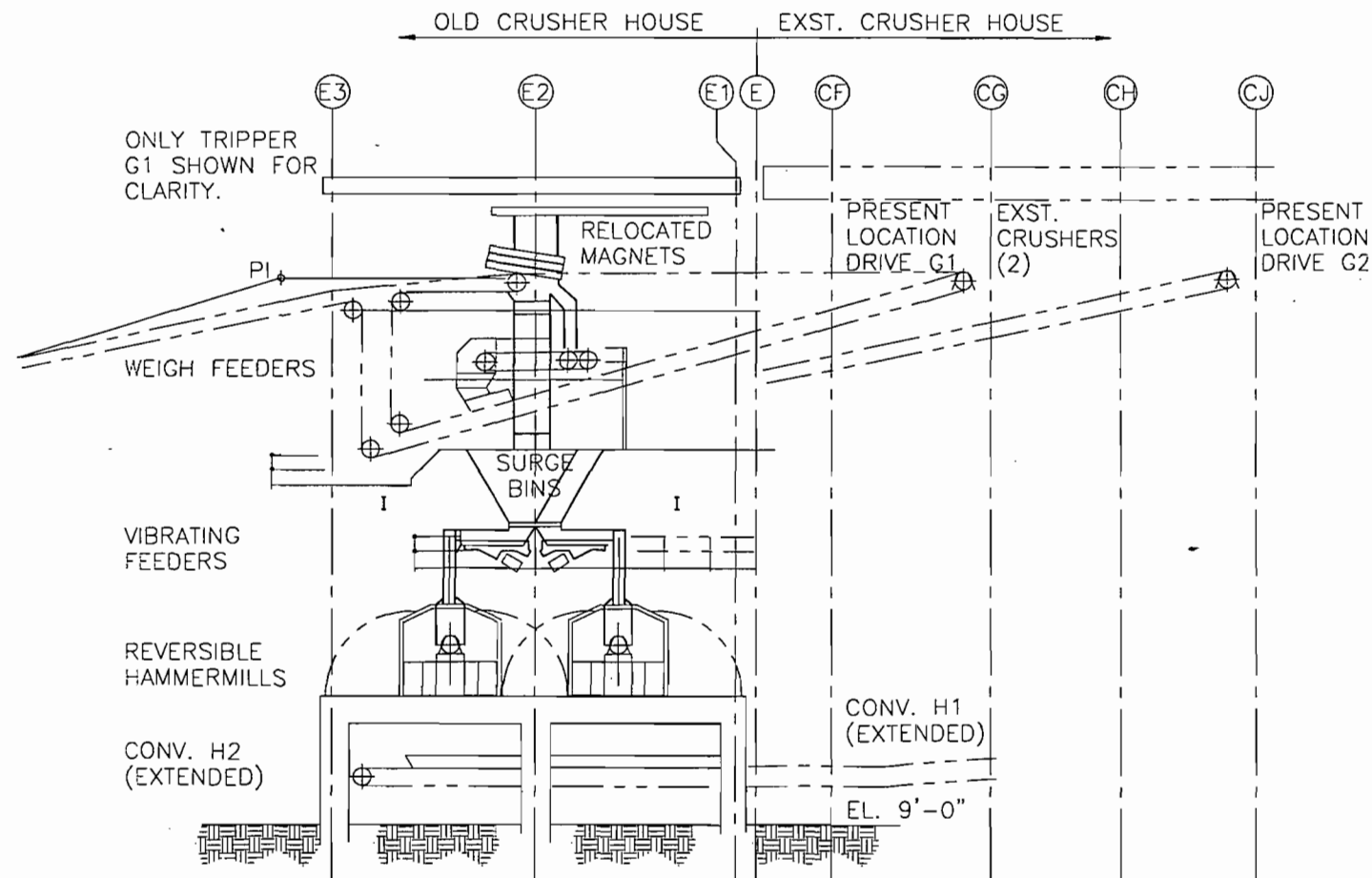
PLAN T/S EL. 64'-0"
N.T.S.



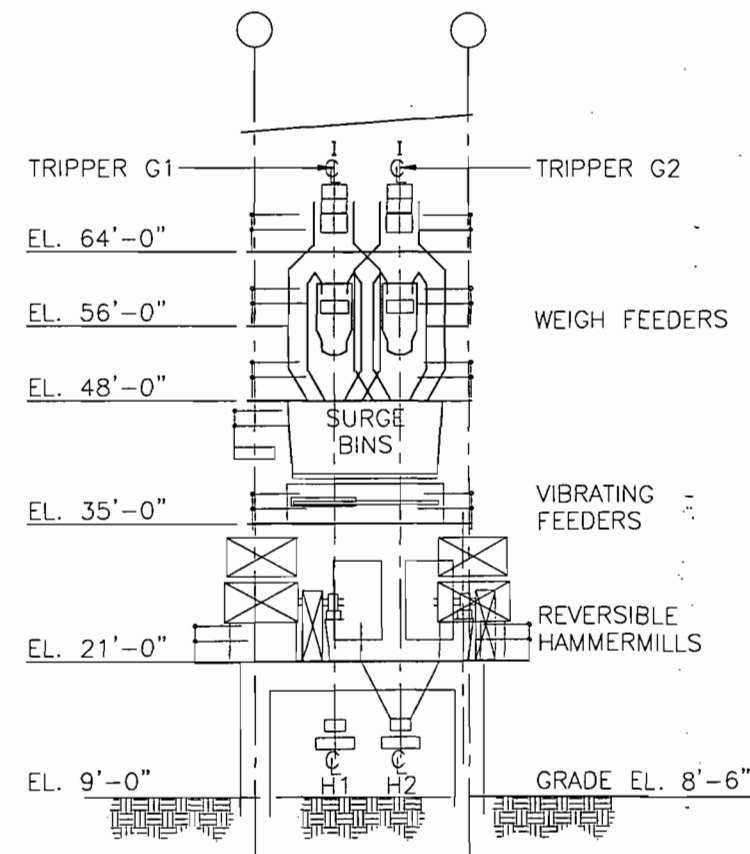
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N.T.S.



PLAN T/S EL. 21'-0"
N.T.S.



ELEVATION -
N.T.S.



ELEVATION -
N.T.S.

PRELIMINARY



**PROPOSED CRUSHER HOUSE
COAL HANDLING FACILITIES
GANNON STATION**

DESIGNED BY RMG	CHECKED BY TW	APPROVED BY TW
DATE 5/98	JOB NO. 930-28	
FILE NAME CRUSHTW	DWG. NO. -	

DOCUMENT III.L.7
OPERATION AND MAINTENANCE PLAN

**E.U.9., UNIT NO. 9—FUEL HANDLING AND STORAGE
OPERATION AND MAINTENANCE FOR PARTICULATE CONTROL**

A. Process System Performance Parameters

1. For all sources covered under this permit, permitted operation schedule: 24 hrs/day, 7 days/week, 52 weeks/yr.
2. Equipment data:
Conveyor hoods: corrugated aluminum
Transfer point enclosures: carbon steel
3. Wet dust suppression:
Manufacturer: Martin Marietta

B. Inspection and Maintenance Procedures:

The fuel yard particulate control equipment receives regular preventative maintenance as follows:

Conveyor enclosures:

1. Daily random visual inspections of conveyor hoods.
2. Daily random visual inspections of the transfer points chute work.

Dust suppression system:

1. Quarterly inspection of system for water leaks.
2. Quarterly inspection of spray nozzles.

The pumps, tanks, etc., that makeup the dust suppression system undergo normal maintenance including lubrication, flushing, and draining.

Should these procedures indicate repairs are necessary, maintenance job requests are initiated. All records are maintained for a minimum of 2 years.

APPENDIX A

LIST OF APPLICABLE REGULATIONS

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 1 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
40 CFR Part 60 - Standards of Performance for New Stationary Sources				
Subpart A - General Provisions		X		Subpart A contains general requirements that are applicable only if a specific NSPS applies. The facility is not subject to any specific NSPS, so the general requirements of Subpart A do not apply.
Subpart D - Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971		X		The steam generators were in existence before August 17, 1971.
Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for which Construction is Commenced After September 18, 1978		X		The electric utility steam generators were in existence before September 18, 1978.
Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units		X		Applies only to generating units with a heat input capacity greater than 100 MMBtu/hr and constructed, modified, or reconstructed after June 19, 1984.
Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units		X		Applies only to generating units with a heat input capacity less than 100 MMBtu/hr and greater than or equal to 10 MMBtu/hr and constructed, modified, or reconstructed after June 9, 1989.
Subpart Y - Standards of Performance for Coal Preparation Plants			FH-032 through FH-035	This construction permit application is for a modification to the coal crushers, which will then subject them to the applicable opacity limits and reporting requirements.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 2 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
40 CFR Part 60 Subpart Ka - Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984		X		Standard applies to storage of petroleum liquids greater than 40,000 gallons. Subpart Ka §60.111a(b) definition of petroleum liquids specifically excludes Nos. 2 through 6 fuel oils. No storage tanks located at the F.J. Gannon Station store petroleum liquids and have a capacity greater than 40,000 gallons.
40 CFR Part 60 Subpart Kb - Standards of Performance for Volatile Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984		X		All No. 2 and No. 6 fuel oil storage tanks with a capacity greater than 40 m ³ (10,567 gallons) were constructed prior to July 23, 1984, and are not subject to Subpart Kb. No other volatile liquid storage tanks located at the F. J Gannon Station were constructed after July 23, 1984, and have a capacity equal to or greater than 40 m ³ .
40 CFR Part 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants		X		Subpart OOO applies to affected sources constructed after August 31, 1983. Non-metallic minerals include limestone. The F.J. Gannon (flux) handling facilities commenced construction prior to August 31, 1983, and are not subject to Subpart OOO.
40 CFR Part 60 - Standards of Performance for New Stationary Sources: Subparts B, C, Ca, Cb, E, Ea, F, G, H, I, J, K, L, M, N, Na, O, P, Q, R, S, T, U, V, W, X, Z, AA, AAA, BB, CC, DD, EE, GG, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, WW, XX, AAA, BBB, DDD, FFF, GGG, HHH, III, JJJ, KKK, LLL, NNN, PPP, QQQ, RRR, SSS, TTT, UUU, and VVV		X		None of the listed NSPS' contain requirements which are applicable to the F.J. Gannon Station.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 3 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
40 CFR Part 61 - National Emission Standards for Hazardous Emission Sources				
<i>Subpart A - General Provisions</i>				
Prohibited Activities	§61.05		Facility-wide	Prohibits construction or modification without first obtaining written approval, operating a new source in violation of any standard after the effective date of the standard, operating an existing source in violation of a standard 90 days after the effective date of the standard, and failure to submit required source test results.
Source Reporting	§61.10		Same as above	Requires submittal of source information.
Compliance with Standards and Maintenance Requirements	§61.12		Same as above	Establishes emission test procedures, requires proper operation and maintenance of the source, including control equipment.
Monitoring Requirements	§61.14		Same as above	General monitoring requirements.
Circumvention	§61.19		Same as above	Emissions that would constitute a violation of a standard cannot be concealed.
<i>Subpart M - National Emission Standards for Asbestos</i>				
Demolition and Renovation	§61.145		Facility-wide	Standards for demolition and renovation.
Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations	§61.150		Same as above	Standards for waste disposal.
Reporting	§61.153		Same as above	Specific reporting requirements.
Active Waste Disposal Sites	§61.154		Same as above	Standards for waste disposal sites.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 4 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants: Subparts B, C, D, E, F, H, I, J, K, L, N, O, P, Q, R, T, V, W, Y, BB, and FF		X		None of the listed NESHAPS' contain requirements which are applicable to the F.J. Gannon Station.
40 CFR Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories: Subparts A, B, D, E, F, G, H, I, L, T, and EE		X		None of the listed NESHAPS' contain requirements which are applicable to the F.J. Gannon Station. In particular, Subpart Q is not an applicable requirement because cooling towers are not utilized. Subpart T is not an applicable requirement because cleaning units using halogenated HAP solvents are not used.
40 CFR Part 72 - Acid Rain Program Permits				
<i>Subpart A - Acid Rain Program General Provisions</i>				
Standard Requirements	\$72.9		CS-001 CS-002 CS-003 CS-004 CS-005 CS-006	General Acid Rain Program requirements. SO ₂ allowance program requirements start January 1, 1995.
<i>Subpart B - Designated Representative</i>				
Designated Representative	\$72.20 - \$72.25		Same as above	General requirements pertaining to the Designated Representative.
<i>Subpart C - Acid Rain Permit Application</i>				
Requirements to Apply	\$72.30(a)		Same as above	Requirement to submit a complete Acid Rain permit application by the applicable deadline.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 5 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
Requirements to Apply	§72.30(b)(1)(I)		Same as above	Deadline to submit a complete Acid Rain permit application was February 15, 1993. (historical)
Requirements to Apply	§72.30©		Same as above	Requirement to submit a complete Acid Rain permit application for each source with an affected unit at least 6 months prior to the expiration of an existing Acid Rain permit governing the unit during Phase II or such longer time as may be approved under part 70 of this chapter that ensures that the term of the existing permit will not expire before the effective date of the permit for which the application is submitted.
Requirements to Apply	§72.30(d)		Same as above	Requirement to submit an original and three copies of all permit applications, to EPA. (historical)
Information Requirements for Acid Rain Permit Applications	§72.31		Same as above	General permit application requirements.
<i>Subpart D - Acid Rain Compliance Plan and Compliance Options</i>				
General	§72.40		Same as above	General compliance plan requirements.
<i>Subpart I - Compliance Certification</i>				
Annual Compliance Certification Report	§72.90		Same as above	Requirement to submit an annual compliance report.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 6 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
40 CFR Part 75 - Continuous Emission Monitoring				
<i>Subpart A - General</i>				
Compliance Dates	§75.4(a)(1)		Same as above	Requirement to complete all certification tests for CEMS and COMS by 11/51/93. (historical)
Prohibitions	§75.5		Same as above	General monitoring prohibitions.
<i>Subpart B - Monitoring Provisions</i>				
General Operating Requirements	§75.10		Same as above	General monitoring requirements.
Specific Provisions for Monitoring SO ₂ Emissions	§75.11(a)		Same as above	SO ₂ continuous monitoring requirements for coal-fired units.
Specific Provisions for Monitoring NO _x Emissions	§75.12(a),(b)		Same as above	NO _x continuous monitoring requirements for coal-fired units.
Specific Provisions for Monitoring CO ₂ Emissions	§75.13(a)		Same as above	CO ₂ continuous monitoring requirements.
Specific Provisions for Monitoring Opacity	§75.14(a)		Same as above	Opacity continuous monitoring requirements for coal-fired units.
<i>Subpart C - Operation and Maintenance Requirements</i>				
Certification and Recertification Procedures	§75.20(a)		Same as above	Requires that monitoring systems meet initial certification requirements by the deadlines stipulated by §75.4. (historical)
Certification and Recertification Procedures	§75.20(a)(1)		Same as above	Requires notification of certification test or retest dates at least 45 days prior to certification testing.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 7 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
Certification and Recertification Procedures	§75.20(a)(2)		Same as above	Requires submittal of certification application in accordance with §75.60.
Certification and Recertification Procedures	§75.20(a)(5)		Same as above	Procedures to be used in the event of agency issues a disapproval of certification application or certification status.
Certification and Recertification Procedures	§75.20(c)(1) - (7), (9)		Same as above	Certification procedure requirements.
Quality Assurance and Quality Control Requirements	§75.21		Same as above	General QA/QC requirements.
Reference Test Methods	§75.22		Same as above	Specifies required test methods to be used for certification or recertification testing.
Out-Of-Control Periods	§75.24		Same as above	Specifies out-of-control periods and required actions to be taken when out-of-control periods occur.
<i>Subpart D - Missing Data Substitution Procedures</i>				
General Provisions	§75.30		Same as above	General missing data requirements.
Initial Missing Data Procedures	§75.31		Same as above	Missing data procedure requirements during the first 720 and 2,160 quality-assured monitor operating hours for SO ₂ pollutant concentration monitor and flow monitor/NO _x CEMS, respectively. (historical)
Determination of Monitor Data Availability for Standard Missing Data Procedures	§75.32		Same as above	Monitor data availability procedure requirements after the first 720 and 2,160 quality-assured monitor operating hours for SO ₂ pollutant concentration monitor and flow monitor/NO _x CEMS, respectively.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 8 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
Standard Missing Data Procedures	§75.33		Same as above	Missing data substitution procedure requirements after the first 720 and 2,160 quality-assured monitor operating hours for SO ₂ pollutant concentration monitor and flow monitor/NO _x CEMS, respectively.
Initial Missing Data Procedures	§75.34	X		Optional missing data substitution requirements for units with add-on emission controls.
<i>Subpart E - Alternative Monitoring Systems</i>				
Alternative Monitoring Systems	§75.40 - 75.48		CS-001 CS-002 CS-003 CS-004 CS-005 CS-006	Optional requirements for alternative monitoring systems.
<i>Subpart F - Recordkeeping Requirements</i>				
General Recordkeeping Provisions	§75.50		Same as above	General recordkeeping requirements.
General Recordkeeping Provisions for Specific Situations	§75.51(b)		Same as above	Recordkeeping requirements for units with add-on controls that choose to use parametric monitoring procedures for missing data substitution pursuant to §75.34
Certification, Quality Assurance, and Quality Control Record Provisions	§75.52		Same as above	General QA/QC recordkeeping requirements.
Monitoring Plan	§75.53(a) - ©		Same as above	Requirement to prepare and maintain a Monitoring Plan.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 9 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
<i>Subpart G - Reporting Requirements</i>				
General Provisions	§75.60		Same as above	General reporting requirements.
Notification of Certification and Recertification Test Dates	§75.61		Same as above	Requires written submittal of certification tests, recertification tests, and revised test dates for CEMS. Notice of certification testing shall be submitted at least 45 days prior to the first day of certification or recertification testing. Notification of any proposed adjustment to certification testing dates must be provided at least 7 business days prior to the proposed date change.
Monitoring Plan	§75.62		Same as above	Monitoring Plan required to be submitted no later than 45 days prior to the certification test. (historical)
Certification or Recertification Application	§75.63		Same as above	Requires submittal of a certification application within 30 days after completing the certification test.
Quarterly Reports	§75.64(a)(1) - (5)		Same as above	Requirement to submit quarterly data report.
Quarterly Reports	§75.64(b), (c), (d)		Same as above	Requirement to submit compliance certification in support of each quarterly data report. Requirement to submit quarterly reports in an electronic format to be specified by EPA.
Opacity Reports	§75.65		Same as above	Requirement to reports of excess opacity emissions to the applicable State (FDEP) agency in the format specified by the State agency.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 10 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
40 CFR Part 76 - Acid Rain Nitrogen Oxides Emission Reduction Program				
NO _x Emission Limitations for Group 1, Phase I Boilers	§76.5	X		F.J. Gannon Station has no tangentially fired boilers.
NO _x Emission Limitations for Group 2 Boilers	§76.6		CS-003 CS-004 CS-005 CS-006	Establishes NO _x emission limits for cyclone and wet bottom boilers effective January 1, 2000.
Permit Application and Compliance Plans	§76.9(a), (b)		Same as above	Requirement to submit a complete Acid Rain permit application and compliance plan (original and three copies) to the permitting authority no later than January 1, 1998. Early election units shall also submit an application by January 1, 1997.
Permit Application and Compliance Plans	§76.9©		Same as above	Required contents of NO _x compliance plans.
Permit Application and Compliance Plans	§76.9(d)		Same as above	Requirement to submit a complete Acid Rain permit application for each source with an affected unit at least 6 months prior to the expiration of an existing Acid Rain permit governing the unit during Phase II or such longer time as may be approved under part 70 of this chapter that ensures that the term of the existing permit will not expire before the effective date of the permit for which the application is submitted.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 11 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
Alternative Emission Limitations	§76.10		Same as above	Alternative requirements for units that cannot meet §76.5 NO _x emission standards using low NO _x burner technology (including separated overfire air).
Emissions Averaging	§76.11		Same as above	Optional requirements for sources which elect to implement a NO _x averaging plan.
Compliance and Excess Emissions	§76.13		Same as above	Required procedures for determining excess emissions.
Monitoring, Recordkeeping, and Reporting	§76.14(a), (b)		Same as above	Petition content requirements for alternative emission limitation demonstration period and alternative emission limitation.
Test Methods and Procedures	§76.15(a)		Same as above	Required test procedures for alternative emission limitation report specified in §76.10(e)(7).
Test Methods and Procedures	§76.15		Same as above	Required test procedures for alternative emission limitation report specified in §76.10(e)(7).
40 CFR Part 77 - Excess Emissions				
Offset Plans for Excess Emissions of Sulfur Dioxide	§77.3		Same as above	Requirement to submit offset plans for excess SO ₂ emissions not later than 60 days after the end of any calendar year during which an affected unit has excess SO ₂ emissions. Required contents of offset plans are specified.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 12 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
Deduction of Allowances to Offset Excess Emissions of Sulfur Dioxide	§77.5(b)		Same as above	Requirement for the Designated Representative to hold enough allowances in the appropriate compliance subaccount to cover deductions to be made by EPA if a timely and complete offset plan is not submitted or if EPA disapproves a proposed offset plan.
Penalties for Excess Emissions of Sulfur Dioxide and Nitrogen Oxides	§77.6		Same as above	Requirement to pay a penalty if excess emissions of SO ₂ or NO _x occur at any affected unit during any year.
40 CFR Part 78 - Appeal Procedures for Acid Rain Program				
Appeal Procedures	§78.1 - 78.20		Same as above	Optional appeal procedures for EPA Acid Rain program decisions.
40 CFR Part 82 - Protection of Stratospheric Ozone				
Production and Consumption Controls	Subpart A	X		F. J. Gannon Station does not produce or consume ozone depleting substances.
<i>Subpart B - Production and Consumption Controls</i>				
Prohibitions	§82.34		Vehicle Maintenance Shop	The facility must use equipment properly approved when performing maintenance on motor vehicles which involves refrigerant in the motor vehicle air conditioner. All such servicing must be conducted by persons trained and certified in accordance with 40 CFR §82.40.
Approved Refrigerant Recycling Equipment	§82.36		Same as above	The facility must use certified refrigerant recycling equipment.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 13 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
Certification, recordkeeping, and public notification requirements	§82.42(a) and (b)		Same as above	Specific certification and recordkeeping requirements must be followed.
Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances	Subpart C	X		F. J. Gannon Station does not sell or distribute any banned nonessential substances.
The Labeling of Products Using Ozone-Depleting Substances	Subpart E	X		F. J. Gannon Station does not produce any products containing ozone depleting substances.
<i>Subpart F - Recycling and Emissions Reduction</i>				
Prohibitions	§82.154		Appliances as defined by §82.152 - any device which contains and uses a Class I or II substance as a refrigerant and which is used for household or commercial purposes, including any air conditioner, refrigerator, chiller, or freezer	Class I and II substances cannot be released from appliances due to maintenance, service, repair, or disposal.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 14 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
Required Practices	§82.156		Same as above	Class I and II substances must be recovered or recycled prior to opening an appliance for maintenance, service, repair, or disposal. Leaking appliances normally containing more than 50 pounds of refrigerant must be repaired, retrofitted, or retired if the leakage rate exceeds specific criteria.
<i>Subpart F - Recycling and Emissions Reduction</i>				
Technician Certification	§82.161		Same as above	Technicians who maintain, service, repair, or dispose of any appliances must be certified.
Certification By Owners of Recovery and Recycling Equipment	§82.162		Same as above	Certified equipment must be used to maintain, service, repair, or dispose of any appliances.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 15 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
Reporting and Recordkeeping Requirements	§82.166(b), (l), (j), (k), (l), and (m)		Appliances as defined by §82.152	<p>To purchase refrigerant, evidence must be presented that the employer has at least one certified technician.</p> <p>Disposers must maintain small appliance verification records.</p> <p>Persons servicing appliances containing 50 or more pounds of refrigerant must provide documentation indicating the amount of refrigerant added to the appliance.</p> <p>Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep servicing records documenting the data and type of service, as well as the quantity of refrigerant added.</p> <p>All records must be retained for at least 3 years.</p>
40 CFR Part 50 - National Primary and Secondary Ambient Air Quality Standards		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 51 - Requirements for Preparation, Adoption, and Submittal of Implementation Plans		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 52 - Approval and Promulgation of Implementation Plans		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 62 - Approval and Promulgation of State Plans for Designated Facilities and Pollutants		X		State agency requirements - not applicable to individual emission sources.
40 CFR Part 70 - State Operating Permit Programs		X		State agency requirements - not applicable to individual emission sources.

Table A-1. Summary of Federal EPA Regulatory Applicability and Corresponding Requirements for the F. J. Gannon Station (Page 16 of 15)

Regulation	Citation	Not Applicable	Applicable: Emission Units	Applicable Requirement or Nonapplicability Rationale
40 CFR Parts 53, 54, 55, 56, 57, 58, 65, 66, 67, 68, 69, 79, 80, 81, 85, 86, 87, 88, and 89		X		The listed regulations do not contain any requirements which are applicable to the F.J. Gannon Station.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the F.J. Gannon Station (Page 1 of 15)

Regulation	Citation	Not Applicable	Applicable		Applicable Requirement or Nonapplicability Rationale
			Facility- Wide	Emission Units	
Chapter 62-4, F.A.C.- Permits Part I General					
Scope of Part I	§62-4.001, F.A.C.	X			Contains no applicable requirements.
Definitions	§62-4.020, F.A.C.	X			Contains no applicable requirements.
General Prohibition	§62-4.030, F.A.C.*		X		All stationary air pollution sources must be permitted, unless otherwise exempted.
Exemptions	§62-4.040, F.A.C.		X		Certain structural changes exempt from permitting. Other stationary sources exempt from permitting upon FDEP insignificance determination.
Procedure to Obtain Permits; Application	§62-4.050(1), (2), (3), and (4)a.2, F.A.C.		X		All permit applications must be submitted on FDEP forms, in quadruplicate, and signed by a Professional Engineer. No application fee is required.
Consultation	§62-4.060, F.A.C.	X			Consultation is encouraged, not required.
Standards for Issuing or Denying Permits; Issuance; Denial	§62-4.070, F.A.C.	X			Establishes standard procedures for FDEP. Requirement is not applicable to the facility.
Modification of Permit Conditions	§62-4.080, F.A.C.		X		Construction permit application is for a modification to the existing operating permit.
Renewals	§62-4.090, F.A.C.		X		Establishes permit renewal criteria. Additional criteria are cited at §62-213.430(3), F.A.C.
Suspension and Revocation	§62-4.100, F.A.C.*		X		Establishes permit suspension and revocation criteria.
Financial Responsibility	§62-4.110, F.A.C.		X		Proof of financial responsibility may be required.

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Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the F.J. Gannon Station (Page 2 of 15)

Regulation	Citation	Not Applicable	Applicable		Applicable Requirement or Nonapplicability Rationale
			Facility- Wide	Emission Units	
Transfer of Permits	§62-4.120, F.A.C.	X			Construction permit application is for a modification to the existing operating permit. A sale or legal transfer of a permitted facility is not included in this permit application.
Plant Operation—Problems	§62-4.130, F.A.C.		X		Immediate notification is required whenever the permittee is temporarily unable to comply with any permit condition. Notification content is specified.
Permit Conditions	§62-4.160, F.A.C.		X		Specifies general conditions that must be included in all permits.
Chapter 62-103, F.A.C. - Rules of Administrative Procedure - Final Agency Action (Nonrulemaking) and Appeal					
Public Notice of Application and Proposed Agency Action	§62-103.150, F.A.C.		X		Applicant may be required to publish Notice of Application.
Chapter 62-204, F.A.C. - State Implementation Plan					
State Implementation Plan	62-204.100, .200, .220-(1)-(3), .240, .260, .320, .340, .360, .400, and .500, F.A.C.	X			Contains no applicable requirements.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the F.J. Gannon Station (Page 3 of 15)

Regulation	Citation	Not Applicable	Applicable		Applicable Requirement or Nonapplicability Rationale
			Facility- Wide	Emission Units	
State Implementation Plan	62-204.800(7)(a), (b)2., and (b)29., F.A.C.*	X			Contains no applicable requirements.
State Implementation Plan	62-204.800(8)(a), (b)8., F.A.C.*		X		NESHAPS Subparts M; see Table A-1 for detailed federal regulatory citations.
State Implementation Plan	62-204.800(12), (13), (14), (15), (16), and (17), F.A.C.*			CS-001 CS-002 CS-003 CS-004	Acid Rain Program; see Table A-1 for detailed federal regulatory citations.
State Implementation Plan	62-204.800(19), F.A.C.*		X		Protection of Stratospheric Ozone; see Table A-1 for detailed federal regulatory citations.
Ambient Air Quality Protection	62-204.220(4), F.A.C.	X			Assessments of ambient air pollutant impacts must be made using applicable air quality models, data bases, and other requirements approved by FDEP and specified in 40 CFR Part 51, Appendix W. Air quality modeling is not required for this construction permit application.
Chapter 62-210, F.A.C. - Stationary Sources - General Require- ments					
Purpose and Scope	§62-210.100, F.A.C.	X			Contains no applicable requirements.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the F.J. Gannon Station (Page 4 of 15)

Regulation	Citation	Not Applicable	Applicable		Applicable Requirement or Nonapplicability Rationale
			Facility-Wide	Emission Units	
Definitions	§62-210.200, F.A.C.	X			Contains no applicable requirements.
Permits Required	§62-210.300, F.A.C., except §62-210.300(1), F.A.C.		X		Air operation permit required, with the exception of certain facilities and sources. Startup notification required if a permitted source has been shut down for more than 1 year.
Air Construction Permits	§62-210.300(1), F.A.C.		X		This construction permit application is for a modification to the existing operating permit.
Public Notice and Comment					
Public Notice of Proposed Agency Action	§62-210.350(1), F.A.C.		X		All permit applicants required to publish notice of proposed agency action.
Additional Notice Requirements for Sources Subject to Prevention of Significant Deterioration or Nonattainment Area New Source Review	§62-210.350(2), F.A.C.	X			PSD and nonattainment area NSR application not included in this application package.
Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources	§62-210.350(3), F.A.C.	X			Additional public notice requirements do not apply to construction permit applicants.
Public Notice and Hearing Requirements for State Implementation Plan Revisions	§62-210.350(4), F.A.C.	X			Defines requirements applicable to FDEP, only.
Administrative Permit Corrections	§62-210.360, F.A.C.	X			An administrative permit correction is not requested in this construction permit application.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the F.J. Gannon Station (Page 5 of 15)

Regulation	Citation	Not Applicable	Applicable		Applicable Requirement or Nonapplicability Rationale
			Facility-Wide	Emission Units	
<p>Reports</p> <p>Notification of Intent to Relocate Air Pollutant Emitting Facility</p> <p>Annual Operating Report for Air Pollutant Emitting Facility</p>	<p>§62-210.370(1), F.A.C.</p> <p>§62-210.370(2), F.A.C.</p>	<p>X</p>		<p>FH-001 through FH-044, OMH-001 through OMH-005, CS-001 through CS-007, FA-001 through FA-007</p>	<p>Facility does not have any relocatable emission units.</p> <p>Specifies annual reporting requirements.</p>
<p>Emission Estimates</p> <p>Applicability</p> <p>General Provisions</p> <p>Reserved</p> <p>Solid Sulfur Storage and Handling Facilities</p>	<p>§62-210.400(1), F.A.C.</p> <p>§62-210.400(2), F.A.C.</p> <p>§62-210.400(3), F.A.C.</p> <p>§62-210.400(4), F.A.C.</p>	<p>X</p> <p>X</p>	<p>X</p> <p>X</p>		<p>Establishes emission estimating standards for all regulatory purposes.</p> <p>Defines the purposes to which emission estimating may be applied.</p> <p>Contains no applicable requirements.</p> <p>Estimation procedure is specified only for solid sulfur storage and handling facilities.</p>
<p>Air Quality Models</p>	<p>62-210.500, F.A.C.</p>	<p>X</p>			<p>Air quality modeling is not required for this construction permit application.</p>
<p>Stack Height Policy</p>	<p>62-210.550, F.A.C.</p>	<p>X</p> <p>CS-001 through CS-007; FA-001 through FA-007</p>		<p>FH-036 through FH-041</p>	<p>Nonapplicable stacks were constructed prior to December 31, 1970, and have not been subject to an applicable modification since that date; applicable stacks have been constructed or modified since December 31, 1970.</p>

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the F.J. Gannon Station (Page 6 of 15)

Regulation	Citation	Not Applicable	Applicable		Applicable Requirement or Nonapplicability Rationale
			Facility-Wide	Emission Units	
Circumvention	§62-210.650, F.A.C.			CS-001 through CS-006; CH-036 through CH-041; FA-001 through FA-007	An applicable air pollution control device cannot be circumvented and must be operated whenever the emission unit is operating.
Excess Emissions	§62-210.700, F.A.C.		X		Excess emissions due to startup, shut down, and malfunction are limited. Excess emissions due to malfunction must be reported. Excess emissions due to certain other causes are prohibited.
Forms and Instructions	§62-210.900, F.A.C.	X			Contains no applicable requirements.
Severability	§62-210.980, F.A.C.	X			Contains no applicable requirements.
Effective Date	§62-210.990, F.A.C.	X			Contains no applicable requirements.
Chapter 62-212, F.A.C. - Stationary Sources - Preconstruction Review					
Purpose and Scope	§62-212.100, F.A.C.	X			Contains no applicable requirements.
Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Review	§62-212.300, F.A.C.		X		Establishes requirements for facility construction and modification permitting.
Prevention of Significant Deterioration	§62-212.400, F.A.C.		X		Establishes requirements for facility construction and modification permitting.
Best Available Control Technology (BACT)	§62-212.410, F.A.C.	X			Contains no applicable requirements.
New Source Review for Nonattainment Areas	§62-212.500, F.A.C.		X		Establishes requirements for facility construction and modification permitting.
Source Specific New Source Review Requirements	§62-212.600, F.A.C.	X			Applicable only to sulfur storage and handling facilities.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the F.J. Gannon Station (Page 7 of 15)

Regulation	Citation	Not Applicable	Applicable		Applicable Requirement or Nonapplicability Rationale
			Facility- Wide	Emission Units	
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution					
Purpose and Scope	§62-213.010, F.A.C.	X			Contains no applicable requirements.
Annual Licensing Fee	§62-213.200(1), and (4), F.A.C.		X		Operating license fee and documentation requirements.
	§62-213.200(2), (3), and (5), F.A.C.	X			Contains no applicable requirements.
Title V General Permits	§62-213.300, F.A.C.	X			No eligible facilities.
Permits and Permit Revisions Required	§62-213.400, F.A.C.		X		Title V operation permit required.
Changes Without Permit Revision	§62-213.410, F.A.C.		X		Certain changes may be made if specific notice and recordkeeping requirements are met.
Immediate Implementation Pending Revision Process	§62-213.412, F.A.C.		X		Certain modifications can be implemented pending permit revision if specific criteria are met.
Fast-Track Revisions of Acid Rain Parts	§62-213.413, F.A.C.			CS-001 through CS-006	Optional provisions for Acid Rain permit revision.
Trading of Emissions within a Source	§62-213.415, F.A.C.		X		Allows facilities to develop a federally enforceable emissions cap independent of other applicable requirements.
Permit Applications	§62-213.420, F.A.C.		X		Title V operating permit application required.
Permit Issuance, Renewal, and Revision	Action on Application	§62-213.430(1), F.A.C.	X		Contains no applicable requirements.
	Permit Denial	§62-213.430(2), F.A.C.	X		Contains no applicable requirements.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the F.J. Gannon Station (Page 8 of 15)

Regulation	Citation	Not Applicable	Applicable		Applicable Requirement or Nonapplicability Rationale
			Facility- Wide	Emission Units	
Permit Renewal and Expiration	§62-213.430(3), F.A.C.		X		Defines permit renewal application contents.
Permit Revision	§62-213.430(4), F.A.C.		X		Defines permit revision application contents.
EPA Recommended Actions	§62-213.430(5), F.A.C.	X			Contains no applicable requirements.
Permit Content	§62-213.440, F.A.C.		X		Defines permit content.
Permit Review by EPA and Affected States	§62-213.450, F.A.C.	X			Contains no applicable requirements.
Permit Shield	§62-213.460, F.A.C.		X		Provides permit shield for facilities in compliance with permit terms and conditions.
Forms and Instructions	§62-213.900, F.A.C.	X			Contains no applicable requirements.
Chapter 62-214—Requirements for Sources Subject to the Federal Acid Rain Program					
Purpose and Scope	§62-214.100, F.A.C.	X			Contains no applicable requirements.
Applicability	§62-214.300, F.A.C.		X		Facility includes Acid Rain units, therefore facility compliance with §62-213 and §62-214, F.A.C., is required.
Applications	§62-214.320, F.A.C.			CS-001 through CS-006	An Acid Rain Part application for each Acid Rain unit must be included in the Title V operating permit application.
Acid Rain Compliance Plan and Compliance Options	§62-214.330, F.A.C.			CS-001 through CS-006	A complete Acid Rain compliance plan for each Acid Rain unit must be included in the Acid Rain Part application.
Exemptions	§62-214.340, F.A.C.			CS-001 through CS-006	An application may submitted for certain exemptions.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the F.J. Gannon Station (Page 9 of 15)

Regulation	Citation	Not Applicable	Applicable		Applicable Requirement or Nonapplicability Rationale
			Facility- Wide	Emission Units	
Certification	§62-214.350, F.A.C.			CS-001 through CS-006	The designated representative must certify all Acid Rain submissions.
Department Action on Applications	§62-214.360, F.A.C.	X			Contains no applicable requirements.
Revisions and Administrative Corrections	§62-214.370, F.A.C.			CS-001 through CS-006	Defines revision procedures and automatic amendments.
Acid Rain Part Content	§62-214.420, F.A.C.			CS-001 through CS-006	Defines the contents of any draft, proposed, or final Acid Rain Part.
Implementation and Termination of Compliance Options	§62-214.430, F.A.C.			CS-001 through CS-006	Defines permit activation and termination procedures.
Chapter 62-252 - Gasoline Vapor Control	§62-252, F.A.C.	X			Facility has a gasoline throughput of less than 20,000 gal/month.
Chapter 62-256—Open Burning and Frost Protection Fires					
Declaration and Intent	§62-256.100, F.A.C.	X			Contains no applicable requirements.
Definitions	§62-256.200, F.A.C.	X			Contains no applicable requirements.
Prohibitions	§62-256.300, F.A.C.*		X		Defines prohibited open burning.
Burning for Cold and Frost Protection	§62-256.450, F.A.C.	X			Limited to agricultural protection.
Land Clearing	§62-256.500, F.A.C.		X		Defines allowed open burning for nonrural land clearing and structure demolition.
Industrial, Commercial, Municipal, and Research Open Burning	§62-256.600, F.A.C.	X			Industrial open burning is not conducted.
Open Burning Allowed	§62-256.700, F.A.C.		X		Allows open fires for warming of outdoor workers.
Effective Date	§62-256.800, F.A.C.	X			Contains no applicable requirements.
Chapter 62-257—Asbestos Fee	§62-257, F.A.C.*		X		Requires notice and payment of fee for asbestos removal projects.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the F.J. Gannon Station (Page 11 of 15)

Regulation	Citation	Not Applicable	Applicable		Applicable Requirement or Nonapplicability Rationale
			Facility- Wide	Emission Units	
Reasonably Available Control Technology (RACT) Volatile Organic Compounds (VOC) and Nitrogen Oxides (NO _x) Emitting Facilities	§62-296.500 through §62-296.516, F.A.C.	X			Facility does not include any regulated emission units.
Reasonably Available Control Technology (RACT)—Requirements for Major VOC- and NO _x -Emitting Facilities	§62-296.570, F.A.C.	X			Facility is not located in a specified VOC nonattainment area or a specified VOC air quality maintenance area.
Reasonably Available Control Technology (RACT)—Lead	§62-296.600 through §62-296.605, F.A.C.	X			Facility does not include any regulated emission units.
Reasonably Available Control Technology (RACT)—Particulate Matter	§62-296.700, F.A.C.			FH-001 through FH-021, FH-024 through FH-043, OMH-001, OMH-004, OMH-005, CS-001 through CS-006, FA-001 through FA-007	Requires compliance with specific, applicable emission limiting standards.
	§62-296.701, F.A.C.	X			Facility does not include any regulated emission units.
Fossil Fuel Steam Generators	§62-296.702, F.A.C.			CS-001 through CS-006	Defines specific emission limitations for the applicable emission units.
	§62-296.703 through §62-296.710, F.A.C.	X			Facility does not include any regulated emission units.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the F.J. Gannon Station (Page 12 of 15)

Regulation	Citation	Not Applicable	Applicable		Applicable Requirement or Nonapplicability Rationale
			Facility- Wide	Emission Units	
Materials Handling, Sizing, Screening, Crushing, and Grinding Operations	§62-296.711, F.A.C.			FH-001 through FH-021, FH-024 through FH-043, OMH-001, OMH-004, OMH-005, FA-001 through FA-007	Defines specific emission limitations for the applicable emission units.
	§62-296.712, F.A.C.	X			Facility does not include any regulated emission units.
Chapter 62-297—Stationary Sources—Emissions Monitoring					
National Emission Standards for Hazardous Air Pollutants (NESHAPs)- Part 63	§62-296.820, F.A.C.	X			Facility does not include any regulated emission units.
Purpose and Scope	§62-297.100, F.A.C.	X			Contains no applicable requirements.
General Test Requirements	§62-297.310, F.A.C.			FH-004, FH-005, FH-013, FH-020, FH-021, FH-034 through FH-043, CS-001 through CS-007, FA-001 through FA-007	Provides certain compliance test protocols.
Compliance Test Methods	§62-297.400, F.A.C.	X			Contains no applicable requirements.
Supplementary Test Procedures	§62-297.440, F.A.C.	X			Contains no applicable requirements.
EPA VOC Capture Efficiency Test Procedures	§62-297.450, F.A.C.	X			Contains no applicable requirements.
Continuous Emission Monitoring Requirements	§62-297.500, F.A.C.	X			Contains no applicable requirements.

Table A-2. Summary of FDEP Regulatory Applicability and Corresponding Requirements for the F.J. Gannon Station (Page 13 of 15)

Regulation	Citation	Not Applicable	Applicable		Applicable Requirement or Nonapplicability Rationale
			Facility- Wide	Emission Units	
Performance Specifications	§62-297.520, F.A.C.	X			Contains no applicable requirements.
Exceptions and Approval of Alternate Procedures and Requirements	§62-297.620, F.A.C.	X			Exceptions or alternate procedures have not been requested.
Operating Permits					
	AO29-216480			FH-001 through FH-035, FH-042, FH-044, OMH-001 through OMH-005	Expires 9/12/97; but has been extended pending the Fuel Yard Modification Construction Permit to increase throughput (Reference 0570040-006-AC).

*State requirement only; not federally enforceable.

APPENDIX B
EMISSION CALCULATION WORKSHEETS

APPENDIX B.1

FUTURE ACTUAL PM₁₀ EMISSION CALCULATION SPREADSHEETS

FUTURE ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-032

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Conveyor G1 to Hammermill Crusher 3A

Emission Control Method(s)/ID No(s): Enclosure with Dust Suppressant

Emission Point ID: FH-032

Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission(lb/hr)} = 0.0011 \times \text{material transferred(tons/hr)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100]$$

$$\text{Emission(tpy)} = 0.0011 \times \text{material transferred(tpy)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, Fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed (mph)	Actual Quantity Transferred		Material Moisture Content (pct)	Control Efficiency (pct)	Actual PM10 Emission Rates	
	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
8.6	800	1,425,000	6.5	90.0	0.03	0.03

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed	Tampa, FL, Climate of the State, Third Edition, 1985.
Actual Quantity Transferred	TEC, 1998.
Material Moisture Content	Average fuel moisture content, TEC, 1994.
Control Efficiency	Table 3.2.17-2, Workbook on Estimation of Emissions and Dispersion Modeling of Fugitive Particulate Sources, UARG, September 1981.

NOTES AND OBSERVATIONS

Future actual PM10 emissions based on 2,850,000 tpy of coal used.

Future actual coal reclaiming was assumed to be equally divided between conveyors G1 and G2, or 1,425,000 tons per conveyor.

Future actual coal reclaiming from conveyors G1 and G2 was also assumed to be equally divided between Crushers 3A and 1, or Crushers 3B and 2; or 712,500 tons per crusher series.

DATA CONTROL

Data Collected by:	T.J.L. Watley	Date:	05/26/98
Evaluated by:	T.J.L. Watley	Date:	05/26/98
Data Entered by:	T.J.L. Watley	Date:	05/26/98
Reviewed by:	A. Trbovich	Date:	05/26/98

FUTURE ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-032a

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Hammermill Crusher 3A to Conveyor G1

Emission Control Method(s)/ID No(s): Enclosure with Dust Suppressant

Emission Point ID: FH-032a Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission(lb/hr)} = 0.0011 \times \text{material transferred(tons/hr)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100]$$

$$\text{Emission(tpy)} = 0.0011 \times \text{material transferred(tpy)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, Fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed (mph)	Actual Quantity Transferred		Material Moisture Content (pct)	Control Efficiency (pct)	Actual PM10 Emission Rates	
	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
8.6	600	712,500	6.5	90.0	0.03	0.02

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed	Tampa, FL, Climate of the State, Third Edition, 1985.
Actual Quantity Transferred	TEC, 1998.
Material Moisture Content	Average fuel moisture content, TEC, 1994.
Control Efficiency	Table 3.2.17-2, Workbook on Estimation of Emissions and Dispersion Modeling of Fugitive Particulate Sources, UARG, September 1981.

NOTES AND OBSERVATIONS

Future actual PM10 emissions based on 2,850,000 tpy of coal used.

Future actual coal reclaiming was assumed to be equally divided between conveyors G1 and G2, or 1,425,000 tons per conveyor.

Future actual coal reclaiming from conveyors G1 and G2 was also assumed to be equally divided between Crushers 3A and 1, or Crushers 3B and 2; or 712,500 tons per crusher series.

DATA CONTROL

Data Collected by:	T.J.L. Watley	Date:	05/26/98
Evaluated by:	T.J.L. Watley	Date:	05/26/98
Data Entered by:	T.J.L. Watley	Date:	05/26/98
Reviewed by:	A. Trbovich	Date:	05/26/98

FUTURE ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-032b

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Conveyor G1 to Hammermill Crusher 1

Emission Control Method(s)/ID No(s): Enclosure with Dust Suppressant

Emission Point ID: FH-032b Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission(lb/hr)} = 0.0011 \times \text{material transferred(tons/hr)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100]$$

$$\text{Emission(tpy)} = 0.0011 \times \text{material transferred(tpy)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, Fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed (mph)	Actual Quantity Transferred		Material Moisture Content (pct)	Control Efficiency (pct)	Actual PM10 Emission Rates	
	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
8.6	800	712,500	6.5	90.0	0.03	0.02

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed	Tampa, FL, Climate of the State, Third Edition, 1985.
Actual Quantity Transferred	TEC, 1998.
Material Moisture Content	Average fuel moisture content, TEC, 1994.
Control Efficiency	Table 3.2.17-2, Workbook on Estimation of Emissions and Dispersion Modeling of Fugitive Particulate Sources, UARG, September 1981.

NOTES AND OBSERVATIONS

Future actual PM10 emissions based on 2,850,000 tpy of coal used.

Future actual coal reclaiming was assumed to be equally divided between conveyors G1 and G2, or 1,425,000 tons per conveyor.

Future actual coal reclaiming from conveyors G1 and G2 was also assumed to be equally divided between Crushers 3A and 1, or Crushers 3B and 2; or 712,500 tons per crusher series.

DATA CONTROL

Data Collected by:	T.J.L. Watley	Date:	05/26/98
Evaluated by:	T.J.L. Watley	Date:	05/26/98
Data Entered by:	T.J.L. Watley	Date:	05/26/98
Reviewed by:	A. Trbovich	Date:	05/26/98

FUTURE ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-033

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Conveyor G2 to Hammermill Crusher 3B

Emission Control Method(s)/ID No(s): Enclosure with Dust Suppressant

Emission Point ID: FH-033 Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission(lb/hr)} = 0.0011 \times \text{material transferred(tons/hr)} \times \left[\frac{(\text{average wind speed(mph)} / 5)E1.3}{(\text{moisture content(pct)} / 2)E1.4} \right] \times [100 - \text{control(pct)} / 100]$$

$$\text{Emission(tpy)} = 0.0011 \times \text{material transferred(tpy)} \times \left[\frac{(\text{average wind speed(mph)} / 5)E1.3}{(\text{moisture content(pct)} / 2)E1.4} \right] \times [100 - \text{control(pct)} / 100] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, Fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed (mph)	Actual Quantity Transferred		Material Moisture Content (pct)	Control Efficiency (pct)	Actual PM10 Emission Rates	
	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
8.6	800	1,425,000	6.5	90.0	0.03	0.03

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed	Tampa, FL, Climate of the State, Third Edition, 1985.
Actual Quantity Transferred	TEC, 1998.
Material Moisture Content	Average fuel moisture content, TEC, 1994.
Control Efficiency	Table 3.2.17-2, Workbook on Estimation of Emissions and Dispersion Modeling of Fugitive Particulate Sources, UARG, September 1981.

NOTES AND OBSERVATIONS

- Future actual PM10 emissions based on 2,850,000 tpy of coal used.
- Future actual coal reclaiming was assumed to be equally divided between conveyors G1 and G2, or 1,425,000 tons per conveyor.
- Future actual coal reclaiming from conveyors G1 and G2 was also assumed to be equally divided between Crushers 3A and 1, or Crushers 3B and 2; or 712,500 tons per crusher series.

DATA CONTROL

Data Collected by:	T.J.L. Watley	Date:	05/26/98
Evaluated by:	T.J.L. Watley	Date:	05/26/98
Data Entered by:	T.J.L. Watley	Date:	05/26/98
Reviewed by:	A. Trbovich	Date:	05/26/98

FUTURE ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-033a

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Hammermill Crusher 3B to Conveyor G2

Emission Control Method(s)/ID No(s): Enclosure with Dust Suppressant

Emission Point ID: FH-033a Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission(lb/hr)} = 0.0011 \times \text{material transferred(tons/hr)} \times [(\text{average wind speed(mph)} / 5)E1.3 / (\text{moisture content(pct)} / 2)E1.4] \times [100 - \text{control(pct)} / 100]$$

$$\text{Emission(tpy)} = 0.0011 \times \text{material transferred(tpy)} \times [(\text{average wind speed(mph)} / 5)E1.3 / (\text{moisture content(pct)} / 2)E1.4] \times [100 - \text{control(pct)} / 100] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, Fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed (mph)	Actual Quantity Transferred		Material Moisture Content (pct)	Control Efficiency (pct)	Actual PM10 Emission Rates	
	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
8.6	600	712,500	6.5	90.0	0.03	0.02

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed	Tampa, FL, Climate of the State, Third Edition, 1985.
Actual Quantity Transferred	TEC, 1998.
Material Moisture Content	Average fuel moisture content, TEC, 1994.
Control Efficiency	Table 3.2.17-2, Workbook on Estimation of Emissions and Dispersion Modeling of Fugitive Particulate Sources, UARG, September 1981.

NOTES AND OBSERVATIONS

Future actual PM10 emissions based on 2,850,000 tpy of coal used.

Future actual coal reclaiming was assumed to be equally divided between conveyors G1 and G2, or 1,425,000 tons per conveyor.

Future actual coal reclaiming from conveyors G1 and G2 was also assumed to be equally divided between Crushers 3A and 1, or Crushers 3B and 2; or 712,500 tons per crusher series.

DATA CONTROL

Data Collected by:	T.J.L. Watley	Date:	05/26/98
Evaluated by:	T.J.L. Watley	Date:	05/26/98
Data Entered by:	T.J.L. Watley	Date:	05/26/98
Reviewed by:	A. Trbovich	Date:	05/26/98

FUTURE ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-033b

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Conveyor G2 to Hammermill Crusher 2

Emission Control Method(s)/ID No(s): Enclosure with Dust Suppressant

Emission Point ID: FH-033b Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission(lb/hr)} = 0.0011 \times \text{material transferred(tons/hr)} \times [(\text{average wind speed(mph)} / 5)E1.3 / (\text{moisture content(pct)} / 2)E1.4] \times [100 - \text{control(pct)} / 100]$$

$$\text{Emission(tpy)} = 0.0011 \times \text{material transferred(tpy)} \times [(\text{average wind speed(mph)} / 5)E1.3 / (\text{moisture content(pct)} / 2)E1.4] \times [100 - \text{control(pct)} / 100] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, Fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed (mph)	Actual Quantity Transferred		Material Moisture Content (pct)	Control Efficiency (pct)	Actual PM10 Emission Rates	
	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
8.6	800	712,500	6.5	90.0	0.03	0.02

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed	Tampa, FL, Climate of the State, Third Edition, 1985.
Actual Quantity Transferred	TEC, 1998.
Material Moisture Content	Average fuel moisture content, TEC, 1994.
Control Efficiency	Table 3.2.17-2, Workbook on Estimation of Emissions and Dispersion Modeling of Fugitive Particulate Sources, UARG, September 1981.

NOTES AND OBSERVATIONS

Future actual PM10 emissions based on 2,850,000 tpy of coal used.

Future actual coal reclaiming was assumed to be equally divided between conveyors G1 and G2, or 1,425,000 tons per conveyor.

Future actual coal reclaiming from conveyors G1 and G2 was also assumed to be equally divided between Crushers 3A and 1, or Crushers 3B and 2; or 712,500 tons per crusher series.

DATA CONTROL

Data Collected by:	T.J.L. Watley	Date:	05/26/98
Evaluated by:	T.J.L. Watley	Date:	05/26/98
Data Entered by:	T.J.L. Watley	Date:	05/26/98
Reviewed by:	A. Trbovich	Date:	05/26/98

FUTURE ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-034

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Hammermill Crusher 1 to Conveyor H1

Emission Control Method(s)/ID No(s): Enclosure with Dust Suppressant

Emission Point ID: FH-034 Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission(lb/hr)} = 0.0011 \times \text{material transferred(tons/hr)} \times \left[\frac{\text{average wind speed(mph)}}{5} \right]^{E1.3} / \left[\frac{\text{moisture content(pct)}}{2} \right]^{E1.4} \times [100 - \text{control(pct)} / 100]$$

$$\text{Emission(tpy)} = 0.0011 \times \text{material transferred(tpy)} \times \left[\frac{\text{average wind speed(mph)}}{5} \right]^{E1.3} / \left[\frac{\text{moisture content(pct)}}{2} \right]^{E1.4} \times [100 - \text{control(pct)} / 100] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, Fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed (mph)	Actual Quantity Transferred		Material Moisture Content (pct)	Control Efficiency (pct)	Actual PM10 Emission Rates	
	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
8.6	800	712,500	6.5	90.0	0.03	0.02

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed	Tampa, FL, Climate of the State, Third Edition, 1985.
Actual Quantity Transferred	TEC, 1998.
Material Moisture Content	Average fuel moisture content, TEC, 1994.
Control Efficiency	Table 3.2.17-2, Workbook on Estimation of Emissions and Dispersion Modeling of Fugitive Particulate Sources, UARG, September 1981.

NOTES AND OBSERVATIONS

Future actual PM10 emissions based on 2,850,000 tpy of coal used.

Future actual coal reclaiming was assumed to be equally divided between conveyors G1 and G2, or 1,425,000 tons per conveyor.

Future actual coal reclaiming from conveyors G1 and G2 was also assumed to be equally divided between Crushers 3A and 1, or Crushers 3B and 2; or 712,500 tons per crusher series.

DATA CONTROL

Data Collected by:	T.J.L. Watley	Date:	05/26/98
Evaluated by:	T.J.L. Watley	Date:	05/26/98
Data Entered by:	T.J.L. Watley	Date:	05/26/98
Reviewed by:	A. Trbovich	Date:	05/26/98

FUTURE ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-034a

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Hammermill Crusher 3A to Conveyor H1

Emission Control Method(s)/ID No(s): Enclosure with Dust Suppressant

Emission Point ID: FH-034a Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission (lb/hr)} = 0.0011 \times \text{material transferred (tons/hr)} \times [(\text{average wind speed (mph)} / 5)^{E1.3} / (\text{moisture content (pct)} / 2)^{E1.4}] \times [100 - \text{control (pct)} / 100]$$

$$\text{Emission (tpy)} = 0.0011 \times \text{material transferred (tpy)} \times [(\text{average wind speed (mph)} / 5)^{E1.3} / (\text{moisture content (pct)} / 2)^{E1.4}] \times [100 - \text{control (pct)} / 100] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, Fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed (mph)	Actual Quantity Transferred		Material Moisture Content (pct)	Control Efficiency (pct)	Actual PM10 Emission Rates	
	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
8.6	600	712,500	6.5	90.0	0.03	0.02

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed	Tampa, FL, Climate of the State, Third Edition, 1985.
Actual Quantity Transferred	TEC, 1998.
Material Moisture Content	Average fuel moisture content, TEC, 1994.
Control Efficiency	Table 3.2.17-2, Workbook on Estimation of Emissions and Dispersion Modeling of Fugitive Particulate Sources, UARG, September 1981.

NOTES AND OBSERVATIONS

Future actual PM10 emissions based on 2,850,000 tpy of coal used.

Future actual coal reclaiming was assumed to be equally divided between conveyors G1 and G2, or 1,425,000 tons per conveyor.

Future actual coal reclaiming from conveyors G1 and G2 was also assumed to be equally divided between Crushers 3A and 1, or Crushers 3B and 2; or 712,500 tons per crusher series.

DATA CONTROL

Data Collected by:	T.J.L. Watley	Date:	05/26/98
Evaluated by:	T.J.L. Watley	Date:	05/26/98
Data Entered by:	T.J.L. Watley	Date:	05/26/98
Reviewed by:	A. Trbovich	Date:	05/26/98

FUTURE ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-035

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Hammermill Crusher 2 to Conveyor H2

Emission Control Method(s)/ID No(s): Enclosure with Dust Suppressant

Emission Point ID: FH-035 Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission(lb/hr)} = 0.0011 \times \text{material transferred(tons/hr)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100]$$

$$\text{Emission(tpy)} = 0.0011 \times \text{material transferred(tpy)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, Fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed (mph)	Actual Quantity Transferred		Material Moisture Content (pct)	Control Efficiency (pct)	Actual PM10 Emission Rates	
	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
8.6	800	712,500	6.5	90.0	0.03	0.02

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed	Tampa, FL, Climate of the State, Third Edition, 1985.
Actual Quantity Transferred	TEC, 1998.
Material Moisture Content	Average fuel moisture content, TEC, 1994.
Control Efficiency	Table 3.2.17-2, Workbook on Estimation of Emissions and Dispersion Modeling of Fugitive Particulate Sources, UARG, September 1981.

NOTES AND OBSERVATIONS

Future actual PM10 emissions based on 2,850,000 tpy of coal used.

Future actual coal reclaiming was assumed to be equally divided between conveyors G1 and G2, or 1,425,000 tons per conveyor.

Future actual coal reclaiming from conveyors G1 and G2 was also assumed to be equally divided between Crushers 3A and 1, or Crushers 3B and 2; or 712,500 tons per crusher series.

DATA CONTROL

Data Collected by:	T.J.L. Watley	Date:	05/26/98
Evaluated by:	T.J.L. Watley	Date:	05/26/98
Data Entered by:	T.J.L. Watley	Date:	05/26/98
Reviewed by:	A. Trbovich	Date:	05/26/98

FUTURE ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-035a

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Hammermill Crusher 3B to Conveyor H2

Emission Control Method(s)/ID No(s): Enclosure with Dust Suppressant

Emission Point ID: FH-035a Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission}(\text{lb/hr}) = 0.0011 \times \text{material transferred}(\text{tons/hr}) \times [(\text{average wind speed}(\text{mph}) / 5)^{E1.3} / (\text{moisture content}(\text{pct}) / 2)^{E1.4}] \times [100 - \text{control}(\text{pct}) / 100]$$

$$\text{Emission}(\text{tpy}) = 0.0011 \times \text{material transferred}(\text{tpy}) \times [(\text{average wind speed}(\text{mph}) / 5)^{E1.3} / (\text{moisture content}(\text{pct}) / 2)^{E1.4}] \times [100 - \text{control}(\text{pct}) / 100] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, Fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed (mph)	Actual Quantity Transferred		Material Moisture Content (pct)	Control Efficiency (pct)	Actual PM10 Emission Rates	
	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
8.6	600	712,500	6.5	90.0	0.03	0.02

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed	Tampa, FL, Climate of the State, Third Edition, 1985.
Actual Quantity Transferred	TEC, 1998.
Material Moisture Content	Average fuel moisture content, TEC, 1994.
Control Efficiency	Table 3.2.17-2, Workbook on Estimation of Emissions and Dispersion Modeling of Fugitive Particulate Sources, UARG, September 1981.

NOTES AND OBSERVATIONS

Future actual PM10 emissions based on 2,850,000 tpy of coal used.

Future actual coal reclaiming was assumed to be equally divided between conveyors G1 and G2, or 1,425,000 tons per conveyor.

Future actual coal reclaiming from conveyors G1 and G2 was also assumed to be equally divided between Crushers 3A and 1, or Crushers 3B and 2; or 712,500 tons per crusher series.

DATA CONTROL

Data Collected by:	T.J.L. Watley	Date:	05/26/98
Evaluated by:	T.J.L. Watley	Date:	05/26/98
Data Entered by:	T.J.L. Watley	Date:	05/26/98
Reviewed by:	A. Trbovich	Date:	05/26/98

APPENDIX B.2

ACTUAL PM₁₀ EMISSION CALCULATION SPREADSHEETS

ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-032

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Conveyor G1 to Hammermill Crusher 1

Emission Control Method(s)/ID No(s) .: Enclosure with Dust Suppressant

Emission Point ID: FH-032

Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission(lb/hr)} = 0.0011 \times \text{material transferred(tons/hr)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100]$$

$$\text{Emission(tpy)} = 0.0011 \times \text{material transferred(tpy)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, Fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed (mph)	Actual Quantity Transferred		Material Moisture Content (pct)	Control Efficiency (pct)	Actual PM10 Emission Rates	
	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
8.6	800	1,377,496	6.5	90.0	0.03	0.03

SOURCES OF INPUT DATA

Parameter	Data Source
Mean Wind Speed	Tampa, FL, Climate of the State, Third Edition, 1985.
Actual Quantity Transferred	TEC, 1998.
Material Moisture Content	Average fuel moisture content, TEC, 1994.
Control Efficiency	Table 3.2.17-2, Workbook on Estimation of Emissions and Dispersion Modeling of Fugitive Particulate Sources, UARG, September 1981.

NOTES AND OBSERVATIONS

Actual PM10 emissions based on 2,754,991 tpy of coal delivered. Actual coal throughput is the average of the 1996 and 1997 actual coal delivered, 2,668,955 tons and 2,841,027 tons, respectively.

Actual coal reclaiming was assumed to be equally divided between conveyors G1 and G2, or 1,377,495.5 tons per conveyor.

DATA CONTROL

Data Collected by:	T.J.L. Watley	Date:	05/27/98
Evaluated by:	T.J.L. Watley	Date:	05/27/98
Data Entered by:	T.J.L. Watley	Date:	05/27/98
Reviewed by:	A. Trbovich	Date:	05/27/98

ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-033

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Conveyor G2 to Hammermill Crusher 2

Emission Control Method(s)/ID No(s) : Enclosure with Dust Suppressant

Emission Point ID: FH-033

Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission(lb/hr)} = 0.0011 \times \text{material transferred(tons/hr)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100]$$

$$\text{Emission(tpy)} = 0.0011 \times \text{material transferred(tpy)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

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	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
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Data Entered by:	T.J.L. Watley	Date:	05/27/98
Reviewed by:	A. Trbovich	Date:	05/27/98

ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-034

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Hammermill Crusher 1 to Conveyor H1

Emission Control Method(s)/ID No(s) : Enclosure with Dust Suppressant

Emission Point ID: FH-034

Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission(lb/hr)} = 0.0011 \times \text{material transferred(tons/hr)} \times \left[\frac{\text{average wind speed(mph)}}{5} \right]^{1.3} / \left[\frac{\text{moisture content(pct)}}{2} \right]^{1.4} \times \left[\frac{100 - \text{control(pct)}}{100} \right]$$

$$\text{Emission(tpy)} = 0.0011 \times \text{material transferred(tpy)} \times \left[\frac{\text{average wind speed(mph)}}{5} \right]^{1.3} / \left[\frac{\text{moisture content(pct)}}{2} \right]^{1.4} \times \left[\frac{100 - \text{control(pct)}}{100} \right] \times (1/2000)$$

Source: Section 13.2.4 - Aggregate Handling and Storage Piles, AP-42, fifth Edition, January 1995.

INPUT DATA AND EMISSIONS CALCULATIONS

Mean Wind Speed (mph)	Actual Quantity Transferred		Material Moisture Content (pct)	Control Efficiency (pct)	Actual PM10 Emission Rates	
	(tons/hr)	(tons/yr)			(lb/hr)	(tpy)
8.6	800	1,377,496	6.5	90.0	0.03	0.03

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Mean Wind Speed	Tampa, FL, Climate of the State, Third Edition, 1985.
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Reviewed by:	A. Trbovich	Date:	05/27/98

ACTUAL EMISSION INVENTORY WORKSHEET

Tampa Electric Company - F.J. Gannon Station

FH-035

EMISSION SOURCE TYPE

MATERIAL TRANSFER - FUGITIVE EMISSION SOURCES

Figure:

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Fuel Handling - Hammermill Crusher 2 to Conveyor H2

Emission Control Method(s)/ID No(s) .: Enclosure with Dust Suppressant

Emission Point ID: FH-035 Transfer Point ID(s):

EMISSION ESTIMATION EQUATIONS

$$\text{Emission(lb/hr)} = 0.0011 \times \text{material transferred(tons/hr)} \times [(\text{average wind speed(mph)} / 5)^{E1.3} / (\text{moisture content(pct)} / 2)^{E1.4}] \times [100 - \text{control(pct)} / 100]$$

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