

# E-Permitting: The Future is Here Now



Jim Marinucci  
NJ Dept. of Environmental Protection  
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# NJ Air Permitting Statistics

■ Active Facilities	18,000
■ Active Permits	36,000
■ General Permits	12,000
■ Equipment	93,000
■ Control Devices	11,000
■ Emission Points	58,000

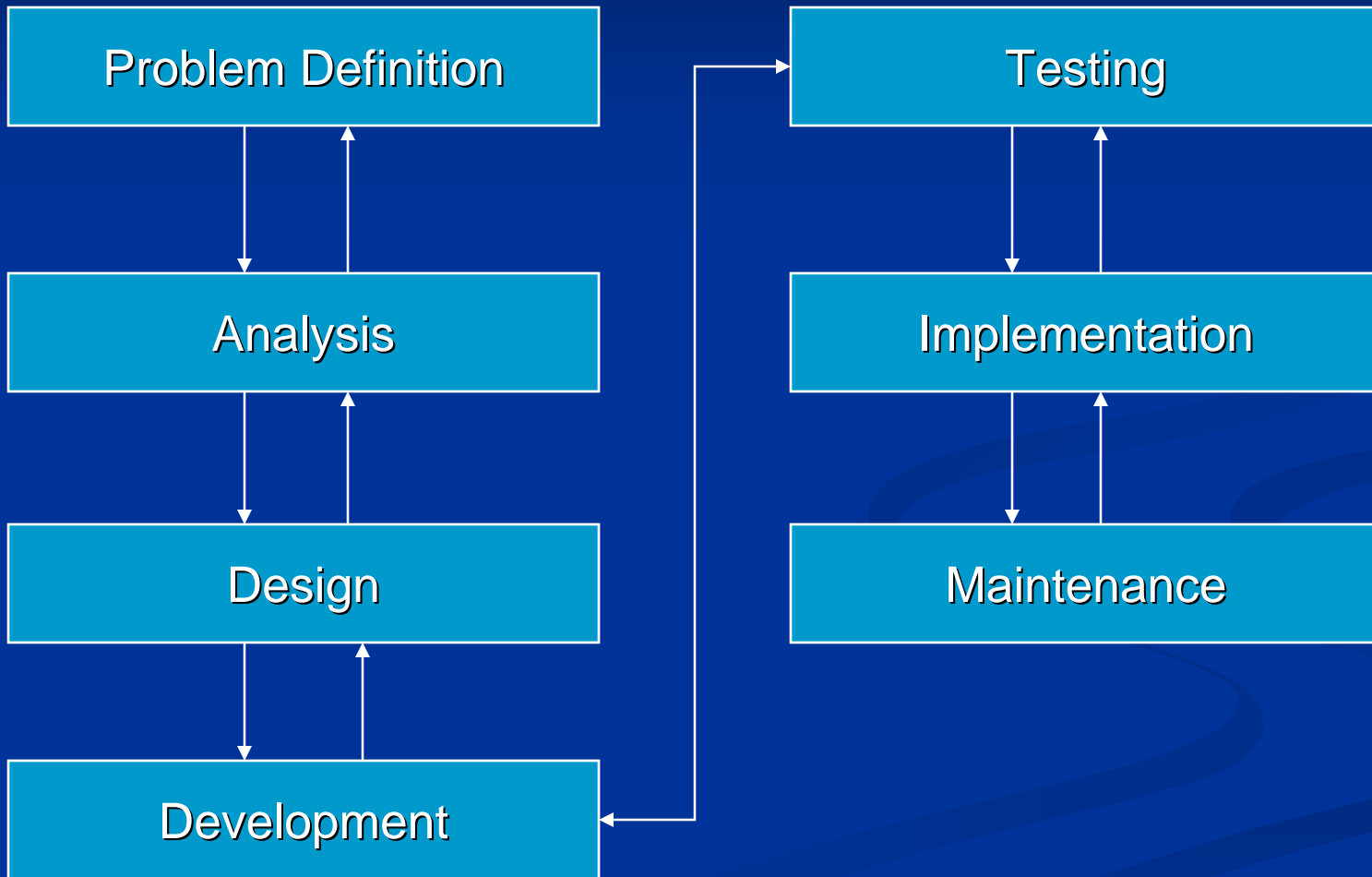
# What is RADIUS?

- RADIUS - Remote Access Data Input User System
  - Complete set of air permit application and emission statement forms
  - Requirements library
  - Completeness check
  - Electronic certification
- Version 1.0 released on Jan. 1998 (current version = 3.2)

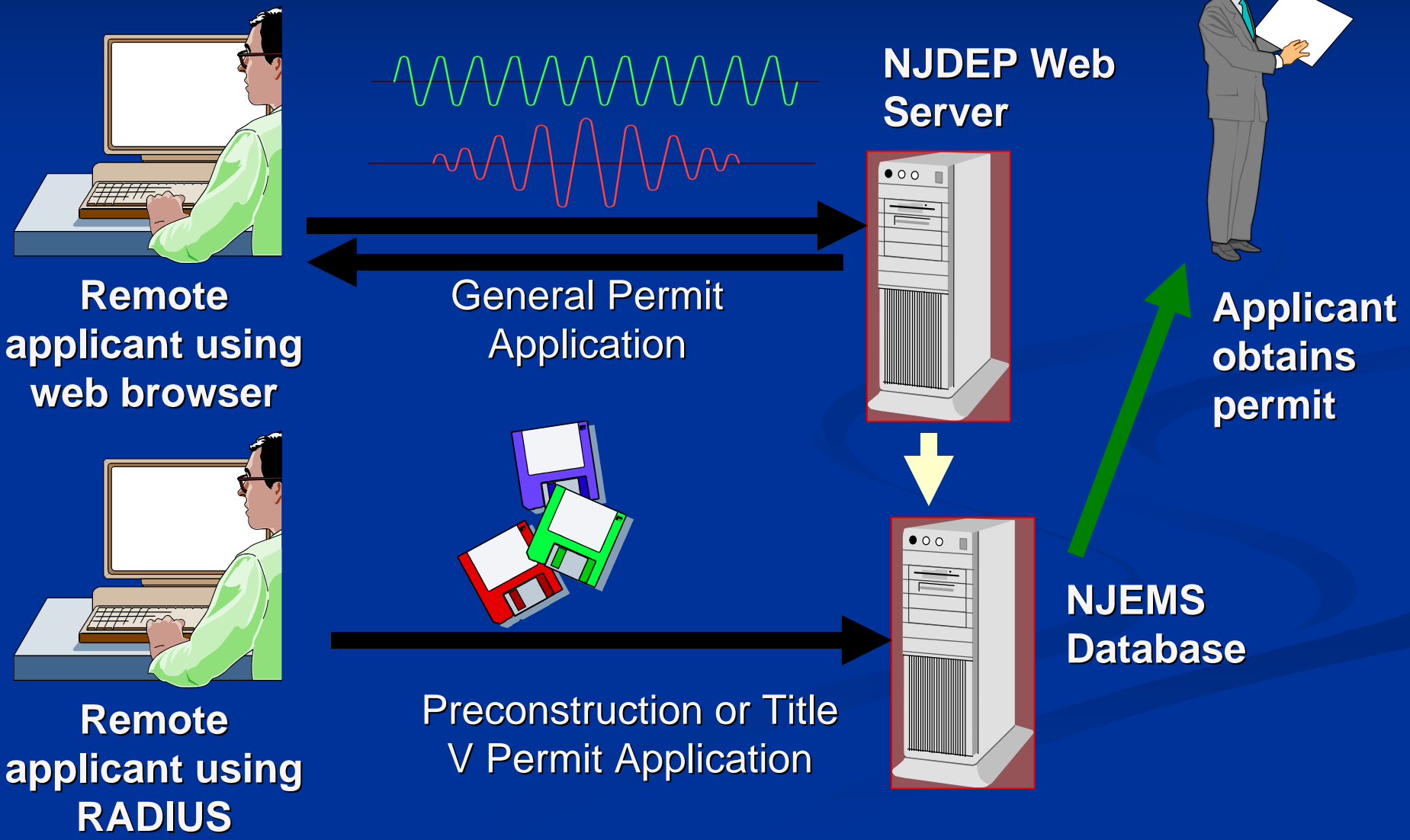
# NJDEP Online

- <http://www.njdeponline.com>
- Instantaneous approval for 15 different types of Air General Permits
  - Several new GPs in the pipeline
- Version 1.0 released on Mar. 2000 (current version = 5.6)
- 1/3 of all preconstruction permits and ~60% all new preconstruction permits are General Permits

# System Development Life Cycle



# Process Schematic



# RADIUS - Table of Contents

The screenshot displays the NJDEP RADIUS application window. The title bar reads "NJDEP RADIUS". The menu bar includes "File", "Edit", "Document", "Tools", "Window", and "Help". The toolbar contains various icons for file operations. The main window title is "Test File - Table of Contents". Below the title, it shows "Facility Name: 00000 Test Corporation". A "Batch Print Document..." button is located in the upper right. A "Modification" header is centered above a list of items. The list includes "Permit Application Forms" (with sub-items: Reason for Application, Facility Profile (General), Facility Profile (Permitting), Non-Source Fugitive Emissions, Insignificant Source Emissions, Equipment Inventory, Control Device Inventory, Emission Point Inventory, Emission Unit/Batch Process Inventory, Subject Item Group Inventory, Potential to Emit), "Compliance Plan" (highlighted in blue), and "Compliance Schedule". The status bar at the bottom left says "Double click or press enter to open Compliance Plan..." and the bottom right shows the date and time: "August 16, 2006 5:39 PM".

NJDEP RADIUS

File Edit Document Tools Window Help

Test File - Table of Contents

Facility Name: 00000 Test Corporation

Batch Print Document...

Modification

**Permit Application Forms**

- Reason for Application
- Facility Profile (General)
- Facility Profile (Permitting)
- Non-Source Fugitive Emissions
- Insignificant Source Emissions
- Equipment Inventory
- Control Device Inventory
- Emission Point Inventory
- Emission Unit/Batch Process Inventory
- Subject Item Group Inventory
- Potential to Emit

**Compliance Plan**

Compliance Schedule

Double click or press enter to open Compliance Plan...

August 16, 2006 5:39 PM

# Permit Conditions Library

- Standard “conditions” - federal and state regulations are stored as data
- Permit conditions are directly linked to Compliance/Enforcement module
  - Inspection checklists, enforcement documents, etc.
  - Deadline dates automatically transfer into inspector’s ‘to-do’ list

# Permit Conditions Library

- Each permit condition consists of four essential components:
  - Applicable Requirement
  - Monitoring Requirement
  - Recordkeeping Requirement
  - Submittal/Action Requirement

# Example - Library Profile

The screenshot displays the NJDEP RADIUS software interface. The main window, titled 'Test File - Compliance Plan', shows the following details:

- Facility: 00000 Test Corporation
- Subject Item: FC
- Operating Scenario: [Empty]
- Step: [Empty]
- Same As: [Empty]

A 'Change Profile and Load Requirements' dialog box is open, showing the following configuration:

- PI Type: AIR
- 1: Emission Unit Operating Scenario (UOS)
- 2: Operating Permit - Sources with a PC Permit
- 3: Boiler, Non-Utility
- 4: 100 to <250 MMBTU/hr
- 5: Natural Gas Fired
- 6: [Empty]
- 7: [Empty]

Below these items is an 'and/or' section with a 'Set:' list:

- NSPS A - General Provision
- NSPS Db - Industrial-Commercial-Institutional Steam Generating U
- Stack Testing Requirements for Operating Permit with a PC Permi

Buttons for 'Add' and 'Delete' are located to the right of the 'Set:' list. At the bottom of the dialog are 'Load', 'Append', and 'Cancel' buttons.

The background window also features a table with the following columns: 'Incl. Flag', 'Ref #', 'Req. ID', and 'Applicable Requirement'. The first row contains a checked checkbox, the number '1', and an empty cell.

At the bottom of the main window, there are buttons for 'Show All', 'Show Only Included', 'Library', 'Copy All', 'Copy Rows', and 'Add CA'.

# Example - Library Profile

**NJDEP RADIUS**

File Edit Document Tools Window Help

**Test File - Compliance Plan**

Facility: 00000 Test Corporation

Subject Item: FC

Operating Scenario:

Step:

Same As:

Change Profile and Load Reqs...

Last Profile Loaded

- 1: Emission Unit Operating Scenario (UOS)
- 2: Operating Permit - Sources with a PC Permit
- 3: Boiler, Non-Utility
- 4: 100 to <250 MMBTU/hr
- 5: Natural Gas Fired
- 6:
- 7:

Set(s): NSPS A - General Provision  
NSPS Db - Industrial-Commercial-Institutional Steam Generating Units

Incl. Flag	Ref #	Req. ID	Applicable Requirement	Monitoring Requirement		Record Keeping		Submittal or Action		Compliance Status	Comments	
<input checked="" type="checkbox"/>	1	1	Option 1 of 2: Select if maximum gross heat input is less than 200 MMBTU per hour, or if maximum							1		
<input checked="" type="checkbox"/>	2	2	Option 2 of 2: Select if gross heat input greater than or equal to 200 MMBTU/hr and all stack internal							1		
<input checked="" type="checkbox"/>	3	3	Select most stringent limit determined from SOTA, RACT, BACT or LAER analysis. Particulate	C000	D000	I000	G000	D000	J000	F000	1	
<input checked="" type="checkbox"/>	4	4	Select most stringent limit determined from SOTA, RACT, BACT or LAER analysis. VOC	C000	D000	I000	G000	D000	J000	F000	1	
<input checked="" type="checkbox"/>	5	5	Select most stringent limit determined from SOTA, RACT, BACT or LAER analysis. CO <=	C001	D080	I066	G005	D080	J021	F006	1	
<input checked="" type="checkbox"/>	6	6	Select most stringent limit determined from SOTA, RACT, BACT or LAER analysis. SO2 <=	C000	D000	I000	G000	D000	J000	F000	1	
<input checked="" type="checkbox"/>	7	7	Select most stringent limit determined from SOTA, RACT, BACT or LAER analysis. NOx	C001	D080	I066	G005	D080	J021	F006	1	
<input checked="" type="checkbox"/>	8	8	Option 1 of 2: Specify limit used as basis for determining annual emission limits. Hours of Operation	C016	D100	I015	G001	D010			1	

Show All  Show Only Included

Library Copy All Copy Rows Add CA

Ready August 16, 2006 5:23 PM

# Permit Conditions Library

- Standard permit conditions can be de-selected or edited, as needed.
- Custom conditions can be added to address non-standard situations.
- Commonly used requirement “components” can be accessed via drop-down lists.
- Monitoring requirement example

# Monitoring Method

**Monitoring Requirement**

Parameter: N/A

Method: continuous opacity monitoring system

Frequency: C000 no monitoring method

Avg. Period: C001 stack emission testing

Additional Text: C002 continuous emission monitoring system

Prefix C003 carbon adsorption breakthrough monitor

Suffix C004 continuous opacity monitoring system

Citation: C005 temperature instrument

C006 scrubber flow rate instrument

Delete

Preview: Monitored by continuous opacity monitoring system continuously, based on 6 minute blocks. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours for the performance test. [40 CFR 60.11(b)]

Usage: Option 3 of 3: Select if using a continuous opacity monitoring system to demonstrate compliance with opacity standard.

Most Stringent  None

Requirement Type

Limitation  S/A  Monitoring

Recordkeeping  Text

OK Cancel

# Monitoring Frequency

**Monitoring Requirement**

Parameter: N/A

Method: continuous opacity monitoring system

Frequency: continuously

Avg. Period: D012 continuously

Additional Text:  
 Prefix  
 Suffix

Citation:  
D013 once initially  
D014 prior to permit renewal  
D015 upon request of the Department  
D016 per change of material  
D017 once per calendar day during operation

Preview: Monitored by continuous opacity monitoring system continuously, based on 6 minute blocks. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours for the performance test. [40 CFR 60.11(b)]

Usage: Option 3 of 3: Select if using a continuous opacity monitoring system to demonstrate compliance with opacity standard.

Most Stringent  None

Requirement Type:  
 Limitation  S/A  Monitoring  
 Recordkeeping  Text

OK Cancel

# Averaging Period

**Monitoring Requirement**

Parameter: N/A

Method: continuous opacity monitoring system

Frequency: continuously

Avg. Period: 6 minute blocks

Additional Text: I033 6 minute blocks

Prefix

Suffix

Citation: I034 the average of three 1-hour tests  
I035 a 7 day rolling average  
I036 the averaging period as per Department approved test method  
I037 a batch cycle average  
I038 a weighted 12 month average

Preview: Monitored by continuous opacity monitoring system continuously, based on 6 minute blocks. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours for the performance test. [40 CFR 60.11(b)]

Usage: Option 3 of 3: Select if using a continuous opacity monitoring system to demonstrate compliance with opacity standard.

Most Stringent  None

Requirement Type

Limitation  S/A  Monitoring

Recordkeeping  Text

OK Cancel

# Regulatory Citation

**Monitoring Requirement**

Parameter: N/A

Method: continuous opacity monitoring system

Frequency: continuously

Avg. Period: 6 minute blocks

Additional Text: . For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours for the performance test.

Prefix  
 Suffix

Citation:

General Rule	Section	Subsection	Paragraph	Subparagraph
40 CFR 60	11	b		
Not Applicable				
Other				

Preview:

- (40 CFR 266) Boilers and Industrial Furnaces (BIF)
- (40 CFR 503) Standards for the Use or Disposal of Sewage Sludge
- (40 CFR 52) Prevention of Significant Deterioration (PSD)
- (40 CFR 60) New Source Performance Standards (NSPS)
- (40 CFR 61) National Emissions Standards for Hazardous Air Pollutants (NESHAPs)
- (40 CFR 63) Approval and Promulgation of State Plans for Reciprocating Engines and Pollutants

Usage:

Most Stringent  None

Requirement Type

Limitation  S/A  Monitoring  
 Recordkeeping  Text

OK Cancel

# Completed Monitoring Reqt.

**Monitoring Requirement**

Parameter: N/A

Method: continuous opacity monitoring system

Frequency: continuously

Avg. Period: 6 minute blocks

Additional Text: . For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours for the performance test.

Prefix  
 Suffix

Citation:

General Rule	Section	Subsection	Paragraph	Subparagraph
40 CFR 60	11	b		

Preview: Monitored by continuous opacity monitoring system continuously, based on 6 minute blocks. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours for the performance test. [40 CFR 60.11(b)]

Usage: Option 3 of 3: Select if using a continuous opacity monitoring system to demonstrate compliance with opacity standard.

Most Stringent  None

Requirement Type

Limitation  S/A  Monitoring  
 Recordkeeping  Text

# Final Product

Print Preview : Page 1 of 25

Zoom Percent: 100 Rulers Printer Setup... Print Close

Test Corporation (00000) Date: 8/16/2006

**New Jersey Department of Environmental Protection  
Facility Specific Requirements**

Ref#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
28	The owner or operator shall demonstrate compliance with NSPS opacity standards specified in 40 CFR Part 60. [40 CFR 60.11(b)]	Other: Monitoring and demonstration of compliance shall be by an alternative method approved by the Administrator. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours for the performance test. [40 CFR 60.11(b)].	Other: The owner or operator shall maintain records of opacity of emissions based on approval of alternative method. [40 CFR 60.11(e)(2)].	Submit a report: At a common schedule agreed upon by the operator and the Administrator. The owner or operator shall submit to the Administrator for approval an alternative method to demonstrate compliance and data shall be submitted based on alternative approved method. [40
29	The owner or operator shall demonstrate compliance with NSPS opacity standards specified in 40 CFR Part 60. [40 CFR 60.11(b)]	Monitored by continuous opacity monitoring system continuously, based on 6 minute blocks. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours for the performance test. [40 CFR 60.11(b)]	Recordkeeping by strip chart, data acquisition (DAS) system, or other method approved by BTS continuously. [40 CFR 60.13(h)]	Submit a report: At a common schedule agreed upon by the operator and the Administrator. The owner or operator shall submit Continuous Opacity Monitoring System (COMS) data produced during any performance test in lieu of Method 9 data. The owner or operator shall notify the Administrator in writing of intent to demonstrate compliance using COMS data at least 30 days before any performance required under 40CFR Part 60.8 is conducted and shall follow procedures outlined in 40CFR Part 60.11(e). [40 CFR
30	The owner or operator shall record the monitoring data produced during the initial performance test as required by 40 CFR Part 60.8. [40 CFR 60.11(e)(4)]	None.	None.	Submit a report: At a common schedule agreed upon by the operator and the Administrator. The owner or operator shall submit continuous opacity monitoring results along with Method 9 and 40 CFR 60.8 performance test results. [40 CFR

# Administrative Check

Adobe Acrobat Professional - [2.pdf]

File Edit View Document Comments Tools Advanced Window Help

Search Create PDF Comment & Markup Send for Review Secure Sign Forms

Select 91% Help

00000 Test Corporation Date: 8/16/2006

**New Jersey Department of Environmental Protection**  
**Administrative Check for Initial Operating Permit Applications**  
**Test Application**

Source of Failure	Description	Reason	Error/Warning
<b>Emission Point Inventory</b>			
PT15	You must enter an Exhaust Volume Maximum.	not necessary	Error
PT15	You must enter an Exhaust Volume Minimum.	not necessary	Error
PT15	You should enter an Exhaust Temperature Maximum.		Warning
PT15	You should enter an Exhaust Temperature Minimum.		Warning
<b>Emission Unit/Batch Process Inventory</b>			
U19 OS1	You must enter a Maximum Annual Operating Hours.	test	Error
U19 OS1	You must enter a Maximum Flow (acfm).	test	Error
U19 OS1	You must enter a Maximum Temp. (deg. F).	test	Error
U19 OS1	You must enter a Minimum Annual Operating Hours.	test	Error
U19 OS1	You must enter a Minimum Flow (acfm).	test	Error
U19 OS1	You must enter a Minimum Temp. (deg. F).	test	Error
U19 OS2	You must enter a Maximum Annual Operating Hours.	test	Error
U19 OS2	You must enter a Maximum Flow (acfm).	test	Error
U19 OS2	You must enter a Maximum Temp. (deg. F).	test	Error
U19 OS2	You must enter a Minimum Annual Operating Hours.	test	Error
U19 OS2	You must enter a Minimum Flow (acfm).	test	Error
U19 OS2	You must enter a Minimum Temp. (deg. F).	test	Error
<b>Equipment Inventory</b>			
E10	You should enter a Last Mod. Date.		Warning
E11	You should enter a Last Mod. Date.		Warning
E12	You should enter a Last Mod. Date.		Warning
E13	You should enter a Last Mod. Date.		Warning
E21	You should enter a Last Mod. Date.		Warning

1 of 2

# Electronic Certification

## Certification

Responsible Official:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attached documents and, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fine or imprisonment or both, for submitting false, inaccurate or incomplete information.

Name:

PIN:

Confirm PIN:

Date: 08/16/06

Individual with Direct Knowledge:

I certify under penalty of law that I believe the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties, including the possibility of fine or imprisonment or both, for submitting false, inaccurate or incomplete information.

Name:

PIN:

Confirm PIN:

Date: 08/16/06

Section Being Certified:

Add

Delete

Certify and Export

Skip Electronic Certification (Paper Certification Required)