

# Virginia DEQ Comprehensive Environmental Data System (CEDS)

NACAA Permitting and  
Enforcement Workshop  
February 26, 2020

# What is CEDS?

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- Comprehensive Environmental Data System
- Single Repository for Permitting, Compliance , and Inspections data for Air, Water, Land (SW)
- Also includes TMDL, WQMA, Petroleum Tanks, and Enforcement Modules
- Y2k Project
- Uses “Core Facility Model” with some exceptions
- Oracle Db with UI originally developed in Oracle Forms and Reports 1997 – 2002



# CEDS Modernization Effort

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- Revamp of entire system (~50 modules / 150 DB tables, 5 schema)
  - Effort began ~March 2015
  - Had to be complete no later than August 2016 due to Virginia Information Technology Agency (VITA) Security mandate
  - Strategy
    - Use a common framework & reusable patterns
    - Break functionality into smaller pieces
    - Develop iteratively
    - Break down the walls between Business and IT
    - Don't neglect user adoption
    - Add/Update Business functionality where practical
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# Air Permit Module Problems

- Optional Data Fields – wildly varying data
- Difficult to access data
- Multiple redundant systems were maintained at the office/region level
- For program staff, there was no benefit from the system; just a data entry task

# Development Approach

- Workgroup (for permit module) consisted of diverse collection of staff/program managers and central office/regional office staff together with administrative support
- Collaboration with IT resources
- Buy-In / Ownership



# Air Permit Module – Fixes

- Improved integration of programs
- Lean and eliminate optional data
- Upgrade interface and report capabilities
- Search functions

# Air Permit Module - Upgrades

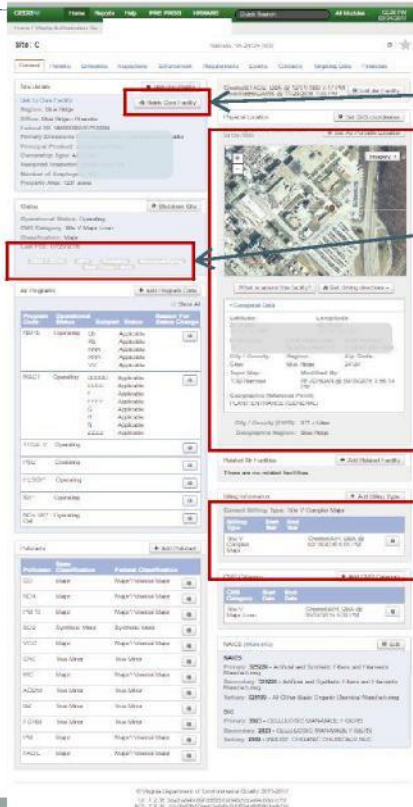
- Data Layers = Designed for staff, program managers and upper management
- Easy access to prior permits for facility / similar facilities / Program Searches
- Workflow Tool for staff
- Minor NSR BACT Database



# IT Platform

- Web Based (email links)
- Directly tied to VADEQ's electronic file system
- Adaptable to future public use
- Oracle Database
- .net user-interface

# Innovations in plain sight



## Integration with Document Management (ECM)

- Allows user to immediately view documents related to that record

## Badges to determine status, associations, etc.

## Integration with Geographic Information System (GIS)

- Allows user to plot GIS location when entering the record
- Uses high res (>1:4800) imagery for accuracy of plotting
- Derives location data such as watershed info (Basins, HUCs, etc. ), county, zip, lat-Long, topo map, DEQ Region,
- Provides buffer to other GIS layers and Driving directions

## Ties to Oracle eBusiness Suite

- Billing & payment information for application fees, permit fees, etc.

## Hyperlinks to other records, modules, systems

## Action Buttons to kick off workflows

# General Screen

Browser: https://ceds.deq.virginia.gov/ui#airFacilities/43161

Navigation: Home Reports Help PRODUCTION SMFAGGERT Quick Search All Modules 12:31 PM 02/19/2020

Breadcrumbs: Home / Air Facility Search / Dominion Energy - Greenville Power Station

## Site: Dominion Energy - Greenville Power Station (52525) 2500 Rogers Rd, Emporia, VA 23847

General | **Permits** | Emissions | Inspections | Enforcement | Requirements | Events | Contacts | Targeting Data | Financials

### Site Details

[View documents](#)

[Link to Core Facility](#)

Region: Piedmont

Federal ID: VA000005108152525

Primary Emissions Unit Description: electric generating plant

Principal Product: electricity and power

Ownership Type: All Other

Assigned Inspector: Eric Deibel

Number of Employees: 49

Property Area: 1144 acres

Created: SCCARTER @ 11/26/2014 8:19 AM [Edit Air Facility](#)

Modified: RSHINES @ 08/23/2019 11:18 AM

### Status

[Shutdown Site](#)

Operational Status: Operating

CMS Category: Title V Major Even


Classification: Major

CEM / COM
  HPV
  Portable
  Nonqualifying
  Near Class I Area

### Physical Location

[Set GIS coordinates](#)

2500 Rogers Rd, Emporia, VA 23847 [Set As Portable Location](#)



Imagery

**Geospatial Data**

City / County (FIPS): 081 - Greenville

Geographic Region: Piedmont

### Air Programs

[Add Program Code](#)

Show All

Program Code	Operational Status	Subpart	Status	Reason For Status Change
NSPS	Operating	Db	Applicable	<a href="#">Edit</a>
		Dc	Applicable	
		IIII	Applicable	
		JJJJ	Applicable	
		KKKK	Applicable	

### Related Air Facilities

[Add Related Facility](#)

# Permits Tab

Site: Dominion Energy - Brunswick (52404) 20100 Governor Harrison Pkwy, Freeman, VA 23856

General | **Permits** | Emissions | Inspections | Enforcement | Requirements | Events | Contacts | Targeting Data | Financials

Active Permits | Pre-CEDS Permits | Exemptions | All

Filter:  From  to

Viewing 1 to 4 of 4 10

[+ New Application](#)

Status	Application Number	Program Type	Permit Type	Issuance Date	Permit Writer	Description of Permit Action	Other Program Types Included
<span>Pending</span> <span>DEQ Processing</span> <span>Fee Paid</span>	6	Article 3 - Title IV/V	TITLEIVV		Alison Sinclair	Initial Title V Permit to also be combined with the Acid Rain Permit dated March 25, 2014 (and renewed by application on October 10, 2019).	
<span>Pending</span> <span>DEQ Processing</span> <span>Fee Paid</span>	5	Article 8 - PSD	SIGAMEN		Alison Sinclair	Add daily emission limits for tuning and water washing of blades, additional clarifications and corrections. No change to SU/SD. No additional FGHs.	
<span>Issued</span>	4	Article 8 - PSD	SIGAMEN	05/13/2015	Alison Sinclair	Three additional circuit breakers for the turbines are being added and new leakage rate and new GWP for SF6 are used on original 11 circuit breakers for a reduction in CO2-e (significant PSD amendment). In addition, the Pb emissions in Condition 83 was changed from 0.022 to 0.023 because, originally, the HAP summary spreadsheet that was submitted accidentally omitted Pb emissions from the	

# Application Screen

**Permit: 4** Dominion Energy - Brunswick (52404)

General | Events | Documents | Application Fees

**Permit Details** Link to Air Facility Issued Fee Paid

Primary Program Type: Article 8 - PSD  
 Primary Permit Type: SIGAMEN  
 Permit Writer: Alison Sinclair  
 Office: Piedmont  
 Application Status: Inactive  
 After this permit, source will be: Major

Description of Permit Action  
 Three additional circuit breakers for the turbines are being added and new leakage rate and new GWP for SF6 are used on original 11 circuit breakers for a reduction in CO2-e (significant PSD amendment). In addition, the Pb emissions in Condition 83 was changed from 0.022 to 0.023 because, originally, the HAP summary spreadsheet that was submitted accidentally omitted Pb emissions from the auxiliary boiler and fuel gas heater (Article 6 amendment). Lastly, Dominion requested to update language in Conditions 52 and

**Primary Dates**

Description	Date
FINAL PERMIT ACTION	05/13/2015
APPLICATION COMPLETE	04/15/2015
INITIAL LETTER OF DETERMINATION (ILOD) SENT	04/02/2015
APPLICATION RECEIVED	03/31/2015

**Public Participation Dates**

Description	Date
FLM Notified	04/08/2015
FLM Notified Of Pre-Application Meeting	03/31/2015
Pre-Application Meeting	03/11/2015

**Program and Permit Types**  
 Implemented by this Permit Action.

Primary	Program Type	Permit Type	Description
★	Article 8 - PSD	SIGAMEN	Significant Amendment to PSD Permit
	Article 6 - mNSR	MINAMEN	Minor Amendment to Minor NSR Permit
	Article 8 - PSD	ADAMEN	Administrative Amendment to PSD Permit

**Other Program Types**  
 Included in the Permit Document.

No additional program/permit types are included in this permit.

**Superseded / Expired Permits**  Select Superseded / Expired Permits

Date	Application #	Program and Permit Type
01/28/2015	3	Article 8 - PSD - PSD

**Process Types**  
 Primary: 15.210 - Natural Gas (includes propane & liquified petroleum gas)  
 -Combined Cycle & Cogeneration (>25 MW)

# Document Screen

Permit: 4 Dominion Energy - Brunswick (52404)

General Events Documents Application Fees

Filter:  From  to

Viewing 1 to 8 of 8 25 By Document Date

Document	Document Type	Title	Document Date	Document Size	Keywords	FOIA Exempt
	Engineering Analysis	52404 - Engineering Analysis - 20150513	05/13/2015	402 KB		None
	QAQC	52404 - QAQC - 20150513	05/13/2015	20 KB		None
	Public Notice/Hearing	52404 - Public Notice-Hearing - 20150513	05/13/2015	107 KB		None
	Tracking Sheet	52404 - Tracking Sheet - 20150513	05/13/2015	62 KB		None
	Permit	52404 - Permit - 20150513	05/13/2015	2128 KB		None
	Application	52404 - Application - 20150513	05/13/2015	608 KB		None
	Correspondence - Source	52404 - Correspondence - Source - 20150513	05/13/2015	241 KB		None
	Correspondence - DEQ	52404 - Correspondence - DEQ - 20150513	05/13/2015	41 KB		None

Viewing 1 to 8 of 8 25 By Document Date

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# Questions?????

