Connecticut Department of Energy and Environmental Protection

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

NSR LEAN Forms Update

January 10, 2013
Louis Corsino III
SIPRAC January 2013

Connecticut Department of Energy and Environmental Protection

BACT Forms

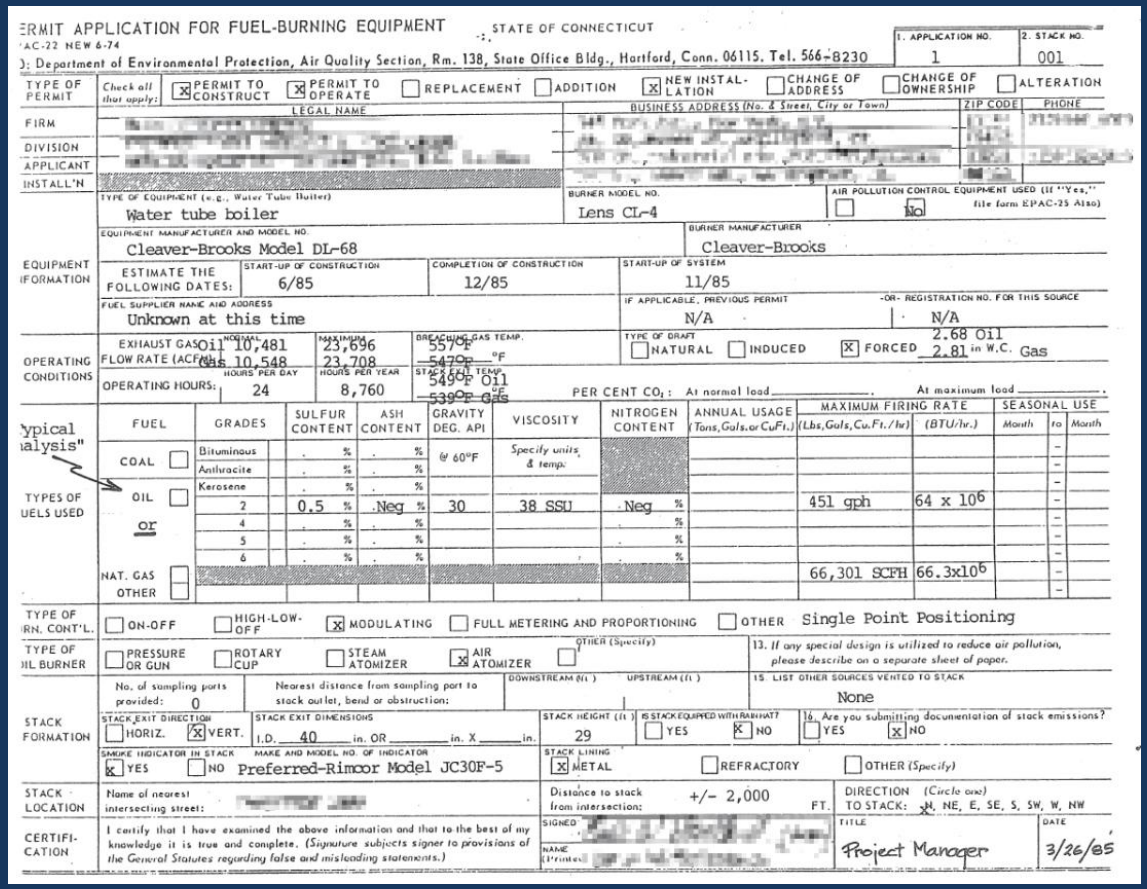
- New BACT Forms were introduced at November 2012 SIPRAC Meeting
- The forms were sent out to SIPRAC email list in December 2012 and comments are due by January 17, 2013
- Direct all comments to Debola Bamgbose: adebola.bamgbose@ct.gov

NSR Forms

- As a result of our NSR LEAN event, it was found that our NSR forms did not provide the opportunity for the applicant to provide all information necessary to process an application in a timely manner.
- It was also noted that the forms were not user friendly and they presented challenges while filling them out.

History

- One Page Permit Application (Pre-CAA of 1990)



ERMIT APPLICATION FOR FUEL-BURNING EQUIPMENT — STATE OF CONNECTICUT
AC-22 NEW 6-74
): Department of Environmental Protection, Air Quality Section, Rm. 138, State Office Bldg., Hartford, Conn. 06115. Tel. 566-8230
1. APPLICATION NO. 1 — 2. STACK NO. 001

TYPE OF PERMIT — Check all that apply: [X] PERMIT TO CONSTRUCT [X] PERMIT TO OPERATE [ ] REPLACEMENT [ ] ADDITION [X] NEW INSTALLATION [ ] CHANGE OF ADDRESS [ ] CHANGE OF OWNERSHIP [ ] ALTERATION

FIRM / DIVISION / APPLICANT / INSTALL'N — LEGAL NAME — BUSINESS ADDRESS (No. & Street, City or Town) — ZIP CODE — PHONE

EQUIPMENT INFORMATION
- TYPE OF EQUIPMENT (e.g., Water Tube Boiler): Water tube boiler
- BURNER MODEL NO.: Lens CL-4
- AIR POLLUTION CONTROL EQUIPMENT USED (If "Yes," file form EPAC-25 Also): [ ] [X] No
- EQUIPMENT MANUFACTURER AND MODEL NO.: Cleaver-Brooks Model DL-68
- BURNER MANUFACTURER: Cleaver-Brooks
- ESTIMATE THE FOLLOWING DATES: START-UP OF CONSTRUCTION: 6/85 — COMPLETION OF CONSTRUCTION: 12/85 — START-UP OF SYSTEM: 11/85
- FUEL SUPPLIER NAME AND ADDRESS: Unknown at this time
- IF APPLICABLE, PREVIOUS PERMIT: N/A — -OR- REGISTRATION NO. FOR THIS SOURCE: N/A

OPERATING CONDITIONS
- EXHAUST GAS FLOW RATE (ACFM): NORMAL Oil 10,481 / Gas 10,548 — MAXIMUM 23,696 / 23,708
- BREACHING GAS TEMP.: 557°F — 547°F — °F
- STACK GAS TEMP.: 549°F Oil — 539°F Gas
- OPERATING HOURS: HOURS PER DAY 24 — HOURS PER YEAR 8,760
- TYPE OF DRAFT: [ ] NATURAL [ ] INDUCED [X] FORCED 2.68 Oil / 2.81 in W.C. Gas
- PER CENT CO_2: At normal load _____ At maximum load _____

TYPES OF FUELS USED ("Typical Analysis")

FUEL	GRADES	SULFUR CONTENT	ASH CONTENT	GRAVITY DEG. API	VISCOSITY	NITROGEN CONTENT	ANNUAL USAGE (Tons, Gals. or Cu.Ft.)	MAXIMUM FIRING RATE (Lbs./Hr., Gals./Hr., Cu.Ft./Hr.)	MAXIMUM FIRING RATE (BTU/Hr.)	SEASONAL USE Month	to Month
COAL [ ]	Bituminous	%	%	@ 60°F	Specify units & temp.						
	Anthracite	%	%								
	Kerosene	%	%								
OIL [ ]	2	0.5 %	Neg %	30	38 SSU	Neg %		451 gph	64 x 10^6		
or	4	%	%			%					
	5	%	%			%					
	6	%	%			%					
NAT. GAS [ ]								66,301 SCFH	66.3x10^6		
OTHER [ ]											

TYPE OF BURN. CONT'L. — [ ] ON-OFF [ ] HIGH-LOW-OFF [X] MODULATING [ ] FULL METERING AND PROPORTIONING [ ] OTHER Single Point Positioning

TYPE OF OIL BURNER — [ ] PRESSURE OR GUN [ ] ROTARY CUP [ ] STEAM ATOMIZER [X] AIR ATOMIZER [ ] OTHER (Specify)

13. If any special design is utilized to reduce air pollution, please describe on a separate sheet of paper.

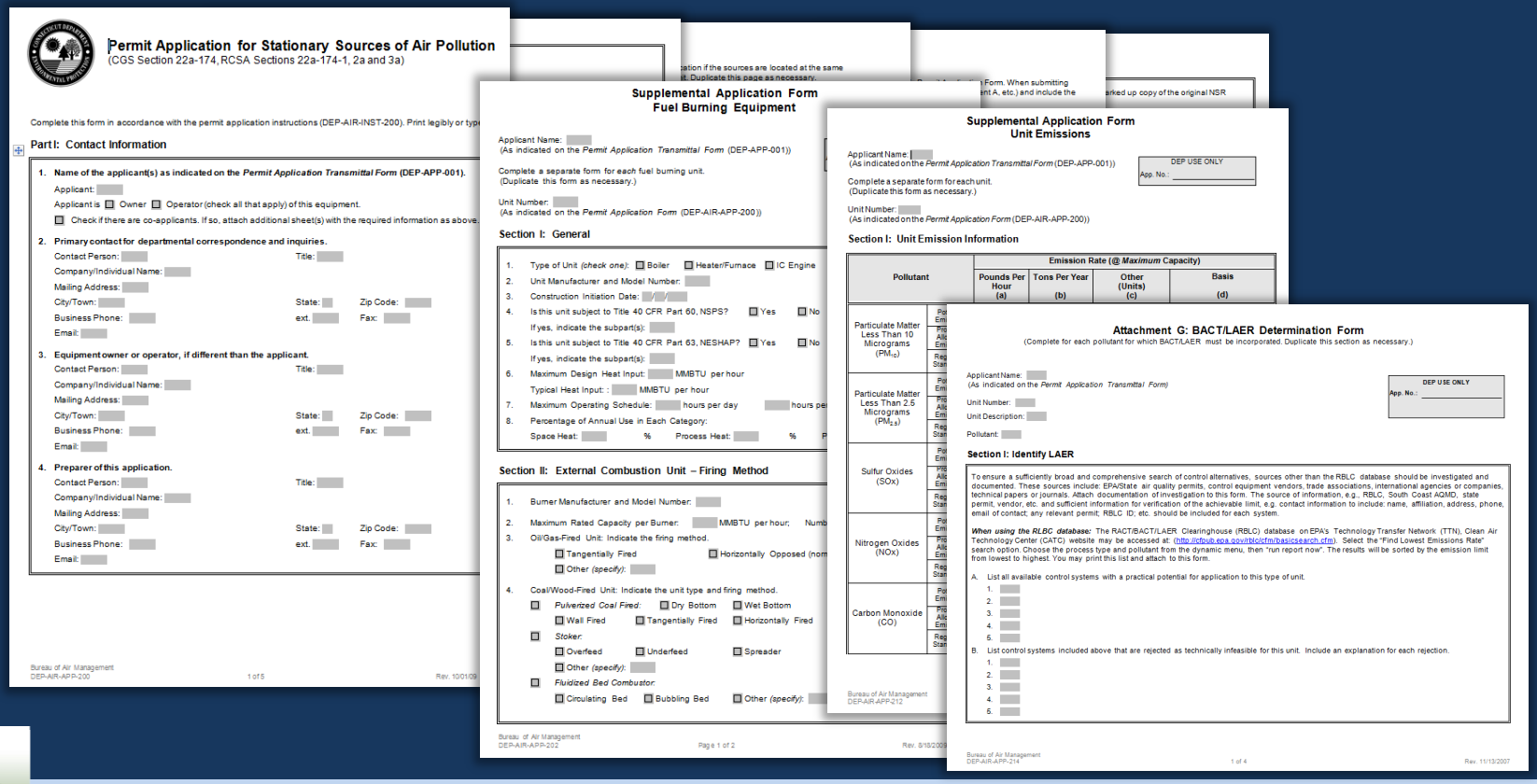
STACK FORMATION
- No. of sampling ports provided: 0
- Nearest distance from sampling port to stack outlet, bend or obstruction: DOWNSTREAM (ft.) UPSTREAM (ft.)
- 15. LIST OTHER SOURCES VENTED TO STACK: None
- STACK EXIT DIRECTION: [ ] HORIZ. [X] VERT.
- STACK EXIT DIMENSIONS: I.D. 40 in. OR _____ in. X _____ in.
- STACK HEIGHT (ft.): 29
- IS STACK EQUIPPED WITH RAINHAT? [ ] YES [X] NO
- 16. Are you submitting documentation of stack emissions? [ ] YES [X] NO
- SMOKE INDICATOR IN STACK: [X] YES [ ] NO
- MAKE AND MODEL NO. OF INDICATOR: Preferred-Rimcor Model JC30F-5
- STACK LINING: [X] METAL [ ] REFRACTORY [ ] OTHER (Specify)

STACK LOCATION — Name of nearest intersecting street: — Distance to stack from intersection: +/- 2,000 FT. — DIRECTION (Circle one) TO STACK: N, NE, E, SE, S, SW, W, NW

CERTIFICATION — I certify that I have examined the above information and that to the best of my knowledge it is true and complete. (Signature subjects signer to provisions of the General Statutes regarding false and misleading statements.)
- SIGNED / NAME (Printed)
- TITLE: Project Manager
- DATE: 3/26/85

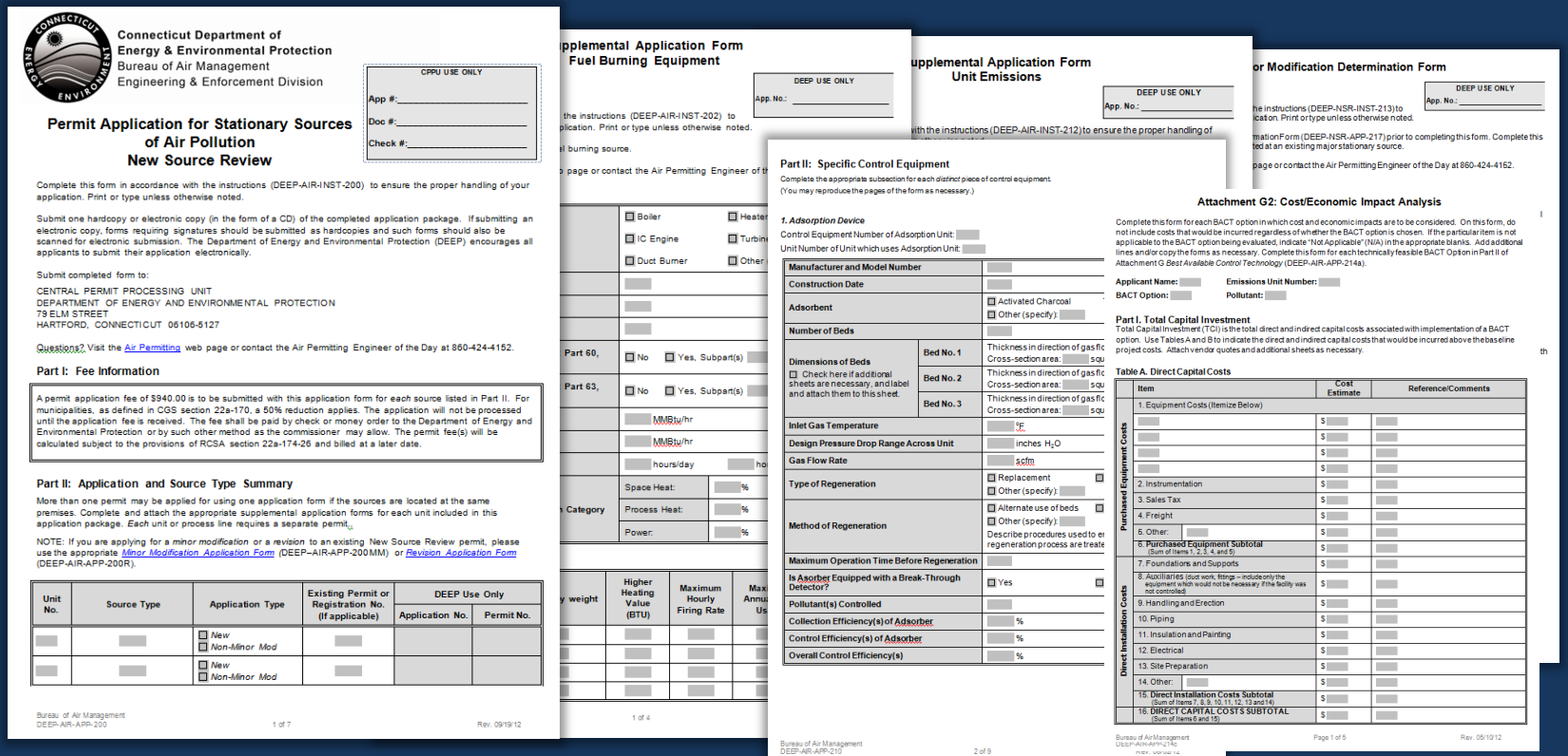
History

- Mid-1990s – 2012 (Post-CAA of 1990)
  - Expanded Application forms in order to ensure new sources comply with various new regulatory requirements



Today

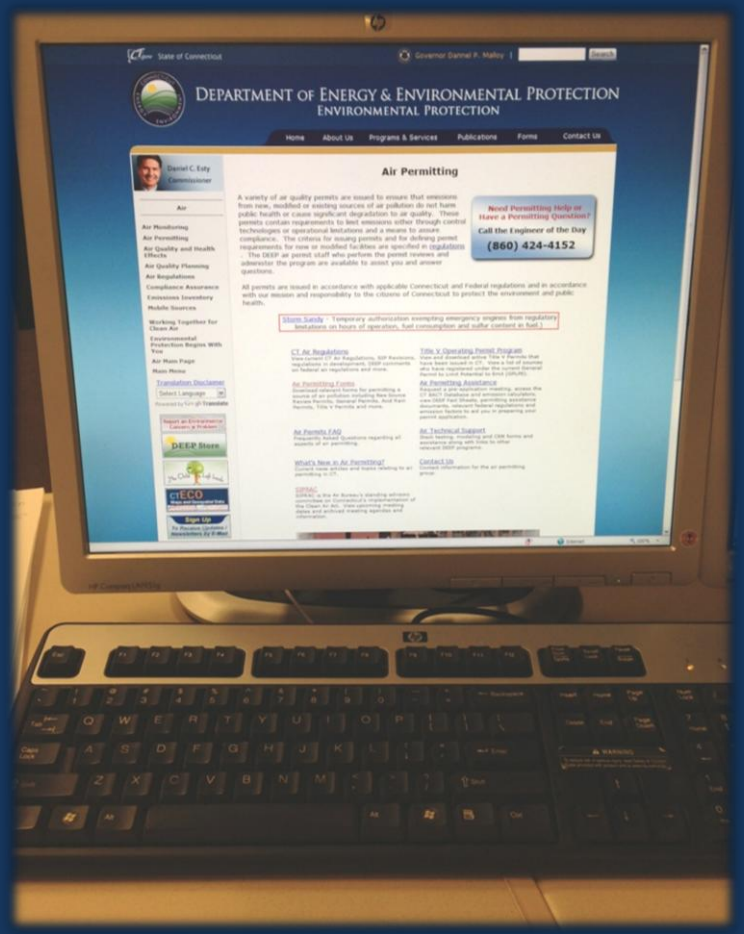
- 2013 – Improved and more complete application



Connecticut Department of Energy and Environmental Protection

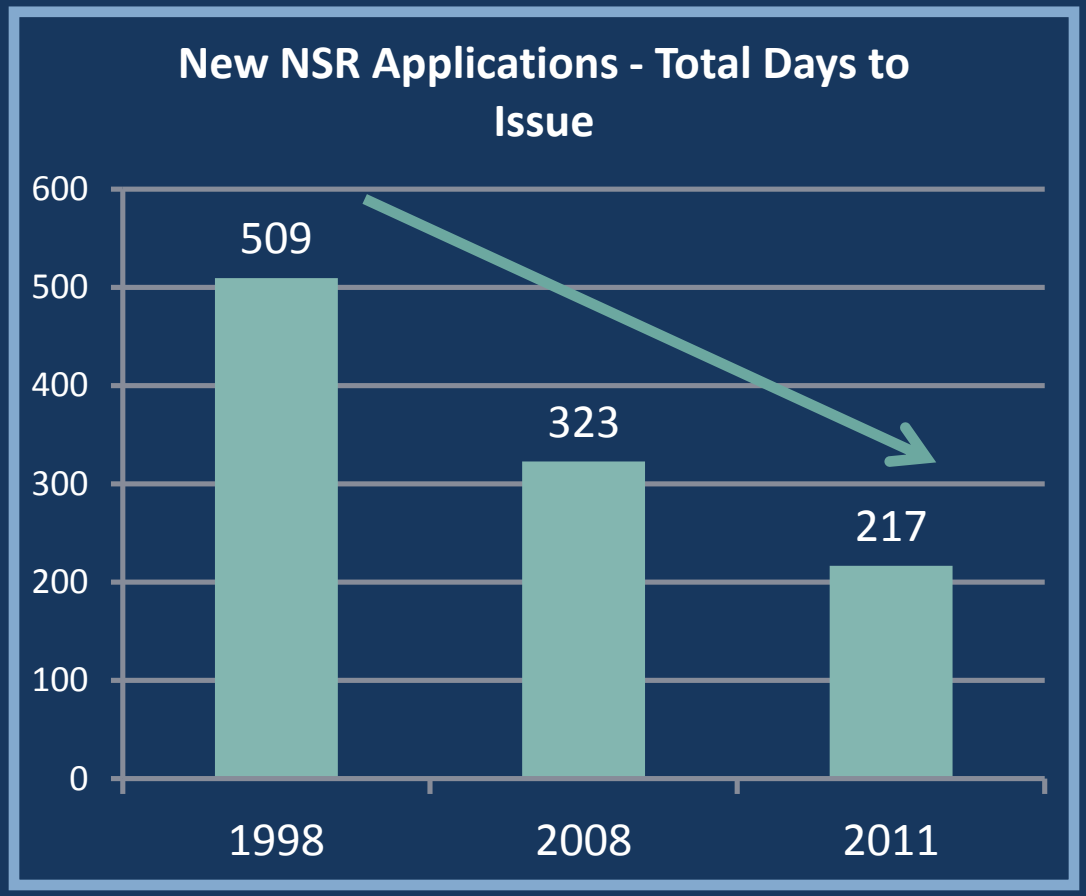
Future

- Our Ideal State – full online submittal of applications
- Automatic sufficiency checks
- Electronic Workflow
- The refreshing of our forms now allows us to be ready for the future online permitting system being developed



Goal of Updated Forms

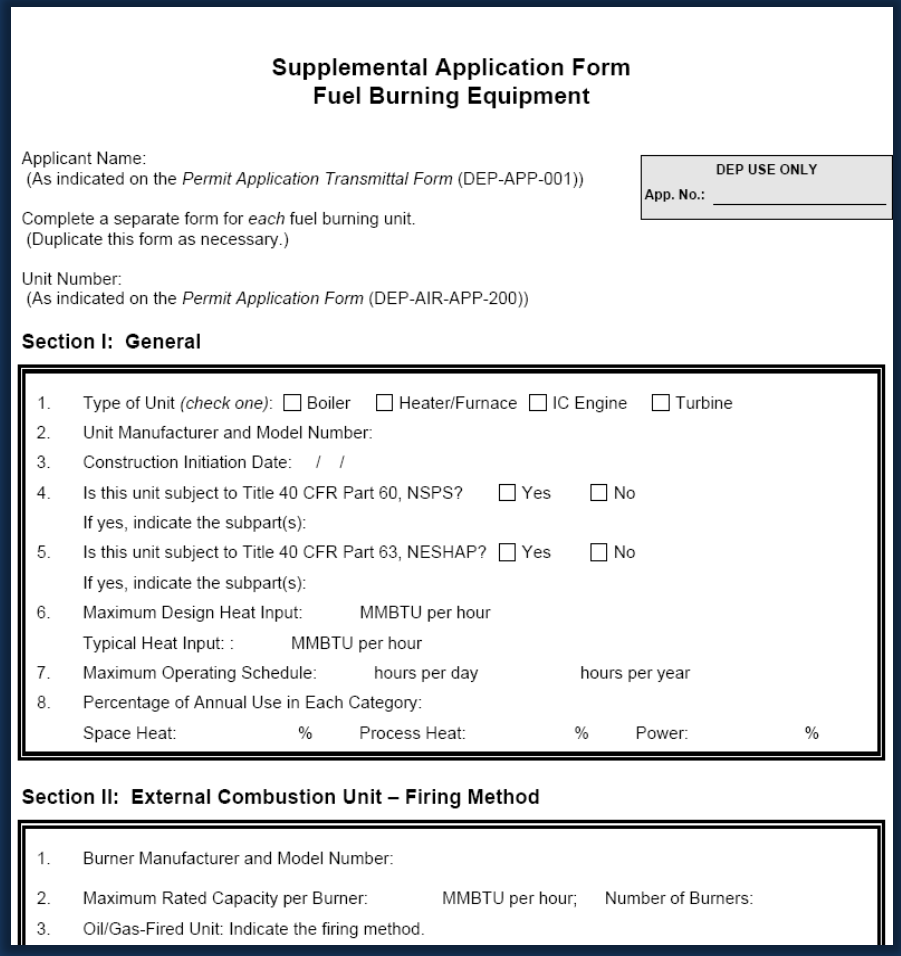
- The goal is to issue better permits faster.
- We need to eliminate as much “non-DEEP” time as possible.
  - Insufficiency and Additional or Missing Info Requests



What Did We Do?

- Updated to make forms more user friendly
- Reorganized visually and logically
- Refined and expanded supplemental forms where needed
- Consistent language across all forms
- Attachment checklist at the end of each form, if necessary.

Examples of Updated Forms



Supplemental Application Form
Fuel Burning Equipment

Applicant Name:
(As indicated on the *Permit Application Transmittal Form* (DEP-APP-001))

DEP USE ONLY
App. No.: _____

Complete a separate form for *each* fuel burning unit.
(Duplicate this form as necessary.)

Unit Number:
(As indicated on the *Permit Application Form* (DEP-AIR-APP-200))

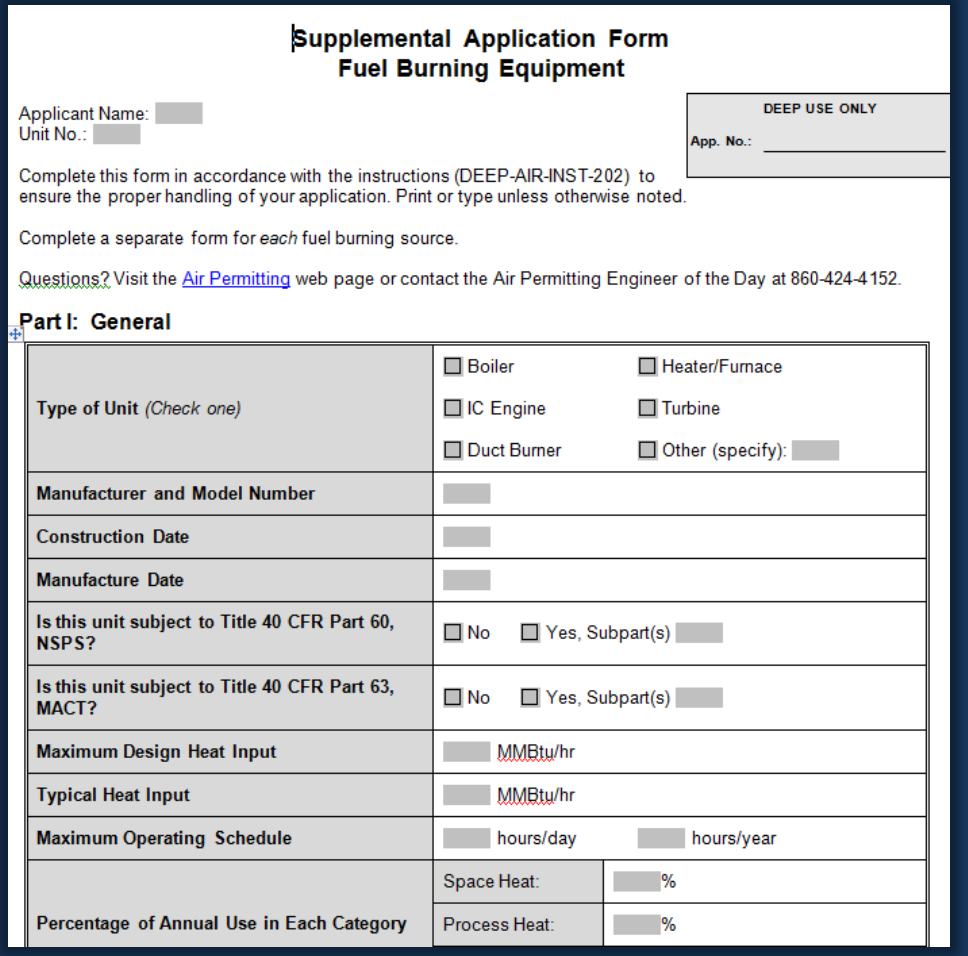
Section I: General

1. Type of Unit *(check one)*: ☐ Boiler ☐ Heater/Furnace ☐ IC Engine ☐ Turbine
2. Unit Manufacturer and Model Number:
3. Construction Initiation Date: / /
4. Is this unit subject to Title 40 CFR Part 60, NSPS? ☐ Yes ☐ No
   If yes, indicate the subpart(s):
5. Is this unit subject to Title 40 CFR Part 63, NESHAP? ☐ Yes ☐ No
   If yes, indicate the subpart(s):
6. Maximum Design Heat Input: MMBTU per hour
   Typical Heat Input: : MMBTU per hour
7. Maximum Operating Schedule: hours per day hours per year
8. Percentage of Annual Use in Each Category:
   Space Heat: % Process Heat: % Power: %

Section II: External Combustion Unit – Firing Method

1. Burner Manufacturer and Model Number:
2. Maximum Rated Capacity per Burner: MMBTU per hour; Number of Burners:
3. Oil/Gas-Fired Unit: Indicate the firing method.

Before



Supplemental Application Form
Fuel Burning Equipment

Applicant Name:
Unit No.:

DEEP USE ONLY
App. No.: _____

Complete this form in accordance with the instructions (DEEP-AIR-INST-202) to ensure the proper handling of your application. Print or type unless otherwise noted.

Complete a separate form for *each* fuel burning source.

Questions? Visit the Air Permitting web page or contact the Air Permitting Engineer of the Day at 860-424-4152.

Part I: General

Type of Unit *(Check one)*	☐ Boiler ☐ Heater/Furnace ☐ IC Engine ☐ Turbine ☐ Duct Burner ☐ Other (specify):	
Manufacturer and Model Number		
Construction Date		
Manufacture Date		
Is this unit subject to Title 40 CFR Part 60, NSPS?	☐ No ☐ Yes, Subpart(s)	
Is this unit subject to Title 40 CFR Part 63, MACT?	☐ No ☐ Yes, Subpart(s)	
Maximum Design Heat Input	MMBtu/hr	
Typical Heat Input	MMBtu/hr	
Maximum Operating Schedule	hours/day	hours/year
Percentage of Annual Use in Each Category	Space Heat:	%
	Process Heat:	%

After

Examples of Updated Forms

Supplemental Application Form
Unit Emissions

Applicant Name:
(As indicated on the *Permit Application Transmittal Form* (DEP-APP-001))

DEP USE ONLY
App. No.: _____

Complete a separate form for each unit.
(Duplicate this form as necessary.)

Unit Number:
(As indicated on the *Permit Application Form* (DEP-AIR-APP-200))

Section I: Unit Emission Information

Pollutant		Emission Rate (@ *Maximum* Capacity)			
		Pounds Per Hour (a)	Tons Per Year (b)	Other (Units) (c)	Basis (d)
Particulate Matter Less Than 10 Micrograms (PM_{10})	Potential Emissions				
	Proposed Allowable Emissions				
	Regulatory Standard(s)				
Particulate Matter Less Than 2.5 Micrograms ($PM_{2.5}$)	Potential Emissions				
	Proposed Allowable Emissions				
	Regulatory Standard(s)				
Sulfur Oxides (SOx)	Potential Emissions				
	Proposed Allowable Emissions				
	Regulatory Standard(s)				
Nitrogen Oxides (NOx)	Potential Emissions				
	Proposed Allowable Emissions				
	Regulatory Standard(s)				

Before

Supplemental Application Form
Unit Emissions

Applicant Name:
Unit No.:

DEEP USE ONLY
App. No.: _____

Complete this form in accordance with the instructions (DEEP-AIR-INST-212) to ensure the proper handling of your application. Print or type unless otherwise noted.

Questions? Visit the Air Permitting web page or contact the Air Permitting Engineer of the Day at 860-424-4152.

Part I: Unit Emission Information

Pollutant	Potential Emissions at Maximum Capacity		Proposed Allowable Emissions		
	lb/hr	tpy	lb/hr	Other Units *(specify)*	tpy
Criteria Air Pollutants					
PM_{10}					
$PM_{2.5}$					
SO_x					
NO_x					
CO					
VOC					
Pb					
GHG					
Hazardous Air Pollutants					

After

Connecticut Department of Energy and Environmental Protection

Example of Updated Forms

(e.g., HVLP gun, etc.). This information can be obtained from the manufacturer.

3a. *Transfer Efficiency* - If using a spray applicator, indicate an estimated transfer efficiency of the applicator. Transfer efficiency is the ratio of amount of solids sprayed from the applicator that adheres to the part being coated. *Provide documentation to support this.* This information can be obtained from the manufacturer.

3b. *Tank Dimensions* - If using a dip tank, indicate the tank dimensions in feet *and* its

anticipated amount of each solvent used, in gallons per hour, gallons per day, and gallons per year. If additional space is needed to answer this item, attach a separate sheet as necessary, clearly identifying the applicant name, form name and item number, and applicator identification number. *Attach a Material Safety Data Sheet for each solvent.* These forms are available from the supplier or are shipped with the chemical when it is purchased.

6a. *Temperature of Coating or Ink Material as*

Before

Attachments buried in instructions

Part VIII: Attachments

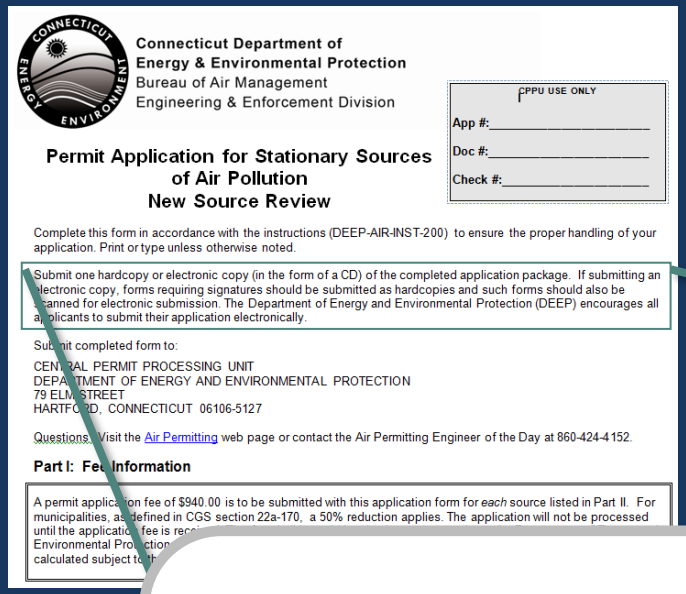
Please check the attachments being submitted as verification that all applicable attachments have been submitted with this application form. When submitting such documents, please label the documents as indicated in this Part (e.g., Attachment 205A, etc.) and be sure to include the applicant's name.

- ☐ Attachment 205A: *Process Information and Flow Diagram* – Submit a process flow diagram indicating all related equipment, air pollution control equipment and stacks, as applicable. Identify all materials entering and leaving each such device indicating quantities and parameters relevant to the proper operation of the device. Indicate all monitoring devices and controls. **REQUIRED**
- ☐ Attachment 205B: *Manufacturer Information* - Submit copies of the manufacturer specification sheets for the unit, the air pollution control equipment and the monitoring systems. **REQUIRED**
- ☐ Attachment 205C: *Transfer Efficiency Information* – If using a spray applicator, submit the manufacturer specification sheets for the transfer efficiency of such spray applicator. **IF APPLICABLE**
- ☐ Attachment 205D: *Material Safety Data Sheets* – Submit a Material Safety Data Sheet for each coating, diluent, and solvent used by this unit. **REQUIRED**

After

Attachments clearly defined on form itself

Example of Updated Forms



Connecticut Department of
Energy & Environmental Protection
Bureau of Air Management
Engineering & Enforcement Division

CPPU USE ONLY
App #:_____
Doc #:_____
Check #:_____

Permit Application for Stationary Sources of Air Pollution
New Source Review

Complete this form in accordance with the instructions (DEEP-AIR-INST-200) to ensure the proper handling of your application. Print or type unless otherwise noted.

Submit one hardcopy or electronic copy (in the form of a CD) of the completed application package. If submitting an electronic copy, forms requiring signatures should be submitted as hardcopies and such forms should also be scanned for electronic submission. The Department of Energy and Environmental Protection (DEEP) encourages all applicants to submit their application electronically.

Submit completed form to:

CENTRAL PERMIT PROCESSING UNIT
DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
79 ELM STREET
HARTFORD, CONNECTICUT 06106-5127

Questions: Visit the Air Permitting web page or contact the Air Permitting Engineer of the Day at 860-424-4152.

Part I: Fee Information

A permit application fee of $940.00 is to be submitted with this application form for *each* source listed in Part II. For municipalities, as defined in CGS section 22a-170, a 50% reduction applies. The application will not be processed until the application fee is rec... Environmental Pro... calculated subject to th...

Electronic Submittal of Application Materials

Submit one hardcopy or electronic copy (in the form of a CD) of the completed application package. If submitting an electronic copy, forms requiring signatures should be submitted as hardcopies and such forms should also be scanned for electronic submission. The Department of Energy and Environmental Protection (DEEP) encourages all applicants to submit their application electronically

New/Revised Forms

- Premises Information Form (NEW)
- Major Modification Form (EXISTING)
- PSD Review Form (NEW)
- Non-Attainment Form (NEW)

Premises Information Form

- Currently we do not know what equipment exists at a non-Title V/GPLPE site due to Sections -3b and -3c.
- Form allows us to obtain an accurate snapshot of the current premises potential emissions.
- GPLPE sources do not have to complete the form.
- Title V sources only need to provide their current potential emissions.

Premises Information Form

- Will obtain potential emissions for:
  - Permitted units
  - Registered units
  - Permit by Rule sources (-3b, -3c)
  - Sources that do not trigger permit applicability
  - Premises wide annual emission limitations in NSR permits or orders
- Final part of form will direct applicant to fill out other required forms (Major Mod, PSD, Non-Attainment)

Major Modification Form

- Updated to include an applicability section.
- The major modification calculation worksheet has been separated as this needs to be completed for each applicable pollutant.
- A table on the main form summarizes the results from the calculation sheets and directs the applicant to additional forms to be completed

Non-Attainment and PSD Forms

- Applicability section
- List of required attachments.
- Because no forms previously existed for these reviews previously, it was common for some of these required attachments to be missing in a permit application.

Request for Volunteers

- Looking for 3-4 volunteers with previous major NSR application experience to review the new Premises Information, Major Mod, PSD and Non-Attainment Forms.

- If interested send email to louis.corsino@ct.gov

Questions?

Louis J. Corsino III
APCE II
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860-424-3544
www.ct.gov/deep/airpermits