

R. SERIES/Initials CON 10-1 / e.A.R.

FACILITY ID 64-01-012

WK ACT/Doc Code CP / GC

Project # / Permit # 07-602 /

12/03/08

Form CEs

Additional Form CEs for Auxiliary Boiler

Roling, Chris [DNR]

From: Hillman, Timothy M. [HillmanTM@bv.com]
Sent: Wednesday, December 03, 2008 3:07 PM
To: Roling, Chris [DNR]
Cc: Phelps, Dave [DNR]; Daniel, Chad; Byers, Andrew C. (Andy); Arnold, Alan; Rinkol, Michael J.; Bleckinger, Mark R.; Hillman, Timothy M.
Subject: RE: CE Forms
Attachments: Attachment A Aux Boiler LNB Form CE.doc; Aux Boiler OxCat Form CE5.doc

Chris,

Please find below IPL's responses to your questions:

- 1) Form CE for the low NOx burners. A CE Form for the Aux Boiler LNB was included in IPL's email Response to RAI #11 of October 29, 2008. I have also attached the Form herein for reference. Also, how many burners on the unit (the total is 268.64 MMBTU/hr). One (1) burner.
- 2) Form CE for the proposed oxidation catalyst. A CE Form for the Aux Boiler Oxidation Catalyst is also attached.

Best regards,

Tim Hillman | Senior Air Quality Scientist
Black & Veatch - Building a World of Difference™
11401 Lamar Avenue
Overland Park, KS 66211
Phone: (913) 458-7928 | Fax: (913) 458-7928
Email: hillmantm@bv.com

From: Arnold, Alan [mailto:AlanArnold@alliantenergy.com]
Sent: Wednesday, December 03, 2008 10:51 AM
To: Hillman, Timothy M.
Cc: Roling, Chris [DNR]; Phelps, Dave [DNR]; Daniel, Chad; Byers, Andrew C. (Andy)
Subject: FW: CE Forms

Tim- please review and provide information to Chris.

Alan J. Arnold
Environmental Lead- IPL Baseload Project
Alliant Energy Corporate Services
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From: Roling, Chris [DNR] [mailto:Chris.Roling@dnr.iowa.gov]
Sent: Wednesday, December 03, 2008 10:02 AM
To: Arnold, Alan
Cc: Phelps, Dave [DNR]
Subject: CE Forms

Alan,

Lori completed her modeling review and gave me the memo late yesterday morning. As I am working on the draft permits I discovered I do not have the following CE forms for the Auxiliary Boiler:

- 1) Form CE for the low NOx burners. Also, how many burners on the unit (the total is 268.64 MMBTU/hr).
- 2) Form CE for the proposed oxidation catalyst.

Please send me the forms as soon as possible. Also, please be aware that as I work on the draft permits I may have numerous questions such as this that I will email to you when they come up.

Chris

Christopher A. Roling, PE
Environmental Engineer Senior
Air Quality Bureau, IDNR
ph: 515-242-6002
fax: 515-242-5094



AIR QUALITY BUREAU
 ATTN: Application Log in
 7900 Hickman Rd., Suite 1
 Urbandale, IA 50322

IOWA DNR Air Construction Permit Application

Form CE Control Equipment Information
 Please see instructions on the reverse side

Company Name IPL-Sutherland Generating Station Unit 4							
1) CE Number ID: 249							
2) Emission Point(s) ID: EP-249							
3) Manufacturer: TBD				4) Model Number: TBD			
5) Control Equipment Description: Low NOx Burner (LNB) and Flue Gas Re-Circulation							
6) Date of Construction: 2009							
7) Date of Modification: N/A							
8) Capture Hood involved: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
9) Capture Hood Efficiency (percentage): N/A							
10) Date of Hood Installation: N/A				11) Date of Hood Modification (if any): N/A			
12) Pollutant Controlled							
	PM	PM₁₀	VOC	SO₂	NO_x	CO	Other()
Control Efficiency					0.037 lb/MBtu		
13) If manufacturer's data is not available attach a separate sheet of paper (labeled CE-13A) to provide the control equipment design specifications and performance data to support the above mentioned control efficiency. Also refer the BACT Analysis (Appendix H) and Equipment Performance Data (Appendix F)							

Instructions for Form CE

This form is used by the DNR to identify the control equipment and the emission point (stack or vent) used for the emission unit(s) proposed in this permit application. This form also asks for supporting documents to verify stated control efficiencies of the control equipment. Additional information may be requested.

Please put your company name in the box provided. This is useful if application pages are separated.

STACK/VENT (EMISSION POINT) SPECIFICATIONS:

IF YOU HAVE MULTIPLE PIECES OF CONTROL EQUIPMENT THAT VENT FROM ONE EMISSION POINT, ATTACH A FORM CE FOR EACH PIECE OF CONTROL EQUIPMENT.

1. Provide the name of the control equipment used (for example: SNCR, ESP, Carbon Adsorption, etc.). Identify the control equipment by a number. This number should be the only number to represent this control equipment on other forms which are included in this application and in other permit applications.
2. Provide the ID number of the emission point. An emission point is the same as a stack or vent. The number should be consistent with numbers provided on previous and future permit applications including operating permits.
3. Provide the manufacturer of the control equipment (if known). If custom, provide engineering specifications.
4. Provide the model number of the control equipment (if known). If custom, provide engineering specifications.
5. Describe the control equipment and how it operates. Please provide any product information from the manufacturer.
6. The date of construction of the control equipment is the date, month, and year in which construction or modification begins as defined in EU Form Instruction item 7.
7. If the control equipment has been or will be modified, give the date, month and year of the most recent or future modification.
8. Indicate whether there is a capture hood associated with the emission unit by answering "yes" or "no."
9. If there is a capture hood, write down its capture efficiency, if known. If unknown, leave blank.
10. Provide the date the capture hood was installed or will be installed at the emission unit(s).
11. If the capture hood has been or will be modified, write the month and year of the modification.
12. If you have supporting documentation for the control efficiency(s) of the control equipment, mark the type of documentation, either manufacturer's data or a stack testing report. Manufacturer's data can include a manufacturer's guaranteed emission rate or a guaranteed control efficiency. Attach the supporting documentation and label this attachment CE-13A. Then, list the pollutant and provide the estimated or proven control efficiency for the control device on this form. If the control equipment will be controlling more than one pollutant at this emission unit, list all pollutants and the corresponding control efficiencies.
13. If you do not have the documentation requested in box (12), provide other documentation for the control efficiency such as calculations or design data or other reference document. Attach a separate sheet labeled CE-13A.



AIR QUALITY BUREAU
 ATTN: Application Log in
 7900 Hickman Rd., Suite 1
 Urbandale, IA 50322

IOWA DNR Air Construction Permit Application

Form CE5 Control Equipment Information for Catalytic Oxidation
 Please see instructions on the reverse side

Company Name IPL-Sutherland Generating Station Unit 4					
1) CE Number ID: 249B – CO Oxidation Catalyst					
2) Emission Point(s) ID: EP-249					
3) Manufacturer: TBD			4) Model Number: TBD		
5) Catalyst Material: Platinum					
6) Operating Temperature (°F) : Approximately 600 - 800 F					
7) Residence Time (seconds) : Approximately 0.1 seconds or less					
8) Date of Construction: 2009					
9) Date of Modification: N/A					
10) Capture Hood involved: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
11) Capture Hood Efficiency (percentage): N/A					
12) Date of Hood Installation: N/A			13) Date of Hood Modification (if any): N/A		
14) Pollutant Controlled					
	PM	PM₁₀	VOC	CO	Other()
Control Efficiency				0.007 lb/MBtu	
15) If manufacturer's data is not available attach a separate sheet of paper (labeled CE5-15A) to provide the control equipment design specifications and performance data to support the above mentioned control efficiency. Reference RAI 5, Response 16.					

Instructions for Form CE5

This form is used by the DNR to identify the control equipment and the emission point (stack or vent) used for the emission unit(s) proposed in this permit application. This form also asks for supporting documents to verify stated control efficiencies of the control equipment. Additional information may be requested.

Please put your company name in the box provided. This is useful if application pages are separated.

STACK/VENT (EMISSION POINT) SPECIFICATIONS:

IF YOU HAVE MULTIPLE PIECES OF CONTROL EQUIPMENT THAT VENT FROM ONE EMISSION POINT, ATTACH A FORM CE FOR EACH PIECE OF CONTROL EQUIPMENT.

1. Provide the name of the control equipment used (for example: pulse jet baghouse, ESP, dust collector, etc.). Identify the control equipment by a number. This number should be the only number to represent this control equipment on other forms which are included in this application and in other permit applications.
2. Provide the ID number of the emission point. An emission point is the same as a stack or vent. The number should be consistent with numbers provided on previous and future permit applications including operating permits.
3. Provide the manufacturer of the control equipment (if known). If custom, provide engineering specifications.
4. Provide the model number of the control equipment (if known). If custom, provide engineering specifications.
5. Provide the material used as a catalyst.
6. Provide the operating temperature of the oxidizer.
7. Provide the residence time of the oxidizer. This is calculated by dividing the internal volume of the oxidizer by the air flow through the oxidizer.
8. The date of construction of the control equipment is the date, month, and year in which construction or modification begins as defined in EU Form Instruction item 7.
9. If the control equipment has been or will be modified, give the date, month and year of the most recent or future modification.
10. Indicate whether there is a capture hood associated with the emission unit by answering "yes" or "no."
11. If there is a capture hood, write down its capture efficiency, if known. If unknown, leave blank.
12. Provide the date the capture hood was installed or will be installed at the emission unit(s).
13. If the capture hood has been or will be modified, write the month and year of the modification.
14. If you have supporting documentation for the control efficiency(s) of the control equipment, mark the type of documentation, either manufacturer's data or a stack testing report. Manufacturer's data can include a manufacturer's guaranteed emission rate or a guaranteed control efficiency. Attach the supporting documentation and label this attachment CE5-14A. Then, list the pollutant and provide the estimated or proven control efficiency for the control device on this form. If the control equipment will be controlling more than one pollutant at this emission unit, list all pollutants and the corresponding control efficiencies.
15. If you do not have the documentation requested in box (14), provide other documentation for the control efficiency such as calculations or design data or other reference document. Attach a separate sheet labeled CE5-15A.

Roling, Chris [DNR]

From: Arnold, Alan [AlanArnold@alliantenergy.com]
Sent: Wednesday, December 03, 2008 10:51 AM
To: Hillman, Timothy M.
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