Worksheet for Technical Review of Working Draft of Proposed Permit

Company Name:	**The Dow Chemical Company**	**AI #:**	**85652**	**TEMPO Activity No:**	PER20060002 PER20060003 PER20060004 PER20070001
Facility Name:	**Plaquemine Cogeneration Plant**	**Remarks Submitted by:**	**Denise Hale ; January 31, 2008**		
Permit Writer:	**Dustin Duhon**	**Permit Writer Email address:**	**Dustin.duhon@la.gov**		

Permit Reference	Remarks	Air Permits Division Response (for official use only)
1. PER2007001 Cover page CAIR permit	The physical location should be noted as Gate 1 within the Dow Chemical Company, not Gate 10. Also, the permit contact should be listed as Paul Soileau, the new Designated Representative for the facility. Use the mailing address: PO Box 150 c/o Bldg 3502 Plaquemine, LA 70765-0150	This change was made.
2. PER2007003 Cover page Acid Rain permit	The physical location should be noted as Gate 1 within the Dow Chemical Company, not Gate 10. Also, the permit contact should be listed as Paul Soileau, the new Designated Representative for the facility. Use the mailing address: PO Box 150 c/o Bldg 3502 Plaquemine, LA 70765-0150	This change was made.
3. PER2007002 Cover page, Title V permit	The permit should be addressed to the new Responsible Official, Paul Soileau at the following address: PO Box 150 c/o Bldg 3502 Plaquemine, LA 70765-0150	This change was made.
4. PER2007002 Page 1, Briefing Sheet, Section I. Background.	TYPO – remove comma from first sentence. In the second sentence, the phrase " Dow Chemical Company's Louisiana Division" should read "Dow Chemical Company's Louisiana Operations". In the last sentence, "Permit No. 1280-00096-V1, issued June 13, 2006" should read "Permit No. 1280-00096-V1, issued October 3, 2003 and Administratively Amended March 21, 2005 and June 13, 2006".	This change was made.

4. PER2007002 Page 1, Briefing Sheet, Section II. Origin	Remove the phrase "by Dow Chemical Co" from the first sentence. AEP actually submitted the renewal application. Dow Chemical submitted the additional information which is referenced.	This change was made.
5. PER2007002 Page 1, Section III. Description, third paragraph	Dow refers to "offgas" as "plant produced fuel gas". Please change "offgas" used in this paragraph (three times) to "plant produced fuel gas". This will be consistent with wording in other Dow permits. Note: this comment applies to several sections throughout the permit document.	This change was made.
6. PER2007002 Page 2, Section III. Description, first paragraph	Please change "offgas" to "plant produced fuel gas".	This change was made.
7. PER2007002 Page 2, Section III. Description, last paragraph, 2nd sentence	Please change " Remaining steam is condensed in a forced-draft cooling tower..." to " Remaining steam is condensed by use of a forced-draft cooling tower..." for a more accurate description.	This change was made.
8. PER2007002 Page 3, Section III, emissions summary table	After VOC is listed as 48.16 tpy with a change of +5.16. There is no VOC change with this permit action. The total VOC should be listed as 43.00 with no change indicated (-).	This change was not made. Upon consideration of startup and shutdown emissions, it was necessary to revise the emissions estimates.
9. PER2007002 Page 5, Section VIII, General Condition XVII Activities	The work activity described as " Plant Produced Duct Burner Purging" should read "Plant Produced Fuel Gas Duct Burner Purging"	This change was made.
10. PER2007002 Page 5, Section IX, Insignificant Activities	Two activities are listed with ID numbers (IA-1 and IA-2) and two activities are listed with no ID number (-). Please list these activities as IA-1 through IA-4 so that each activity has an ID number.	This change was made.
11. PER2007002 Pages 6-9, Section X, Table 1, Applicable Louisiana and Federal Requirements	Typo: the header on each page lists "Palquemine". Correct this to "Plaquemine". For EQTs 6-9 change the "1's" under 40 CFR 63 YYYY to "2's". These units are exempt from requirements due to construction dates. Typo: the table on page 6 and 8 lists EQT 12 and EQT 13 two times each, but does not list EQT 14 and EQT 15. Correct ID for "HRSG w/Duct burner for GT-700" to EQT 14 and ID for "HRSG w/Duct burner for GT-700" to EQT 15 For consistency, add "2's" under Ch 51 for EQTs 12 through 15. Table 2 already lists this exemption on page 10 For FUG1, remove the "2" from 2103, and add a "3" under 2122.	These changes were made.
12. PER2007002 Pages 10-11, Section XI, Table 2, Non-applicability Table	Typo: the header on each page lists "Palquemine". Correct this to "Plaquemine". Page 11, Add exemption language under Gas Turbines GT-500- GT-800 for 40	This change was made.

	CFR 63 YYYY. Exempt due to turbines were constructed prior to Jan 14, 2003. If turbines are reconstructed or replaced, then requirements will apply.	

13. PER2007002, Specific Requirements	Note: "SR" = "Specific Requirement"
	
	Page 2 of 11, GRP0005
	• Note that SR#13 refers to opacity monitoring systems and its operation under Acid Rain. Please note that 75.14(c) exempts the units from opacity monitoring.
	
	Page 3 of 11, GRP0006
	• Change wording of SR#20. The second and third sentences need to be changed.
	  o Existing: "After that time, permittee shall apply to LDEQ for a permit modification so that LDEQ may re-evaluate BACT for nitrogen oxides. Permittee shall supply a copy of this CEMS data to LDEQ as part of the application for a permit modification."
	  o Change to: "Permittee shall supply a copy of this CEMS data to LDEQ. Permittee shall contact LDEQ to determine if permit modification is required."
	
	Note: NAAQS for NOx is an ANNUAL concentration number. The max lb/hr does not impact this average. Therefore, BACT analysis will not be necessary, as it will not be affected.
	
	• Typo. SR#21, 8th word of sentence should be "and" instead of "an"
	
	Page 3,4 of 11, GRPs 007,008,009
	• Change wording of SR#24, #28, #32 in the same way as SR#20 above was changed.
	• Typo SR#25, #29, #33 … same as SR# 21 above. 8th word "and"
	
	Page 4,5 of 11, GRP0014
	• Reword SR # 35
	• Remove SR#37. 60.334(g) does not apply
	• Remove SR#39 and SR#40. They do not apply.
	
	Page 5-7 of 11, GRP0015
	• Add complete citation for SR#47 - 40 CFR 60.44Da(d)(1)
	• Many issues with this section. Beginning with SR#48 through SR#64, the citations numbers all appear to be wrong. It appears that the section numbers are off by 2. For example, the citation listed for SR#49 as 40 CFR 60.48Da(c) should really be listed as 40 CFR 60.46Da(c). The citation errors in this section caused much confusion! However, the following is what should be correct:
		The exemption was noted for the comment regarding GRP005.
		
		In reference to the change requested for SR#20, 24, 28, and 32, the paragraph was reworded to communicate the information requested.
		
		The changes that required the correction of typos were made.
		
		Comment regarding SR#35 does not suggest a specific change. Therefore, no change was made.
		
		Comments regarding SR#37, 39, and 40 do not specify why these conditions should be removed. Therefore, no change was made.
		
		<u>Regarding all comments that reference 40 CFR 60 Subpart Db for GRP0015:</u>
		
		SR#48, 51, 56, and 57 were removed as they do not apply. No other changes that would require the removal of conditions were made because the conditions apply.
		
		All citation numbers are correct as shown in the most current version of this regulation, published in 72 FR 32722 on June 13, 2007. All conditions except for SR#51 reference both initial performance tests as well as any additional tests required by the Administrator and therefore should not be removed.
		
		Regarding the 11th and 12th bullet points, it is not necessary to include a specific condition that explains an exemption clearly provided for in the regulations.
		
		It is not necessary to alter SR#66 as the

	• Remove SR#48. (citation should be 40 CFR 60.45Da(a)) This is not a commercial demonstration permit. • Change SR#49 citation to 40 CFR 60.46Da(c) • Change SR#50 citation to 40 CFR 60.46Da(e) • Remove SR#51. Initial performance testing occurred in the past. Citation should be 40 CFR 60.46Da(f) • Remove SR#52 and 53 • Change SR#54 citation to 40 CFR 60.46Da(i) • Change SR#55 citation to 40 CFR 60.46Da(k) • Remove SR#56-60. • Add SRs for citations 40 CFR 60.47Da(a) which indicates that continuous opacity monitoring is not required because only gaseous fuels are combusted. • Add SR for citation 40 CFR 60.47Da(o) which indicates that continuous emissions monitoring is not required for duct burners. • It appears that citations for SR#61 through #64 are correct, however, these all occurred in the past with the initial performance test and can be removed. • For SR#66 Add the wording "as appropriate" to the end of the sentence • Remove SR#67 and SR#69, these do not apply.	regulations appear to provide the clarity that the suggested change would provide. The commenter did not provide justification for the removal of SR#52, 53, 67, or 69.
14. PER2007002, Specific Requirements - continued	Note: "SR" = "Specific Requirement" Pages 9-11 of 11, GRP0004 • For SR#89, need to cite LAC 33:III.5107.A. Chapter 2201 does not apply... units are exempt per 2201.C.15 (also noted on Table 2 non-applicability table) • For SR#93 ... hasn't the list of the state HRVOC changed? • For SR#99, change total VOC from 48.16 tpy to 43.00 tpy • For SR#101. Is DEQ applying the label of "Alternate Operating Scenario" correctly? Was this description meant to identify startup and shutdown operations? We just want to make sure this label doesn't conflict with any Part 70 definition. • SR#103. This is strictly a renewal permit. There are no projects, no physical changes, no changes in emissions. Therefore there should be no new stack testing requirements. All initial stack testing was performed as required. • Remove SR#113 occurred in the past, please remove.	The requested changes were made, except as noted below: The list of HRVOC in SR#93 is current and was not changed. SR#99 was not changed. See answer to previous comment. SR#101 was removed. SR#103 was removed and its completion was noted in the Statement of Basis. Should there be any reason to conduct further analysis, SR#113 must remain so that this requirement is maintained.
15. PER2007002, Emission Rates for Criteria Pollutants	For GRP0009, max lb/hr VOC should be 4.00 not 16.00 Is it LDEQ intention for GRPs 0010, 0011, 0012, 0013 max lb/hr NOx to be	The requested changes were made, except as noted below:

	400lb/hr? Dow had requested 480 lb/hr but agreed to 400 lb/hr in the additional information submitted Nov 29, 2007. According to footnote on this sheet only GRPs 0010, 0011, 0012, 0013 numbers should be bolded. All other numbers on this sheet should be unbolded. At bottom of page, VOC should be 43.00 tpy, not 48.16tpy	LDEQ has decided to grant Dow's original request of 480 lb/hr, but then to require Dow to submit a PSD permit modification application after collecting 12 months of CEMS data to correct this number. All bolded numbers should be bolded. GRPs 6-9 denote the Normal Operations scenario and GRPs 10-13 denote the SU/SD scenario. RLP 18 – 21 represent the annual emissions from the scenarios. The VOC total was not changed. See answer to previous comment.
16. PER2007002, Emission Rates for Criteria Pollutants	According to description of footnote on this sheet, no numbers should be bolded. All numbers on this sheet should be unbolded.	This change was not made. All bolded numbers should be bolded. GRPs 6-9 denote the Normal Operations scenario and GRPs 10-13 denote the SU/SD scenario. RLP 18 – 21 represent the annual emissions from the scenarios.
17. PER2007004, Cover Sheet	Letter should be addressed to Paul Soileau. Second sentence of letter is not accurate. There are no proposed projects and no construction associated with the Title V renewal. This is strictly a renewal. The header of the second page is titled "Authorization to Construct and Operate an Existing Facility". There is no construction associated with this action. The physical location needs to refer to Gate 1, not Gate 10.	The name of the responsible official and the physical location have been changed throughout this document. The other requested changes were not made. The language in question is standard language that appears in all PSD permits issued by LDEQ.
18. PER2007004, Briefing Sheet	Page 2, first paragraph, last sentence. "Permit No. 1280-00096-V1, issued June 13, 2006" should read "Permit No. 1280-00096-V1, issued October 3, 2003 and Administratively Amended March 21, 2005 and June 13, 2006". Page 2, The Section Labeled "Project Description" should more accurately be labeled "Description". There are no projects and no physical changes. SU/SD have always been present. Page 3, 1st and 3rd paragraphs: Please change "offgas" used in these paragraphs (four times) to "plant produced fuel gas". This will be consistent with wording in other Dow permits. Page 5: Again, is "Alternate Operating Scenario" the correct terminology to use for SU/SD ?	These comments were also made for the Part 70 permit briefing sheet and have been addressed in the same manner. See previous comments for responses.

	Page 6: Under PM10 explanations, please change "offgas" (two times total) to "plant produced fuel gas". Page 7, 1st full paragraph, change "offgas" to "plant produced fuel gas". Page 8, Location needs to refer to Gate 1, not Gate 10.	
19. PER2007004, Preliminary Determination Summary	Is header date of August 27, 2007 correct? For entire Project description, is it necessary to repeat everything from the Briefing sheet description? Why not just refer to the previous description? Throughout the description, change "offgas" to "plant produced fuel gas".	The header date is correct. The description is repeated for completeness. The requested wording change has been made.
20. PER2007004, Specific Conditions	Specific Condition #1, last sentence: additional information received November 29, 2007 should also be cited. Specific Condition #3. There are no projects, physical changes , or emission changes associated with this renewal permit action. SP #3 should be referring to the initial testing which was required. Since there are no projects or changes, there are no testing requirements and initial testing continues to meet compliance requirements. Also, these units are covered by Acid Rain with very strict continuous monitoring and reporting. Clarify no new testing is required. Specific Condition #4. Reword. Remove 2nd and 3rd sentences and replace with the following: "Permittee shall supply a copy of this CEMS data to LDEQ. Permittee shall contact LDEQ to determine if permit modification is required."	Specific Condition #1 change was made. Specific Condition #3 was removed and its completion was noted in the Statement of Basis. The requested change will not be made to Specific Condition #4. See answer to previous comment.
21. PER2007004, Statement of Basis	Page 1, Section II, end of 1st paragraph: "Permit No. 1280-00096-V1, issued June 13, 2006" should read "Permit No. 1280-00096-V1, issued October 3, 2003 and Administratively Amended March 21, 2005 and June 13, 2006." Page 1, Table at bottom: Issue date for 1280-00096-V1 should be October 3, 2003 Page 2 Application Section should also cite additional information submitted November 29, 2007. Page 3, 2nd Paragraph: change "offgas" to "plant produced fuel gas". Page 4, Permitted Air Emissions table: Change After VOC from 48.16 to 43.00. The associated "change" column should show "-" , not +5.16	Issuance date for 1280-00096-V1 was not changed. The date shown in the Statement of Basis is correct. All other comments were also made for the Part 70 permit briefing sheet and have been addressed in the same manner. See previous comments for responses.