Worksheet for Technical Review of Working Draft of Proposed Permit

Company Name:	**BASF Corporation**	**AI #:**	**2049**	**TEMPO Activity No:**	**PER20040012**
Facility Name:	**Utilities Plant**	**Remarks Submitted by:**	**Craig Tyndall**		
Permit Writer:	**Kyle Prestenbach**	**Permit Writer Email address:**	**Kyle.Prestenbach@la.gov**		

Instructions

Permit Reference – Indicate specific portion(s) of the permit to which the remark relates (i.e: "Specific Condition 120", or "Section II Air Permits Briefing Sheet", etc.).

Remarks – Explain the basis for each remark. Provide regulatory citations where possible. If the remark is made due to an error or omission in the permit application this must be noted and the revised information ***must be submitted.*** Revised information may be submitted separately from this worksheet. Please be aware that revised information must be submitted in writing and certified by the Responsible Official, and if necessary, by a Professional Engineer licensed in Louisiana. *Please Note:* New or additional equipment, processes or operating conditions not addressed in the original permit application will be addressed on a case-by-case basis. The Department reserves the right to address such changes in a separate permit action.

DEQ Response – ***DO NOT COMPLETE THIS SECTION.*** This section will be completed by Air Permits Division of DEQ, included in the proposed permit package and made available for public review during any required public comment period.

- Additional rows may be added as necessary.
- Completed Form shall be emailed to the Permit writer in MS Word compatible format within the deadline specified in the email notification.

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Cover Page	Verify the Permit No: 2265-V5 is the correct permit version. The copy of the permit issued on November 22, 2000 that BASF has in its possession is version 2265-V3.	Permit No. 2265-V5 is correct. Permit No. 2265-V3 was issued on 5/26/2000. Permit No. 2265-V4 was issued on 11/22/2000; however, Permit No. 2265-V4 was incorrectly labeled as 2265-V3 on the permit.
Briefing Sheet, Section III, pg .2	The DNT facility is operated by BASF. Remove "...operated by Air Products and Chemicals, Inc. (APCI)".	Removed the wording as requested.
Briefing Sheet, Section III, pg .2	The WWTP also treats wastewater from adjacent facilities (IMTT, Air Products and OxyChem).	Revised a portion of the process description of the WWTP to read as follows, *"The WWTP treats wastewater from chemical production units throughout the entire BASF complex, as well as wastewater from adjacent facilities (IMTT, Air Products, and OxyChem)."*
Briefing Sheet, Section III, pg .3	The WWTP description should include the digester, sooty water clarifier and the plate and frame filter press.	Added the following text, as requested, to the Wastewater Treatment Plant process description, "*The WWTP also includes a digester, a sooty water clarifier, and a plate and frame filter press.*"

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Briefing Sheet pg .4 Permit Description # 5	Should read: "To install aerators in the R-410B, R-460B, and R-480B Bioreactors (EPNs WWT07, WWT09, and WWT20, respectively);"	Changed wording as requested.
Briefing Sheet pg .4 Permit Description # 6	Should read: "To add OxyChem wastewater emissions and Polyol Plant wastewater emissions to the Wastewater Flare and Thermal Oxidizer Emissions CAP..."	Changed wording as requested.
Briefing Sheet, Section III, pg .4	In the last sentence at the bottom of the page, change "large reduction" to "reduction" and "large increase" to "increase."	Since the Utilities Plant NOx and CO emission changes (After Emissions minus Before Emissions) are greater than PSD trigger thresholds, the Air Permits Division believes that "large" is an appropriate adjective which describes the changes. As such, "large" will remain in the permit.
Briefing Sheet pg . 5&6	Verify the change in total TAPS (14.68 tpy) is greater than the total change in VOCs (12.12 tpy).	The change in total TAPs (14.89 tpy) is greater than the change in total VOCs (12.12 tpy). The current permit, Permit No. 2265-V4, does not speciate many of the VOC TAPs speciated in the proposed permit, Permit No. 2265-V5. This results in the change in total TAPs being greater than the change in total VOCs. Note: The change in total TAPs was changed from 14.68 tpy to 14.89 tpy. During the permit application review, meta-xylene (1.31 tpy) was speciated separately from xylene (mixed isomers) (0.27 tpy). The draft of Permit No. 2265-V5 included only the meta-xylene emissions (1.31 tpy) and omitted the xylenes (mixed isomers) emissions (0.27 tpy). The permit has been corrected; xylenes (mixed isomers) include all isomers of xylenes, including meta-xylenes, totaling 1.58 tpy.
Briefing Sheet pg . 8 GC XVII Activities	Oil firing for 3 hr/yr, under boiler 1&2, is insufficient time to perform an adequate test. BASF proposes 48 hr/yr.	In additional information submitted by BASF on June 17, 2008, BASF requested fuel oil test firing for 45 hours/year as opposed to 48 hours/year as requested (see remarks at left). Permit No. 2265-V4 currently has fuel oil test firing for 3 hours/year. Since fuel oil test firing for 45 hours/year meets all criteria under General Condition XVII, the permit was changed from 3 hours/year to 45 hours/year for fuel oil test firing, as requested.
Briefing Sheet pg . 8 GC XVII Activities	Boiler Startup AOG Venting "24/yr" should read "24 startups/year".	Changed as requested.
Statement of Basis, Section III, Proposed Project/Permit Information	The DNT facility is operated by BASF. Remove "...operated by Air Products and Chemicals, Inc. (APCI)".	Removed the wording as requested.
Statement of Basis, Section IV, Regulatory Analysis, Prevention of Significant Deterioration/Nonattainment New Source Review	Change "large reduction" to "reduction" and "large increase" to "increase."	Since the Utilities Plant NOx and CO emission changes (After Emissions minus Before Emissions) are greater than PSD trigger thresholds, the Air Permits Division believes that "large" is an appropriate adjective which describes the changes. As such, "large" will remain in the permit.

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Statement of Basis, Section IV, Regulatory Analysis, Prevention of Significant Deterioration/Nonattainment New Source Review	Change "The proposed project" to "This review".	This following is standard language accepted by the Air Permits Division for permits not requiring emissions modeling. As such, the language will remain in the permit as stated. *"Emissions were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. The proposed project did not require the applicant to model emissions."*
XI Table 2 EQT0646 pg. 28	The exemption section for Cogen 2 should read: "BASF is continuously monitoring NOx lbs/MMBTU using a CEMS per PSD-LA-613".	Changed wording as requested.
Specific Requirement No. 13	Change three hours per year to 48 hr/yr.	Changed three hours per year to 45 hours per year (see explanation above).
Specific Requirement No. 33	Change three hours per year to 48 hr/yr.	Changed three hours per year to 45 hours per year (see explanation above).
Specific Requirement No. 75	Typo: "fot" should be "for".	Corrected misspelling.
Specific Requirement No. 95	Typo: "impundments" should be "impoundments".	Corrected misspelling.
Specific Requirement No. 116	Remove Specific Requirement 116. The Thermal Oxidizer does not utilize an organic monitoring device. The Thermal Oxidizer has continuous monitoring of the combustion temperature as stated in 40 CFR 63.143 (e)(1).	Removed the incorrect requirement (40 CFR 63.143(e)(2)) and added the correct one (40 CFR 63.143(e)(1)).
Specific Requirement No. 125	BASF monitors valve position in lieu of using flow indicators to determine if a bypass occurs. Therefore, restate as follows: "...(bypass lines): Bypass indicated by monitoring bypass valve position on a continuous basis. Install valve position monitor at the entrance..."	By letter dated June 16, 2008, BASF submitted a request for approval to monitor control device bypasses to the atmosphere by continuously monitoring control valve position signals in the control room in lieu of installing flow indicators or car-seals/lock-and-key mechanisms as specified in 40 CFR 63.114(d) and 40 CFR 63.148(f). During the technical review of BASF's request, it was determined by the Air Permits Division that continuously monitoring the control valve signal position in lieu of the requirements specified in 40 CFR 63.114(d) and 40 CFR 63.148(f) is sufficient to monitoring process vent control device bypasses. Therefore, Specific Requirement No. 125 was modified as requested and reads as follows: *"Vapor collection system or closed vent system (bypass lines): Flow monitored by technically sound method continuously. Bypass indicated by monitoring bypass valve position signal on a continuous basis every 15 seconds. Install valve position monitor at the entrance to any bypass line. (Alternate monitoring method to 40 CFR 63.148(f)(1) and (f)(2)). Subpart G. [40 CFR 63.151(f)]".*
Specific Requirement Nos. 126 & 127	Remove. Complies with 40 CFR 63.148(f)(1).	Removed Specific Requirement Nos. 126 and 127.
Specific Requirement No. 133	Remove. There is no regulatory requirement to monitor carbon monoxide from the thermal oxidizer. Temperature is monitored per 40 CFR 63, Subpart G, Table 13 to demonstrate adequate combustion.	Removed Specific Requirement No. 133.

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Permit Reference	Remarks	Air Permits Division Response (for official use only)
Specific Requirement No. 134	Remove. No other emission limits are listed for this source as a specific requirement.	The current TEMPO print format does not print dinitrotoluene in the TAPs/HAPs emissions table (TPOR0146). Therefore, TEMPO prints dinitrotoluene in the Specific Requirements report (TPOR0147).
Specific Requirement No. 135	Remove. There is no regulatory requirement to monitor pH of the scrubber nor is there even a regulatory requirement to operate a scrubber on this control device.	Louisiana policy requires that scrubbing liquid pH and circulation flow rate be monitored for wet scrubbers in operation used as control devices, regardless of whether or not they are required by state or federal regulations.
Specific Requirement Nos. 136 & 137	Remove. There is no regulatory requirement to monitor opacity from this control device. Further, historical records indicate that there has never been an opacity excursion of this control device.	Since there is no regulatory requirement to monitor opacity, Specific Requirement Nos. 136 and 137 have been removed.
Specific Requirement No. 138	Remove. There is no regulatory requirement to monitor oxygen content from this control device. Temperature is monitored per 40 CFR 63, Subpart G, Table 13 to demonstrate adequate combustion.	Since there is no regulatory requirement to monitor oxygen content, Specific Requirement No. 138 has been removed.
Specific Requirement No. 139 & 140	Remove. There is no regulatory requirement to monitor pH of the scrubber nor is there even a regulatory requirement to operate a scrubber on this control device.	Louisiana policy requires that scrubbing liquid pH and circulation flow rate be monitored for wet scrubbers in operation used as control devices, regardless of whether or not they are required by state or federal regulations.
Specific Requirement Nos. 141, 142, 143, & 144	Remove. There is no regulatory requirement to monitor scrubber flow nor is there even a regulatory requirement to operate a scrubber on this control device.	Louisiana policy requires that scrubbing liquid pH and circulation flow rate be monitored for wet scrubbers in operation used as control devices, regardless of whether or not they are required by state or federal regulations.
Specific Requirement Nos. 147-149, 152-157, 160-162, 165-167, 170-172, 230, 231, 232, 236-238, 344, 345, 382, 383, 386	Remove. No other emission limits are listed for these sources as a specific requirement.	The current TEMPO print format does not print dinitrotoluene, barium, or zinc in the TAPs/HAPs emissions table (TPOR0146). Therefore, TEMPO prints dinitrotoluene, barium, and zinc in the Specific Requirements report (TPOR0147). Also, specific requirements 152 – 157 were removed since ethanol and isopropyl alcohol do not have to be speciated since they are not TAPs or HAPs. However, their emissions are included in the Total VOCs and Other VOCs amounts in the permit.
Specific Requirement Nos. 252-262	Remove. This is a stormwater tank that does not receive any wastewater streams as defined by 40 CFR 63, Subpart G. Therefore, none of these HON requirements apply.	Removed Specific Requirement Nos. 252 – 262 as requested. Table 2 of Section XI of the Word Document was updated to explain non-applicability of 40 CFR 63 Subpart G.
Specific Requirement Nos. 276-280	Equalization Tank TK-401 does not operate as a closed-vent system. The tank is designed as an open system under a vacuum. Each opening is maintained in an open position in order to create a sweep across the headspace. The purge air is then sent to the thermal oxidizer.	As defined in 40 CFR 63.111 of Subpart G, a "*closed-vent system means a system that is not open to the atmosphere and is composed of piping, ductwork, connections, and, if necessary, flow inducing devices that transport gas or vapor from an emission point to a control device.*" Based on the above definition, LDEQ asserts that TK-401 does operate as a closed-vent system. As such, specific requirements 276 – 280 will remain in the permit.

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Specific Requirement Nos. 316, 317 & 318	Remove. The Cogeneration Unit No. 2 utilizes a NOx CEMS, therefore it is not required to monitor the steam to fuel ratio [40 CFR 60.334(b)].	Since a NOx CEMS is being used as specified in 40 CFR 60.334(b) instead of monitoring fuel consumption and steam to fuel ratio, Specific Requirement Nos. 314 – 318 were removed. The requirement, 40 CFR 60.334(b), was added.
Specific Requirement No. 327	Typo: "aplicable" should be "applicable".	Corrected misspelling.
Specific Requirement No. 333	Remove "and opacity".	Removed *"and opacity"*.

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