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Via facsimile (512-239-1300) and email (airperm@tceq.state.tx.us and bstewart@tceq.state.tx.us)

Re: Standard Permit, Permits by Rule (PBR) and Air Quality Permits (Regular Permits): Proposed Changes to Address Emissions from Maintenance, Startup and Shutdown (MSS) Activities: Stakeholder Comments

Dear Mr. Stewart:

The Texas Commission on Environmental Quality (TCEQ) recently held stakeholder meetings in Austin and Houston to seek input and answer questions regarding proposed changes to 30 TAC 116 (Air Quality Permits), 30 TAC 106 (Permits by Rule) and a new standard permit for maintenance, startup and shutdown (MSS) activities. The purpose of the proposed changes and new standard permit is to provide mechanisms for authorizing facility emissions associated with MSS. During the Houston Stakeholders meeting on October 18, 2007, TCEQ staff indicated that TCEQ is interested in receiving feedback from stakeholders on the preliminary MSS authorizations proposals, which were posted on TCEQ's website for review. TCEQ staff asked that comments on the preliminary proposal be submitted to TCEQ by November 2, 2007 but stated that was a target date. In response to that request, the City of Houston, Bureau of Air Quality Control (BAQC) is submitting the following comments on TCEQ's preliminary MSS authorization proposal. BAQC understands that there will be a formal proposal of these rules at a later date, and that there will be another opportunity to comment on the proposed rules at that time.

The BAQC is concerned that without clearly defined and narrow authorization requirements for MSS activities, there will be adverse impacts from MSS activities in the Houston neighborhoods that are surrounded by large industrial plants, including refineries and chemical plants, which are significant sources of hazardous air pollutants. The BAQC recognizes the importance of MSS activities to ensure that facilities operate reliably and to prevent emissions events. TCEQ must therefore balance the need for emissions sources to startup and shutdown their facilities and to perform necessary maintenance on those facilities, with the understanding that in certain instances, the emissions associated with MSS activities and impacts from those emissions, will be greater than the emissions and impacts associated with the normal operation of those same facilities. It is those instances where the MSS activity emissions and the authorizations associated with those activities, must be sufficiently protective to prevent nuisance conditions and health impacts on sensitive persons in the community. BAQC requests that TCEQ consider the following comments and modify the proposed MSS activity authorization rules accordingly.

Retroactive Federal New Source Review (NSR) Analyses May Be Required

One mechanism available to TCEQ to ensure that MSS activity emissions will not adversely impact air quality is federal New Source Review (NSR) analyses. Therefore, the proposed rules should clearly state how TCEQ will address the need to distinguish between new and existing MSS activity emissions, to ensure that when required, retroactive NSR analyses, including netting and offsets will be conducted. The proposed revisions to 30 TAC 116 (Air Quality Permit) should include specific requirements in 30 TAC 116.111 that permit applications for MSS activity authorizations must include sufficient records of historical facility construction and modifications, and historical MSS activity emissions, to allow for the permit engineer to determine when retroactive NSR analyses will be required.

BACT and LAER Analyses for MSS Activity Permits Must Consider Existing Site Infrastructure

The case by case Best Available Control Technology (BACT) and Lowest Available Emissions Rate (LAER) analyses for permits that will authorize MSS activities should consider existing plant infrastructure. For example, there may be instances where a plant has available options to minimize MSS activity emissions and such options may include: 1) a relatively low efficiency control device like a flare; 2) a flare gas recovery system; and 3) another high efficiency control device. In these instances, the authorization should require that the most effective option be used so that the most effective control mechanism is applied to best accommodate the volume, rate, and character of emissions generated during MSS activities to minimize the MSS activity emissions.

The Proposed Temporary Maintenance Facilities Permit By Rule (PBR) 30 TAC 106.263 Should be at Least as Stringent as the MSS Emissions PBR

The proposed permit by rule (PBR) for temporary maintenance facilities (30 TAC 106.263) should be at least as stringent as the MSS emissions PBR, or the temporary maintenance

facilities PBR will be used to circumvent the protectiveness of the MSS emissions PBR. The temporary maintenance facilities PBR does not include emissions limits and it does not prevent Air Pollution Watch List (APWL) contaminant emissions from facilities in an APWL area. As proposed, a site wanting to do equipment degassing with an existing flare using a PBR would be subject to strict hourly emissions limits on a per contaminant basis and would not be allowed to emit APWL contaminants if the site is in an APWL area. However, the site could elect to bring in a temporary flare and would not be subject to the emissions or APWL limitations.

The proposed temporary maintenance facilities PBR only includes operating and design criteria for control devices, by incorporating 30 TAC 106.533(g) by reference. The proposed rule would therefore allow for unlimited use of a flare over a six-month period, not to exceed the maximum allowable annual emissions stipulated in 30 TAC 106.4, for maintenance degassing activities. Without short-term and long-term emissions limitations for hazardous air pollutants, TCEQ has no mechanism to ensure that the emissions from temporary maintenance facilities will be protective. TCEQ should therefore include emissions limits that are sufficiently protective against short-term and long-term human health impacts as applicable requirements under the temporary maintenance facilities PBR. The same approach used by the MSS Emissions PBR, where short term emissions limits are set by the short-term toxicological characteristics of the air contaminant, the distance to the fence line or receptor, the stack height and the time of day, could be used to ensure that the temporary PBR is at least as stringent as the MSS emissions PBR. The temporary maintenance facilities PBR should also have an annual 1 ton per year (tpy) limit for certain hazardous air pollutants that are currently identified as causing or that could potentially contribute to significant long-term health risks, like benzene, ethylene dichloride, carbon tetrachloride and 1,3-butadiene.

The Proposed Temporary Maintenance Facilities Permit By Rule (PBR) 30 TAC 106.263 and the MSS Emissions PBR (30 TAC 106.268) Should Include Registration Requirements

The proposed temporary maintenance facility and MSS emissions PBRs should include a registration requirement so that the TCEQ and local air pollution control agencies will have an opportunity to verify the distances to fence lines and off site receptors as well as the location of temporary maintenance facility emissions points. A registration requirement will also allow for local programs and TCEQ to keep better track of MSS emissions activity including where temporary maintenance facilities are being installed and how long they have been sited in a particular location.

The Proposed Maintenance, Startup and Shutdown (MSS) Emissions PBR (30 TAC 106.268) and the MSS Emissions PBR (30 TAC 106.268) Should Include an Annual Limit for 1,3-Butadiene and Carbon Tetrachloride

The proposed MSS emissions PBR includes a 1 tpy annual emissions limit for benzene and ethylene dichloride. Reports and studies recently released, such as the Mayor's Task Force for Health Effects from Air Pollution and the Houston Endowment Report, indicate that the health risk levels associated with existing ambient concentrations of 1,3-butadiene in certain portions of

the Houston area are unacceptably high. An analysis of the 2006 Houston area canister data indicate that the average carbon tetrachloride concentration for all the canisters was equivalent to the 1 in 100,000 cancer risk level, based on the cancer risk levels found in the US Environmental Protection Agency's Integrated Risk Information System (IRIS). Therefore the MSS emissions PBR and the temporary maintenance facility PBR should include a 1 tpy annual emissions limit for 1,3-butadiene and carbon tetrachloride, in addition to the 1 tpy limit for benzene and ethylene dichloride found in the proposed MSS emissions PBR 30 TAC 106.268(d)(6).

The Proposed Air Quality Standard Permit for Maintenance, Startup, and Shutdown (MSS) Activities Should Clarify What "At Least as Stringent" Means

The proposed Standard Permit, Sub-Section (c)(1): Technical Requirements, Quantification of Emissions, states that "These representations must be at least as stringent as the facilities production authorization." This statement is ambiguous, because stringency could be based on impacts modeling (short-term, long-term or both) or emissions rates (hourly, annual or both). TCEQ should clarify what is meant by "at least as stringent."

The Proposed Air Quality Standard Permit for MSS Activities Should Clarify that the Modeled Impact at and Beyond the Site's Fence Line Should Not Exceed Applicable Standards

The proposed Standard Permit, Paragraph (c)(2)(A)(i)(a): Technical Requirements, Protection of Public Health, Welfare, and Physical Property states that the air quality modeling analysis must demonstrate that:

"the impact of all applicable air contaminants must meet all state and national ambient air quality standards at or beyond the property line of the site, as defined in 30 TAC Chapter 122, Federal Operating Permits Program, property lines"

The maximum impact from elevated emissions points, like stacks and flares is typically well beyond the fence line. The maximum impact from fugitive emissions sources like low level equipment leaks, wastewater treatment processes and cooling towers will typically be at the fence line. The standard permit as proposed would actually allow for impacts above an applicable standard at the fence line if the standard was met beyond the fence line, and it would also allow for impacts above an applicable standard beyond the fence line if the standard was met at the fence line. The Standard Permit should state that the air quality modeling analysis must demonstrate that the impacts of all applicable air contaminants must meet all state and national ambient air quality standards at **and** beyond the property line of the site.

The Proposed Air Quality Standard Permit for MSS Activities Should Require that Modeling Demonstrate that the Short-Term ESL Will Not be Exceeded

The proposed Standard Permit, Paragraph (c)(2)(A)(i)(b), Technical Requirements, Protection of Public Health, Welfare, and Physical Property states that the air quality modeling analysis must demonstrate that:

“the maximum ground level concentration of all speciated air contaminants must not exceed the values in Table 1 of this standard permit”

Table 1 indicates for long term impacts the maximum off property impacts must not exceed the long-term ESL. Long-term ESLs for carcinogenic air contaminants should be based on a one in a million cancer risk level (not a one in one hundred thousand risk level). This is the appropriate standard because TCEQ should ensure an ample margin of safety, as studies (Texas Air Quality Study I and II) have shown that emissions reported by air pollution sources tend to be significantly lower than actual emissions and the cumulative impact from other sites are not considered in the standard permit modeling analysis. Using the long term ESL as the maximum off-property annual concentration for carcinogenic air contaminants is acceptable if the ESLs are based on a one in a million cancer risk level.

Table 1 indicates that for short-term impacts, the “Maximum one-hour concentration must not exceed two times the short-term Effects Screening Level (ESL)” and the “One-hour concentrations must not exceed the short-term ESL more than 24-hours per year.” The concept of potentially allowing short-term impacts to exceed the level that is expected to cause adverse impacts to the most sensitive populations is not a good approach. Houston is home to the largest petrochemical complex in the nation, and many residents live within just a few feet of the fence lines of these significant sources. These fence line communities experience cumulative impacts from various facilities, not from just one site at a time, as the modeling analysis seems to imply. Therefore, TCEQ’s standard permit for MSS should provide an ample margin of safety from short-term impacts for the most sensitive persons who potentially live at or near the fence line of more than one source, and the modeling analysis should demonstrate that the site’s emissions will not cause the short-term ESL to be exceeded.

The Proposed Air Quality Standard Permit for MSS Activities Should Require that Impacts Modeling of Air Pollution Watch List (APWL) Contaminants in APWL Areas Include Currently Existing Background Levels

The proposed Standard Permit should require that the air quality modeling analyses demonstrate that the MSS emissions and the existing APWL contaminant ambient levels when cumulatively evaluated will not exceed the long-term ESL. There should be an ample margin of safety to protect individuals who reside within APWL areas, because emissions estimates tend to be under-reported and because these individuals who live near the most significant emissions sources are exposed to cumulative effects from a variety of sites and air contaminants as reported by the Mayor’s Task Force for Health Effects from Air Pollution, particularly concerning individuals in certain East End Houston census tracts. These same individuals tend to be the most

susceptible populations based on economic resources, access to health care and education; furthermore, their homes often lack appropriate weather insulation and individuals frequently keep doors and windows open to cool their homes, therefore further increasing exposure to air pollution risks.

The Proposed Air Quality Standard Permit for MSS Activities Should Clarify the Monitoring and Recordkeeping Required to Demonstrate Compliance

The proposed Standard Permit, Paragraph (d)(1)(E): Administrative Requirements states that “a description of monitoring and recordkeeping that will demonstrate compliance with the emissions rates as represented” must be submitted with the standard permit registration. This language is ambiguous in terms of the minimum amount of monitoring and record keeping that TCEQ would determine to be sufficient. TCEQ should stipulate, at a minimum that the record keeping should include the estimated total amount of emissions and the highest hourly emissions rate for each air contaminant for which the permit holder represented emissions for in the MSS standard permit registration. Record keeping should also include other pertinent information such as the start time and end time for each MSS activity authorized by the MSS standard permit and the raw monitoring data used to estimate the emissions rates for each MSS activity authorized by the standard permit.

The Proposed Air Quality Standard Permit for MSS Activities Should not Automatically Authorize MSS Activity if TCEQ Fails to Respond

The proposed Standard Permit, Paragraph (d)(2)(A): Administrative Requirements, and 30 TAC 116.615(2)(C) state that a standard permit authorization for MSS is effective if “no written response has been received from the executive director within 120 calendar days of receipt by the TCEQ”. This language is troubling for BAQC, especially in light of public perception, as well as TCEQ’s track record for communicating with regulated sources on issues related to permits. BAQC is aware of instances where TCEQ failed to provide required written correspondence to permit holders, and the consequence of these failures resulted in TCEQ’s inability to ensure that the sites had up to date and adequately protective authorizations. For example, under 30 TAC 116.310, TCEQ is supposed to provide permit holders with a notice that their permit is scheduled for review, and such notice is supposed to be provided by TCEQ no less than 180 days prior to the expiration of the permit. There have been several instances where TCEQ failed to notify the permit holder as required and in one case the permit had been expired for nearly ten years before TCEQ provided the permit holder with the required notification. BAQC is unaware of any instances where TCEQ initiated enforcement action against permit holders who allowed their permits to expire when TCEQ failed to meet its notification requirement under 30 TAC 116.310. As a result TCEQ’s failure to respond, TCEQ has failed to ensure that certain permits are up to date and adequately protective. Allowing MSS standard permits to become effective without a response from TCEQ opens the potential for MSS standard permits not to be adequately protective, should TCEQ fail to respond in a timely manner, as TCEQ has done before in similar circumstances.

Mr. Blake Stewart

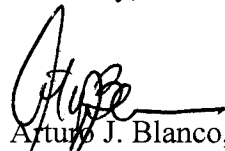
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The Proposed Air Quality Standard Permit for MSS Activities Should Require a Registration Alteration for Changes in Control Methods or Monitoring

The proposed Standard Permit, Subsection (d)(3): Administrative Requirements states that a “registration alteration must be submitted no later than 45 days prior to the start of construction or implementation of any change which will result in an increase in authorized emissions of any air contaminant.” TCEQ should also require a registration alteration if the represented methods of control or monitoring are proposed to be changed, or if the configuration of any emissions source is proposed to be changed, if that change will result in a change to the air quality modeling analysis submitted with the MSS standard permit registration.

Thank you for the opportunity to comment on these proposals. BAQC looks forward to reviewing the next version of these proposed rules.

Sincerely,



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City of Houston

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