## Texas Natural Resource Conservation Commission

To:Chemical Permit ReviewersDate:October 5, 2001

From: Harry Pruett, Ph.D., P.E.

Manager, Chemical and Coatings Section

Subject: 32M/Non-routine Emission Permit Conditions

We have been working with Compliance and Enforcement to ensure that we properly account for non-routine emissions in the permits we issue and approve. This involves upgrading existing permit conditions to clarify which emissions are authorized by the permit. This includes properly authorizing maintenance, start-up and shutdown emissions, when appropriate.

One step in this process is to remove boilerplate permit condition 32M, paragraph A, from existing permits as they come in for amendment or renewal. The paragraphs of 32M dealing with cooling water emissions should be made a separate permit condition. The merge version of condition 32M paragraph A is shown below for reference:

## Carbon Compound Waste Gas Streams

A. Except as may be provided for in the special conditions of this permit, all waste gas from point sources containing volatile organic compounds (VOC) and/or other organic compounds (hydrocarbons and/or hydrocarbon derivatives excluding carbon dioxide) shall be routed to (a flare)(an incinerator)(a recovery system). The (flare shall operate with no less than 98 percent efficiency in disposing of)(the incinerator shall operate with no less than 99.9 percent efficiency in disposing of)(recovery system shall operate with no less than 95 percent efficiency in recovery of) the carbon compounds captured by the collection system. The waste gas streams shall include process vents, relief valves, analyzer vents, steam jet exhausts, upset emissions, start-up and shutdown-related emissions or purges, blowdowns, or other system emissions of waste gas. Storage tank vents, cooling tower exhaust, and process fugitive emissions are excluded from this requirement. Any other exception to this condition requires prior review and approval by the TNRCC Executive Director, and such exceptions may be subject to strict monitoring requirements.

If this condition was being used to ensure that all routine vents and/or relief devices are controlled, it should be replaced with the first 2 conditions on the attachment. Note that 32M may not need to be replaced in some permits. In the case of a gasoline terminal permit, 32M might be removed and not replaced with anything because 32M served little purpose in that type of permit. In either case, if the existing 32M condition specified a control efficiency, that control efficiency may also need to be added to an existing permit condition for the applicable control device.

The two new conditions would also be used in any new permits where there is a need to ensure that all potential emissions from a process unit are controlled and you should ensure that any affected relief devices are reviewed to ensure that the proposed control is appropriate (the design is good practice for minimizing emissions). These conditions should be used verbatim because they are the product of negotiations with compliance to ensure they are enforceable. Accordingly, the language should not be modified without my consent.

The first condition limits emission points to those shown on the MAERT, preventing any claims that emissions from other points are covered by the permit. This restriction also ensures that all authorized emissions are routed to a control device unless the uncontrolled vent is on the MAERT.

The second condition ensures that any upset releases are routed to a control device. If they are not, and we have not specifically exempted them, any release from them will not meet the exemption under 101.11. The assumption continues to be that all the relief devices will be controlled. The condition does not authorize any releases from these emission points.

Note that the new conditions do not affect the use of permits by rule, changes to qualified facilities, or the applicability of any existing footnotes on emissions on Maximum Allowable Emission Rates Tables.

The third condition on the attachment would be utilized if the permit holder has represented start-up, shutdown, or maintenance emissions in the permit application that meet the requirements identified in the "Permitting Upset/Maintenance Emissions" memo dated January 23, 2001. It requires that the specific activities and emission points be identified. The emission point might be a flare (or other common control device) or if there are multiple emission points, the application might be referenced in the condition. The activities should also be listed and the emissions quantified on the MAERT under the applicable emission point. Emissions should be reviewed for BACT and impacts, and reflect the operation of a well run and well maintained facility.

Notify your supervisor if a permit holder takes issue with replacing or removing 32M from their permit during an amendment or renewal. While we strongly encourage all permit holders to replace or remove 32M from their permits, there may be cases where it is not appropriate given the circumstances associated with the project. These should be reviewed with management so that appropriate action may be taken.

## **Example Permit Conditions**

- 1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources Maximum Allowable Emission Rates" and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit.
- 2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than one percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration greater than one weight percent are not consistent with good practice for minimizing emissions [if applicable, with the exception of those listed below.

*list of the equipment*]

3. This permit authorizes emissions from the [identify emission point/control device] for the following maintenance, start-up and shutdown activities:

*list of the activities* 

These emissions are subject to the maximum allowable emission rates indicated on the MAERT. Any maintenance, start-up and shutdown activities not in the above list are not authorized by this permit. Records shall be kept at the plant demonstrating compliance with this representation for the last two years.