DRAFT Bonding Program Proposal Department of Environmental Protection Bureau of Oil and Gas Management <u>April 4, 2005</u>

Based on the TAB Bonding Workgroup discussions to date, DEP calculated an average DEP well plugging cost for pre-84 wells. That average is \$8,941/well. This is based on 1,519 wells plugged by DEP between 1988 and 2004. This average only includes the actual contract cost and does not include any program overhead costs (contract preparation, administration and inspection).

Without a change to the legislative authorization, the bonding system will continue to be a penal bond system wherein the bond rate reflects the cost to the Commonwealth to plug wells. The bonding system will continue to apply only to post-84 wells. The consensus of the Workgroup is that the bonding system should continue to utilize a relatively simple single and blanket bond structure, as opposed to a more complex structure involving many categories of number and depth of wells.

In order to adapt DEP's average well plugging cost of \$8,941 to reflect a post-84 single well DEP plugging cost, i.e. a single well bond rate, the following factors must be considered:

- Needed adjustments reflected by industry's pre- and post-84 plugging cost data, the most notable being:
 - salvage value which is significant with post-84 wells. DEP estimates that overall salvage value averages approximately \$1,000/well.
 - the fact that the post-84 wells are newer and generally easier to plug than pre-84 wells. DEP estimates that this equates to a 25% reduction, or \$2,225, in the average pre-84 DEP plugging cost.
- DEP's plugging program overhead costs (contract preparation, administration and inspection) must be added. DEP calculations show that this adds approximately \$1,920/well to our contract cost.

Taking these factors into consideration, the estimated average post-84 DEP single well plugging cost (single well bond rate) would be \$7,595 (\$8,941 - \$1,000 - \$2,225 + \$1,920). This will be rounded to \$7,500.

Relative to the blanket bond, DEP has expressed concern that the present 10:1 blanket:single well bond ratio is inadequate to cover the potential plugging liability that blanket bonds currently present to the Commonwealth. An analysis of existing bonds shows that the median number of wells covered by blanket bonds is 23. Therefore, DEP proposes a blanket bond of \$172,500 (23 x \$7,500).

This proposed bond program structure and rates satisfy the basic criteria established by the Workgroup:

- Bond program structure
 - Continuation of the single and blanket penal bond system
 - No legislative changes
 - Possible adjustments to the single/blanket well bond ratio
- Bond rates that consider
 - Net estimated DEP cost, including overhead, to plug post-84 wells
 - Need to maintain industry compliance
 - CPI increases since 1984 (approximately 100%)

DEP will incorporate into this proposal:

- guidelines for establishing as necessary higher bond rates for those situations that warrant it, for example extreme depths as with Trenton Black River wells, or other factors.
- a system of updating the bond amounts and structure based on the CPI and/or periodic review.

DEP proposes to implement this change by incorporating these modified rates and structure into the proposed Chapter 78 regulation amendment package currently under development.