

**Review of New Zealand Specification for Reticulated Natural Gas:
By Degussa Peroxide Ltd**

Degussa Peroxide Ltd uses natural gas as a feed stock for the production of Hydrogen Peroxide. The situation for Degussa is similar to that of Balance AgriNutrients in that a change to the gas quality directly affects the plant. Degussa has no immediate way of addressing the effect of increased inerts & falling calorific value, resulting in the plant suffering from reduced capacity and efficiency.

As stated in the October 2005, Plant and Platform report; in the foreseeable future it is unlikely that the gas in the transmission lines will match the requirements for “process” gas. This being based on more gas being produced with a carbon to hydrogen ratio higher than the present stoichiometric ratio from predominately the Maui field

We would suggest that any consideration of changes in gas standards take into account industries that use natural gas not only for its calorific value but also as a “process” gas. We would also suggest that our type of industry needs to be considered when related to the government’s objectives that gas is delivered in a “fair” way and that competition in the gas industry is for the long term benefits of end users.

A lack of a suitable feedstock would undermine DPL’s ability to fully service customers and put DPL at a disadvantaged position compared to overseas competitors. We have seen the effect of significantly increased inerts and the associated effects both locally and at an overseas sister facility. The effect of raised inerts is both immediate, by reducing through put, and long term. It puts pressure on operations and capital spending while introducing uncertainty into the business.

For the benefit of ourselves and other users we would suggest that specifications for natural gas be amended as follows:

- **Calorific Value**
Narrow the range to minimise variability. We prefer a range 39 - 45 MJ/m³.
Specify a **maximum rate of change** for calorific value
- Limit total **inert levels** to less than 5%, in line with international standards.

In summary, users require both availability and consistency of supply. Consistency will enable users to make appropriate capital investment to plant, by eliminating uncertainty related to changing gas composition.

Tightening of specification in key areas could balance the cost and operability issues of both producers and users.

*By Arnold Yeoman
Site Manager
Degussa Peroxide Ltd.*