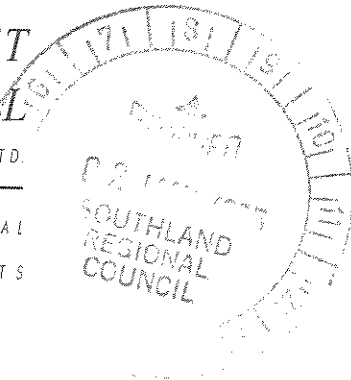


**KINGETT
MITCHELL**
& ASSOCIATES LTD.
ENVIRONMENTAL
CONSULTANTS



**CONFIRMATION
OF FAX**

For rec'd 1/5/95

28 April, 1995

Our Ref: 75910

The Consents Manager
Southland Regional Council
Private Bag 90116
INVERCARGILL

File ref	Authorised
A1202	initial
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...	...
...	...
JFE	...

Attention: Mr J Engel

Dear Sir,

**RE: SOUTHGAS COALBED DEMETHANATION PROJECT
RESOURCE CONSENT A1202 - CONTINGENCY PLAN**

Resource Consent A1202, issued by the Southland Regional Council, authorises discharges into the water and the air, from the two Southgas Joint Venture test wells, subject to various conditions. In relation to the discharge of water, Condition 8 of Resource Consent A1202 states:

"By 30 April 1995, the consent holder shall provide the Regional Council with a contingency plan detailing actions to be taken in the event that flows in the Orauea Stream are such that the limits set in Condition 6 cannot be maintained."

We have been asked by the Southgas Joint Venture to provide a plan that we consider satisfies Condition 8. We set this out below in draft form for your feedback, following which the plan can be finalised.

By way of background, Condition 6 confirms the "Class D" status of the Orauea Stream. In particular the condition also sets numerical limits for:

- pH
- Dissolved oxygen
- Clarity
- Dissolved chromium
- Ammoniaial nitrogen
- Dissolved reactive phosphorus
- Undissociated hydrogen sulphide.

The potential contingency issues arise if the flow rates in the Orauea Stream are very low, thereby possibly not allowing compliance with Condition 6 to be achieved. In this regard, Resource Consent A1202 authorises discharges from two wells, each at a maximum rate of 18 cubic metres per day, or 36 cubic metres per day in total. Assuming that the total discharged occurred continuously over a day, the discharge flow rate would be approximately 0.4 litres per second.

To put this figure into context, the lowest flow recorded in the Orauea Stream during the baseline water quality for the project was 186 litres per second. Thus, there is always likely to be a very considerable dilution available, and as the Assessment of Environmental Effects shows, the in-river criteria would be expected to be achieved, and mostly by a considerable safety margin. It is also noted that water production is expected to decrease rapidly, and within 12 months would be reduced by some 50%, and within two years by a further 25%.

Having said that, contingency measures are appropriate, and the proposals can be summarised as follows.

Firstly, one of the two 22 cubic metre fibreglass water tanks that are on-site is used to receive water from the well prior to discharging it, while the second is there as a back up. This can be used for storing water during short term low flows, meaning that some 1.2 days' of this contingency storage exists.

Secondly, during more extensive low flow periods, water could be stored in the existing 600 cubic metre water storage tank on the site, giving a further 13 days' contingency storage.

Thirdly, if necessary, and flow monitoring dictates, the pumps abstracting water from the coal seams can be throttled back to reduce the flow of water to be discharged.

Fourthly, it is also possible to shut the pumps off completely, should this be considered necessary.

Given the above, and the monitoring that is required by the consent (including flow in the Orauea Stream), decisions to use the on-site storage capacity or to decrease, or even stop, pumping can readily be made.

We trust the above draft meets your requirements and we look forward to receiving your comments prior to seeking formal approval, pursuant to the provisions of Condition 8. If you have any questions, or any matters require clarification, please do not hesitate to contact the writer.

Yours sincerely,
KINGETT MITCHELL & ASSOCIATES LTD



P H MITCHELL