



Your reference:
Our reference: LIC06/638-07:DOC11/35450:CK
Contact: Chris Kelly, (02) 4224 4100

Mr David Kelly
AGL Upstream Investments Pty Limited
Locked Bag 1837
ST LEONARDS NSW 2065

Dear Mr Kelly

WARNING LETTER - FOAM AND WATER EMISSION – SUGARLOAF WELL SL03

I am writing in response to the information provided by AGL Upstream Investments Pty Limited (AGL) to the Office of Environment and Heritage (OEH) on 27 June 2011 regarding the emission of foam and water during well workover operations on the Sugarloaf property at well site SL03 on 17 May 2011 (the incident).

In consultation with Sydney Catchment Authority (SCA), Department of Trade and Investment, Regional Infrastructure and Services (DTIRIS), and Department of Planning and Infrastructure, OEH has been leading an interagency investigation into this incident. As part of this investigation, an inspection of the well site was carried out on 1 June 2011 by OEH, SCA, and DTIRIS. OEH requested detailed information from the Company on the nature, frequency and impacts of the practice and measures in place to protect the environment following the incident. In response, AGL provided a comprehensive outline of its well maintenance process, workover equipment, monitoring results and proposed preventative actions to prevent a recurrence

Based on our review of the information provided and the circumstances surrounding the incident OEH has determined that the degasser unit was not being operated in a proper and efficient manner as required by Condition O2 of the Environment Protection Licence (EPL) 12003 during the incident. OEH has determined that an appropriate regulatory response to this incident is to issue a formal warning to AGL Upstream Investments.

In arriving at this decision OEH has taken the following matters into account:

1. The incident occurred on 17 May 2011 at approximately 1000 hours. OEH was notified of the incident on 19 May 2011 at approximately 1500 hours.
2. The degasser was not being operated in a proper and efficient manner.

In performing this well bore clean out, a soap and water mixture was pumped down the wellbore under pressure to clear blockages and return the material to the surface. The resulting liquid and solids are captured in a mud tank. A degasser sits over the mud tank and is plant that is designed to remove any gas from liquids and solids by the use of baffles. The degasser is a safety measure to divert potential gases from the well away from the work area. A choke which can be used to reduce the flow rate to the mud tank was left fully open as the intention was to unload as much water as possible from the well. Neither the fluid pump engine power nor the air compressor power was adjusted during the incident. The aerated foam, being lighter than

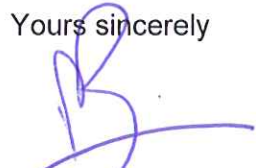
the return fluids was discharged from the degasser vertical outlet pipe due to the fluid pump and air compressor pressures being used.

3. There was no significant harm to the surrounding environment from the emission of foamy liquid. Independent soil sampling analysis undertaken for AGL by URS Australia Pty Ltd concluded there was no evidence that the release of foam has caused adverse environmental impacts at the well site. It is also unlikely that the release of foam would have carried to Sydney Catchment Authority's water storage canal located down slope of the release area. This canal was empty at the time of the event. There are also culverts and diversions at this location that protect the water supply channel and prevent any surface water flows into it.
4. AGL has taken corrective actions to reduce the likelihood of this type of incident reoccurring. This has included modifications to equipment and reviews of procedures, including:
 - Modifications to the degasser by installing a bypass to accommodate flow back of soap foam into the mud tank
 - Modifying work procedures to reflect the modified degasser and choke control requirements to ensure the degasser would handle the fluid efficiently
 - Modifying work procedures to limit and specify soap volumes to be used in cleaning a well. Whilst it is not thought that an excessive volume of soap was used at the time of the incident this will ensure specific volumes are specified in work procedures
 - Ensuring control methods (including defoamer) are available on site
 - Reinforcement to all employees and contractors the existing AGL Health, Safety and Environment Step Back Policy; and
 - Hold Environmental Responsibilities and Accountabilities refresher courses for all field personnel.
5. AGL has provided updates and notifications to the community regarding this matter.
6. AGL has assisted and cooperated with OEH and other agencies during the investigation.

OEH reminds AGL that all breaches of the Protection of the Environment Operations Act 1997 are taken very seriously. The purpose of this letter is to serve as a warning to your Company and its employees that environmental performance and statutory compliance must be continually maintained. It also serves as a record of your Company's compliance history and will be considered by OEH if there are environmental incidents in the future.

In addition OEH encourages AGL to continue to increase community access to readily available information about all aspects of its coal seam methane process. This includes its publicly accessible website. If you have any further queries regarding the above, please contact Chris Kelly on (02) 4224 4100.

Yours sincerely


PETER BLOEM
Manager Illawarra
Environment Protection and Regulation

4/8/11

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cc. Department of Planning and Infrastructure
 (Attention: Howard Reed)
 GPO Box 39
 SYDNEY NSW 2001

Sydney Catchment Authority
 (Attention: Malcolm Hughes)
 PO Box 323
 PENRITH BUSINESS CENTRE NSW 2751

Department of Investment, Trade, Regional Infrastructure and Services
 (Attention: Greg Kininmonth)
 State Office Block
 Level 3, 84 Crown Street
 WOLLONGONG NSW 2500