1. Gas and Groundwater Monitoring

1.1. Description of the works

Each monitoring well will be 'spot monitored' for gas concentration (methane, Lower Explosive Limit (LEL) of methane, carbon dioxide, oxygen, hydrogen sulphide, volatile organic compounds (VOCs), borehole flow rate, atmospheric pressure and water depth (m bgl).

Gas concentrations and associated measurements will be taken using a GasData Gas Analyser, with groundwater depth measurements taken using a proprietary dipmeter.

All monitoring and measurements equipment shall be calibrated and/or in calibration at the time of use on site.

Groundwater sampling will be undertaken using proprietary samplers, e.g. bailers, low flow pumps or the like. Each monitoring well will be purged prior to groundwater sampling commencing and then 'developed' prior to each sampling round. Purging and development refer to removal of approximately five times the volume of water within the well, thus providing 'fresh' water for sampling. Prior to purging or development, the standing groundwater depth will be measured. Water will be allowed to recover to this depth prior to sampling being undertaken.

Groundwater samples shall be placed in to glass jars and stored in cool boxes (at 4°C or less) for transit to the analytical laboratory.

Appropriate manual handling techniques will be employed throughout the gas and groundwater monitoring/sampling works.

PPE required for other site activities will be required for the gas and groundwater monitoring/sampling, albeit augmented with splash protection (hands, body and face).