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Gas Blowout Impacts on Ground Water Environs around the Tengratila Gas Field, Chattak, Bangladesh

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ABSTRACT

Gas blowout is one of the major hazard in petroleum field which normally damages the gas bearing geologic formation, structure, local tectonic setting, environment and so on. In Bangladesh, there have been three well known gas blowouts. Among them, the most dangerous gas well blowout took place on 8 January 2005 in Sunamganj district when chattak-2 (also known as Tengratila) gas field was drilled. As a result, the surrounding area is facing various problems among them water is the top of the list. From this point of view, the present study has been considered to find the impact of blowout on water around the gas blowout area. In this regard, the water samples (some are very near and some are away from the well) are collected and analyzed in the laboratory following the standard method. Some physical and chemical parameters of water such as pH, turbidity, EC, total solids, dissolved solids, suspended solids, manganese ion, calcium ion, magnesium, iron, chloride and total hardness have measured where without turbidity, manganese and iron, all are still in tolerable state for all purposes and ranging within standard limit based on WHO, EU and EQS for Bangladesh. The quality of the near well tube wells water is much decreased than far away tube wells water which might be the direct or indirect influence of the blowout incident around the area.

KEYWORDS

Tengratila Gas Field; Gas Blowout; Water Quality; Blow out Impact

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