



UREA FERTILIZER FACTORY LIMITED

Repair of Leaks in Ammonia Pipelines

SUMMARY OF THE OPTION

Urea Fertilizer Factory Ltd (UFFL) is a government owned producer of ammonia and urea fertilizer in Bangladesh with an installed production capacity of 470,000 tons per year.

During the plant assessment, strong ammonia smells were observed (particularly in the gas compressor house) and old and leaking valves and fittings. Based on the total production of ammonia in 2004 and the amount effectively used to produce the urea in 2004, the ammonia losses were estimated. Reportedly, the extent of ammonia leakage is about 3-9 tons per day, which is equivalent to 6-18 tons of urea per day. The Team proposed to repair and replace the pipelines and valves to prevent the leakage of ammonia.

Investment requirement to implement this option is about US\$ 25,000 (Tk 1.5 million) and it may save about US 23,334 (Tk 1.4 million) with a payback period of 13 months. Natural gas savings would be reduced by 646,470 NM³, which equals to GHG emission reductions of 1,400 tCO₂. This option not yet implemented. At time of writing of this case study this option was not yet implemented because it requires a shut down of parts of the process. For this reason, the leak repairs would be included in major repair and maintenance work that was to be carried out at the end of 2005.

KEY WORDS

Chemicals, Bangladesh, Fertilizer, Ammonia

FOR MORE INFORMATION

GERIAP National Focal Point of Bangladesh

Mr. M Saidul Haq, President
Institute for Management Consultants Bangladesh (IMCB)
396 New Eskaton Road
Dhaka 1000, Bangladesh
Tel: +880-2-9353350-4, 9351102
Fax: +880-2-9351103
E-mail: srgb@consultant.com
Web: www.srgb.org

GERIAP Company in Bangladesh

Md Eklas Uddin
Additional Chief Chemist, RIC
Urea Fertilizer Factory Limited
Ghorasal, Narsingdi 1611, Bangladesh
Tel: 880-2-9352550, 9350760, 880-6254-88076
Fax: 880-2-9352550

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