



EFCTC NEWSLETTER

An update on fluorocarbons and sulfur hexafluoride

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F-GAS REGULATION : DOWNLOADABLE LOGBOOK AVAILABLE IN SEVEN LANGUAGES

Article 3.6 of the F-Gas Regulation requires operators of equipment with a charge of F-Gases of 3kg or more (if hermetic, 6kg or more) to maintain records on :

- The quantity and type of fluorinated greenhouse gases installed;
- any quantities added and the quantity recovered during servicing, maintenance and final disposal;
- other relevant information including the identification of the company or technician who performed the servicing or maintenance;
- dates and results of the checks carried out.

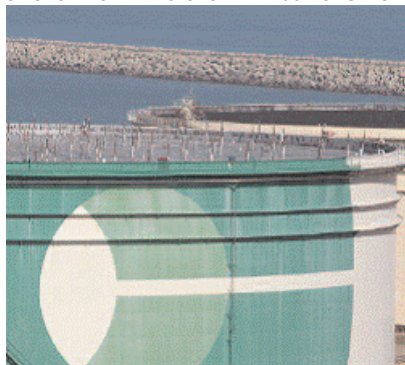
An example of logbook has been developed in collaboration with [EPEE](#) to help F-Gases users, and is downloadable free of charge on [Figaroo](#).

HFC-236fc PROVIDING A RELIABLE FIRE PROTECTION FOR FLOATING ROOF TANKS

To protect floating roof tanks from fire, [HFC-236fa fire protection](#) devices represent a cost effective and reliable solution.

Floating roof storage tanks have a roof which rises and falls with the liquid level inside the tank, thereby decreasing the vapor space above the liquid level. They are used for the storage of crude and refined petroleum products, and are considered a safety requirement as well as a pollution prevention measure for many industries including petroleum refining.

They still have one weak spot: between the rim of the floating roof and the tank shell is an annular seal, where a flammable mixture of air and vapor can collect.





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Usually foam fire extinguishing systems are used, but they have many drawbacks: a potential for failure, a residue after discharge requiring clean-up and leaving the tank unprotected during maintenance. They require human intervention for activation that, coupled with a high cost of maintenance increases the overall cost.

An automatic system based on HFC-236fa consists of a delivery pipe (sited along the annular seal) connected to a storage cylinder, both placed on the roof, in which HFC-236fa is held under pressure. Automated sprayers located along the delivery pipe are opened upon detection of heat from a fire. The extinguishing agent is applied directly, and the fire is out even before it has been spotted.

HFC-236fa is a pure non-corrosive, electronically nonconductive, volatile gas; it leaves no residue, minimizing the need for clean-up after discharge, and is non-miscible with the petroleum products stored in the tanks.

As each storage tank is divided into different zones, each with its own independent system, only the system protecting the area with a fire will be activated – and will need to be recharged – offering minimal post-fire costs and a shorter return to operations. A further benefit is the reduced risk of having the whole tank unprotected in the period before the system is recharged.

Source: Equipment Manufacturer

SF₆ INSULATED SUBSTATION: ANSWER TO SPACE CRUNCH IN CITY LIMITS

A SF₆ gas insulated switchgear (GIS) substation will be [the first of its kind in an Indian city](#), which suffered erratic power supply on account of the lack of space to put up enough substations.

Because of the shortage of space to set up conventional substations, the city decided to install a 132 KV GIS one, expected to play a major role in tackling the problem of laying overhead transmission lines, especially in crowded areas. The system ensures that there are practically no interruptions to the power supply, and cables will be laid underground, avoiding the need to install huge electricity pylons.





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Given the demand for space in India, GIS suppliers concentrate on compact SF₆ insulated substations, as they require less space compared to air insulated switch gear (AIS) substations.

The entire switchgear system is enclosed in a container be filled with sulphur hexafluoride (SF₆). This technology increases the insulation of the complete system and does not require maintenance.

ENERGY SAVING WITH AIR CONDITIONING EFFICIENCY IMPROVEMENT PROGRAMME

The US EPA and a Californian Utility company has launched a pilot program to significantly improve the efficiency of residential [air conditioners](#). The pilot will assess the feasibility of using ENERGY STAR (a voluntary labelling programme that identifies [energy-efficient](#) products) specifications, addressing equipment sizing and selection, [refrigerant charge](#), air flow, duct leakage, etc.

If the pilot delivers good results, the EPA could roll it out as a national programme later on.

The Utility company is promoting energy efficiency services, based on preventative maintenance services by qualified, trained and verified contractors, who will mainly take care of evaporator coil cleaning, condenser coil cleaning or refrigerant charge adjustment.

According to the US Department of Energy, US Utilities Energy Efficiency Programs saved in total until 2005 around 35 millions MWh.

Source: Utility Company

HCFC ACCELERATED PHASE-OUT MONTREAL PROTOCOL ADJUSTMENT ENTERED INTO FORCE

The 2007 [Montreal Adjustment](#) on Production and Consumption of HCFCs, adopted at the 19th Meeting of the Parties in September 2007, has entered into force and became binding to all Parties on 14 May 2008.

The following links contains the official copies of the English and French versions of the depositary notification:

http://untreaty.un.org/English/CNs/2007/1001_1100/1096E.pdf and

http://untreaty.un.org/English/CNs/2007/1001_1100/1096F.pdf . Attached to the



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notification, are copies of the adjustments to the Protocol in the six UN official languages as circulated to all Parties.

Source :

http://ozone.unep.org/Ratification_status/hcfc_adjustments_entry_to_force_notice.shtml

NEW ON OUR SITE

GENERAL LIBRARY REGULATORY DOCUMENTS –Climate Change

Regulations implementing the F-Gas Regulation 842/2006 have been added:

- [REGULATION 303/2008](#) Minimum Requirements and Certification for Stationary Refrigeration Equipment   70 KB
- [REGULATION 304/2008](#) Minimum Requirements and Certification for Fire Fighting Equipment   50 KB
- [REGULATION 305/2008](#) Minimum Requirements and Certification Recovery Switchgears   45 KB
- [REGULATION 306/2008](#) Minimum Requirements and Certification Recovery Solvents   45 KB
- [REGULATION 307/2008](#) Training programmes MAC   42 KB
- [REGULATION 308/2008](#) Format for Programmes Notification   85 KB