

UreaKnowHow.com presents Major Safety Hazards in Urea Plants at FAI 2018 in New Delhi

From 5-7 December 2018, FAI (Fertilizer Association of India) organised its yearly FAI Annual Seminar 2018 in New Delhi. More than 1400 participants attended this important event.



“The Major Safety Hazards In Urea Plants” was presented based on a paper prepared by Prem Baboo of Dangote Fertilizers (former National Fertilizers Limited), Mark Brouwer and Jo Eijkenboom of UreaKnowHow.com B.V. and Majid Mohammadian of OCI N.V.

In 2017, AmmoniaKnowHow.com and UreaKnowHow.com introduced Incident Databases and Risk Registers for ammonia and urea plants. A Risk Register is a list of risks including its causes, consequences, its risk level assessment and recommended prevention and mitigation measures.



All Risk Registers together will form **FIORDA: The Fertilizer Industry Operational Risk Database**, a cloud based tool of which all urea producers can obtain membership.

FIORDA mission is to improve safety and reliability performance of fertilizer plants by collecting and exchanging process safety data among the participating companies and acting as an independent focal point for co-ordination and management of process safety data collection within the fertilizer industry. FIORDA has developed a structured database extracting data from process safety incidents, lesson learned, members projects experience covering a variety of geographic areas, plants, equipment types and operating conditions. More information at: www.fiorda.eu

Bank address:

RABOBANK Maastricht e.o.
P.O. Box 200
6200 AE Maastricht
The Netherlands

BIC: RABONL2U
Account number: 1402.09.840
IBAN: NL07 RABO 0140 2098 40

UreaKnowHow.com B.V.
Chamber of Commerce: 52907090
VAT number: NL 850659024.B.01

As per October 1, 2018, the Risk Register Safety Hazards in Urea Plants contained 110 safety hazards. The paper provides the analysis of these hazards: In which plant sections and equipment items do these safety hazards occur and which hazards have the highest risk factor. This paper describes the major safety hazards and provides its list. A surprising conclusion is that most safety hazards may lead to a sudden release of toxic ammonia. It makes sense to enter a urea plant only with a full face mask readily available. The paper one can download from our E-Library by [clicking here](#).

Note also that even after implementing all recommended prevention and mitigation measures, still 64 Safety Hazards have a High Risk level. We believe all people working in a urea plant should be aware of these 64 safety hazards including its prevention and mitigation measures. One of the most important prevention measure in a urea plant are the leak detection systems.

One can distinguish leak detection systems for loose liners of the high pressure synthesis equipment, for the tubes and tube-tubesheet connections of high pressure synthesis heat exchangers, for high pressure synthesis valves and for high pressure synthesis flange connections. For loose liners, UreaKnowHow.com developed the **UreaKnowHow Leak Detection System, a Money Machine with a Guaranteed Pay Back**. [Click here for more information](#).



[Key-Tech Engineering Company](#) in Mumbai, India is one of the approved and recommended fabricators for the UreaKnowHow Leak Detection System.