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Dear Reader,

The last two editorials featured water-related news. The onset of summer has seen acute water scarcity in many cities like Chennai and Nagpur. Ground water levels has shown alarming levels of depletion and water bodies continue to be contaminated due to unregulated discharge of untreated wastewater. As a result, availability of drinking water has reduced, affecting large sections of the population. Large areas, including many towns and cities are already water-stressed and the problem is expected to become more acute in the coming years.

The Namami Gange, being implemented by the National Mission for Clean Ganga (NMCG) was launched as a flagship programme of the government, has achieved limited success. The target to clean the Ganga by 2020 has become a major challenge.

Part of the solution to the above challenges is recycling wastewater, apart from recharging water sources. Essential to recycling wastewater to render it fit for discharging to water bodies and reuse, is chlorination. AMAI has launched an intensive programme to supplement the efforts of SPCBs in implementation of the recent NGT order on WTPs and STPs by conducting training programmes on water disinfection through chlorination. The response has been encouraging with many municipalities coming forward for organising training sessions.

The US President Donald Trump terminated India’s designation as a beneficiary developing nation under the GSP (Generalized Preference) trade program w.e.f. 5 June 2019. GSP was instituted on 1 January 1976, by Trade Act of 1974 and is the US’s oldest preferential trade scheme. India is the largest beneficiary nation and exported goods worth $6.35 billion under the scheme in 2018. The reasons cited by the Trump administration are trade imbalance with India, no access to Indian market for US dairy, medical device industry and issues related to data localisation norms. India was accused by the US of not committing to provide “equitable and reasonable access to its markets” for the US. The withdrawal of GSP will affect Indian exports to the US.

AMAI’s Pre-budget memorandum for the union budget to be presented by the new government contained requests for allowing duty free imports of raw materials EDC & VCM for manufacturing PVC, to meet growing PVC demand in the country besides enhancing customs duties on imports of caustic soda, soda ash and PVC to partly arrest the huge volume of imports that is not only resulting in high outgo of foreign exchange but also affecting the performance of the domestic industry.

K. Srinivasan
Secretary General
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I. ARTICLES & FEATURES

Highlights of The 23rd World Chlor-Alkali Conference 2019 organised by ICIS & Tecnon Orbichem in Singapore– Ms. Harjeet Kaur Anand, Joint Director (Technical), AMAI

China’s Chemical Industry: Only Change is Certain - Mr. Ravi Raghavan, Editor, Chemical Weekly

GDMA Life Time Achievement Award 2019 for Shri Jayantibhai Meghjibhai Patel

Hydrogen as Clean Energy: Will it be different this time around?

Focus of the New Jal Shakti Mantralaya

28th Training Workshop on “Safe Handling of Chlorine and Emergency Preparedness” at Rajkot Municipal Corporation - Mr. Harisaran Das, Honorary SHE Advisor, AMAI

29th Training Workshop on “Safe Handling of Chlorine and Emergency Preparedness” at Hydraulic Engineer’s Department, Water Treatment Plant, Pise Panjrapur - Mr. Harisaran Das, Honorary SHE Advisor, AMAI

Chlor-Alkali Industries Observed 47th World Environment Day on 5th June 2019 – A Report

Incident Report No.109: 16 labourers Faint as Chlorine Gas Leaks in Kashipur Factory

Beacon-Messages for Manufacturing Personnel

II. NEWS DIGEST

General

Customs regime may be tweaked to boost Make in India, Exports

India, US to solve Trade Disputes

India plans to offer incentives to companies moving from China

India well placed to deal with Global Trade Crossfire: Piyush Goyal

Hundreds lose livelihood as duty hike hits bilateral trade

China-US trade war benefits India, 350 products ripe for exports: Study

Imports from Pak down 92% after imposition of 200% duty

Research group finds way to turn plastic waste products into jet fuel

Plastic shredding centre inaugurated at Begumpur

Export Credit: Decline in loans to exporters a concern, says Piyush Goyal

Industry, exporters should not depend on subsidies; work on improving competitiveness: Piyush Goyal

Centre looking at ways to support sectors hurt by US’ withdrawal of duty-free exports

Chemicals and Petrochemicals

NALCO lines up Rs 17,000 crore expansion to enhance capacity
China’s pollution crackdown to benefit Indian chemical stocks
India’s plastic industry to touch Rs. 5 lakh crore-mark

**Member Units**

Tata Chemicals plans first UK industrial carbon capture demo plant
GHCL awaits green nod to commence work on Bada Project

**III. UPCOMING SEMINARS/CONFERENCES/ WORKSHOPS**

- AMAI to organise Two Day International Seminar on “Safe and Efficient Transportation of Chlor-Alkali Products in India” and Mini-Exhibition on 25-26 September 2019 at Vadodara, Gujarat
- IHS Markit Global Chlor-Alkali Conference 2019, 9-11 September 2019, Rome, Italy – AMAI is Association Partner
- IHS Markit Global Soda Ash Conference 2019, 24-26 September 2019, Cannes, France – AMAI is Association Partner
- CCAON to organise The 8th China International Chlor-Alkali Conference on November 19-21, 2019, in Sanya, Hainan Province – AMAI is Partner to the Conference

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Corrosion under insulation

A plant experienced a catastrophic piping failure of an 8-inch (200 mm) insulated steel line containing noncorrosive cracked gas (~ 40% ethylene). The incident started as a pinhole leak that was detected by operators. The pipe failed while the line was being isolated and depressurized. Fortunately, the line folded as it failed, which limited the size of the release. There were no injuries.

The line was 30 years old. It was in a regeneration service where operation alternated among three different temperature conditions:

- Normal operation at 1 °F (–17 °C)
- Regeneration at 428 °F (220 °C)
- Standby at ambient temperature

These changes in operating temperature caused condensation of moisture from the atmosphere on the outside of the pipe, and re-evaporation. This is a well-known high-risk situation for corrosion under insulation (CUI). It can easily be missed if the mechanical integrity team is not aware of the changing operating conditions.


**Did You Know?**

- Corrosion under insulation (CUI) is external corrosion of pipes and vessels. It can happen when a corrosive fluid, including process fluids which have leaked, is trapped under insulation or fireproofing and kept in continued contact with the outside of pipes or vessels.
- CUI can also result from trapped water from precipitation or condensation of atmospheric moisture.
- CUI often occurs in carbon steel that is cold enough for water to condense on the external surface.
- CUI occurs most often when the operating temperature is between 10 and 350 °F (–12 and 177 °C) or in cyclic service where temperatures go in and out of this range.
- Corrosive liquid may accumulate at the lowest part of the piping or vessel, rather than where the leak, spill, or condensation occurred.
- Damaged insulation may allow water to enter. The insulation jacket is an important layer of protection to keep the metal pipe or other equipment dry.
- A common cause of jacket failure is from people stepping on insulated pipe to reach something.
- Insulation hides corrosion from view.

**What Can You Do?**

- Understand which equipment in your plant is most susceptible to CUI. Some examples include steel pipe, pipe in cold or cycling service, and pipe containing a corrosive fluid. Your corrosion experts can provide information to help you understand CUI in your plant.
- When you walk through the plant, look for damaged insulation, jackets, or seals where water can enter. These areas should be inspected, and the insulation repaired.
- Immediately report signs of any leak that you observe. Look for signs of liquid inside the insulation jacket such as drips or puddles (even if “only water”), discoloration, rust stains, and blistering. Follow up to make sure the leak is repaired in a timely manner.
- If insulation is removed during maintenance or repairs, use this chance to check the equipment for signs of corrosion. Also, remember that the job is not complete until the insulation is replaced.
- Read the February 2005 and January 2014 *Beacons* for other examples of corrosion under insulation.

**Recognize corrosion under insulation hazards!**

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CCAON will hold the 8th China International Chlor-Alkali Conference on November 19-21, 2019, in Sanya, Hainan Province. The conference will track the global hot topics and market trends as in the past conferences, meanwhile, the conference will create a platform for both domestic and foreign industrial insiders to exchange market information.

**Agenda of the Conference**

1. The evolution of the global energy structure and its impact on the chlor-alkali industry
2. The development pattern of the global vinyl industry and the impact of raw material routes on the chlor-alkali industry
3. The trade pattern and future evolution of the global caustic soda industry
4. General situation and future development trend of chlor-alkali industry in North America
5. The latest pattern distribution and future development direction of the chlor-alkali industry in Russia
6. The rapid development and future evolution trend of Indian caustic soda industry
7. Development of the Indian PVC industry and its downstream applications
8. Development Status of PVC Industry in ASEAN and Development of Downstream Industry
9. Industrial layout and trend of Asian caustic soda industry
10. The development status of the global alumina industry and its impact on the global caustic soda industry pattern
11. The pattern and evolution of China plastic products industry
12. Development Status and Trends of China Caustic Soda Industry
13. The latest development technology and policy of China chlor-alkali industry
14. The pattern and evolution of China PVC industry
15. The development of PVC futures market and forecast
16. Analysis of China caustic soda export market and EDC/VCM international market

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