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APM Terminals Inland Services in collaboration with BARC innovates with environment friendly in-situ biodegradation technology

- **A first-of-its-kind initiative**
- **Project executed with support from Padma Shri Dr. Sharad Kale, BARC**
- **Ensures retention of key nutrients in the environment and reduction in CO2 emissions**
- **Easily replicable initiative to benefit logistics and perishable commodities industry at large**

Mumbai ___February, 2016: In continuation of its commitment to trade and environment, APM Terminals Inland Services, South Asia has collaborated with Bhabha Atomic Research Centre (BARC) to address the long standing need of a safer, more efficient and environment friendly in-situ biodegradation technique for treating perishable cargo. The logistics industry, especially Container Freight Stations and Inland Container Depots, witness frequent cases of abandonment of containers carrying perishable cargo like chocolates, fruits, vegetables, nuts, spices, meat and beverages.

In-situ biodegradation enables natural decomposition of stale perishable cargo within the container right inside the container freight station as against the requirement of transporting the container to a specially approved facility with special incineration machine. This in situ biodegradation technique significantly restricts the carbon dioxide emissions in the environment.

Dr Sharad Kale, Padma Shri, Outstanding Scientist and Head - Nuclear, Agriculture and Biotechnology Division at BARC, Mumbai has developed an inoculum. An inoculum is a culture composed of multiple kinds of bacteria which when introduced in existing

biodegradable material enables natural decomposition of the cargo with organic manure as the end product. Through this method, the entire process of addressing stale perishable cargo in long standing containers is much faster, efficient, simpler and comes at minimal cost and effort.

This process, through bio assimilation doesn't just prevent carbon dioxide emissions but more importantly helps retain micronutrients and trace elements (e.g. B, Cu, Zn, Mg, Fe etc.) in the active eco system. "With Government's enhanced focus on cold chain, and impetus to trade of perishable cargo in India, such cases of long standing cargo are bound to increase. APM Terminals Inland Services has shown great initiative and commitment towards introducing the in-situ biodegradation technique and making it possible. If the entire industry adapts this practice, it will hugely impact the environment and make a key contribution to retaining the nature's cycle and balance."- says Dr Sharad Kale.

Having pursued this initiative and seen the benefits of the in-situ biodegradation process first hand, APM Terminals Inland Services has been making a committed effort to propagate this technology to the business fraternity. With support from the Customs Department, a seminar on the technology was conducted during the Container Freight Stations Association of India meetings and Customs Task Force Meetings in Mumbai. As a result, some of the neighboring Container Freight Stations have already successfully converted the cargo in their long standing containers to organic manure.

"Innovating to deliver better ways of working and caring for the environment while addressing safety and customer satisfaction have been the cornerstones of APM Terminals Inland Services' operations globally. This is a classic example of wonders that collaboration between the government and private organizations can do. This initiative has the potential to make a remarkable difference to the environment and we are glad to be able to make a positive difference. This wouldn't have been possible without the support from Dr. Kale from BARC and we are extremely thankful to him and his team" - says Ajit Venkataraman, Managing Director, APM Terminals India Pvt. Ltd.



About APM Terminals India Pvt. Ltd.

APM Terminals India Pvt. Ltd. is a part of the APM Terminals- a Global Port, Terminals and Inland Services operator comprising of 64 ocean ports and terminals in 39 countries, along with 135 inland services locations in 39 countries; and staffed by 20,300 employees in 59 countries. APM Terminals India Pvt. Ltd. comprises of Container Freight Stations (CFS) with a total bonded yard area of about 2.6 million sq. ft., empty depots in multiple locations with state-of-the-art dry and reefer repair workshops and is backed by a strong trucking fleet to manage shunts and primary transportation. South Asia cluster is powered by a dedicated team of over 1350 own and contract professionals who focus on providing best in class integrated solutions in the field of inland container logistics. APM Terminals India Pvt. Ltd. has world-class CFS facilities at Nhava Sheva, Chennai, Dadri and Cochin.

For more information, please contact:

Dhruvi L Parmar, Communications
APM Terminals India Pvt. Ltd.
Mumbai, India
E-Mail: dhruvi.parmar@apmterminals.com
Ph: 91 22 3340 7461



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