Johnson Matthey Chemical India Pvt Ltd

Sustainability through Waste Recycling

CASE STUDY

Summary

In support of the sustainability vision of our company, there was drive across our site to reduce waste. Various initiatives taken resulted in significant waste reduction by reducing cleaning frequencies and off-size generation. The next significant source of waste was powder collected by our dust extraction system. The chemical properties of this powder were analyzed on site lab and they were found to be very similar to the product properties. With due consultation and risk assessment for its usage it was safely established that it can be reused without compromising quality of product. Plant modification is in progress to automate this process and similar activity is being considered in other plants as well.

Objective of Intervention

The conventional process is always being questioned by everyone at JM, and this intervention is a testament of such mentality. The plant has been running for more than 14 years with the DE collected always being sent as waste; it was only challenging the norm and recent focus on reducing waste which has resulted in such an initiative

Description of Intervention

Inorganic Dust Extraction System collects particles which are so fine that they get carried away into surrounding air during processing. Since the plant processes raw materials which are in the form of powder converting them into granules, a lot of dust is generated during the process. The DE System collects this dust which was sent for recycling as waste. On an idea generated by team to reuse this dust back into the system, its properties were analyzed and upon determining that it could be safely used, it was utilized back into the plant.

Intangible or Tangible Benefit

The idea was implemented for the first time in Jun-15. The DE waste was completely eliminated for the month bringing its contribution to overall waste from 7% in May-15 to Nil in Jun-15. From June-2015 to August-2015, the site has saved ~500000 INR by recovering waste. The process change has further reduced the drum handling increasing the morale of the whole team. This has reduced the waste generated by us having an overall impact on nature and environment.

About Johnson Matthey Chemical India Pvt Ltd

Johnson Matthey is a specialty catalysts and materials company, founded in 1817 with headquarters in London. We have been operating in India for more than four decades, providing globally acclaimed services across a wide range of industries including Pharmaceuticals, Automotive, Precious Metals fertilizers, Contract Research Organizations, Laboratories and Refineries.At Kanpur, Johnson Matthey has a Process Technologies Division site which is primarily a manufacturing facility and supplies catalysts to the petrochemical, syngas, oil refining and gas processing industries.