

"Jal Abhishek" - Green Solution for POP Ganesh Idol dissolution

Shree Ganesh festival is one of the most popular festivals celebrated in all parts of India. During this 1.5 to 10 day celebration the idol of Lord Ganesh is worshipped. After the festival, as a tradition the idols are immersed in sea or in the river. In the past, idols were sculpted out of clay for worship and post festival they were immersed in water. In water, the clay would easily disintegrate and the disintegrated clay would be collected for reuse in the following year.

However in recent years due to considerable increase in the demand for more idols as well as bigger idols, plaster of Paris (POP) is being used for the preparation of Ganesh idols. The size of the idol too varies depending on the location of the idol whether it is for public worship or in homes for family worship. As POP does not dissolve in water, causes pollution to water bodies. Hence there was a need of a technique that would convert the POP idols to useful materials like fertilizers and make the process eco friendly without hurting the sentiments of the people. The conventional recycling of POP (crushing) is not possible in case of Ganesh idols due to the sentimental attachment of people with the Lord Ganesh. In order to avoid the water and soil pollution related to POP idol immersion, the project was taken up jointly by NCL, PMC, Cummins India and Mojj Engineering Systems Pvt Ltd for development of environmental friendly technique for disintegration of POP idols which would be acceptable by public at large.

The team efforts yielded a environmental friendly solution in which water solution of food grade material, bakery soda (ammonium bicarbonate) dissolved the POP Ganesh idols giving a very good quality fertilizer (ammonium sulphate) which is soluble in water leaving behind limestone (CaCO_3) in the form of sludge which can be easily separated and used further as cement additive or in construction. The idols can be disintegrated in a specialised plant designed for the same which takes only 2-3 hours for complete disintegration. Otherwise it can also be done in very easy way by immersing the idols in a tank filled with solution of ammonium bicarbonate.



4 idols disintegrated at a time in 2-3 hrs



400 idols disintegrated in 2-3 days