1	**ID: 68**	**Title of measure**	**Sector: Paints & Allied Product Industry**
2	**Survey Year: 2007**	**Replacement of the surface aerator with a diffused aerator in effluent treatment plant**	**Technology: Diffused Aerator**
3	Name of the Company	: **Asian Paints, Kasna, Greater Noida, Uttar Pradesh, INDIA**	
4	Agency that executed the project	: In-house	
5	Year of Implementation	: 2006-07	

6 **Unit Profile:**

Asian Paints is one of the largest paint companies in India with a turnover of around US$ 0.9 billion. Asian Paints operates in 21 countries and has 29 paint manufacturing facilities in the world. Besides Asian Paints, the group operates around the world through its subsidiaries Berger International Limited, Apco Coatings, SCIB Paints and Taubmans. The high service level demands in the Indian market is met through strategically located manufacturing plants near respective zones (1) Ankleshwar, Gujarat (2) Bhandup, Maharashtra (3) Patancheru, Andhra Pradesh (4) Sri Perambudur, Tamil Nadu and (5) Kasna, Greater Noida. Kasna plant services the northern zone of Indian market, which amounts to a quarter of total sales of Asian Paints.

7 **Description of Energy Conservation Measure:-**

Before Modification

The aeration in the effluent treatment plant (ETP) was carried out with the help of a surface aerator using an air blower of 4.5 kW capacity, which used to agitate the water thereby getting it in contact with the air and hence enhancing oxidation process.

After Modification

The same is now replaced with a diffused aeration system which passes diffused air through the effluent chamber thus causing better oxygenation. The diffused aeration system is supplied with air from a central compressor station. The benefits of the system are improved efficiencies and lower energy requirement.

8 **Picture Before Modification**

Picture After Modification

9	Total investment :	9,075 US$
10	First year energy cost savings :	3,725 US$
11	First year additional savings beyond energy (i.e. water, raw materials etc.):	Nil
12	Annual electricity consumption before, MWh	--
13	Annual electricity consumption after, MWh	--
14	First year electricity savings, MWh	39
15	First year tons of CO_2 mitigated	39
16	Assumed sustainability, years	10
17	**Expected tons of CO_2 mitigated throughout life cycle**	**390**