

# When a chance visit led to transformation of business



## Transforming from sub-optimal to optimum

GACL is a forward-looking company, set up in the year 1973. With an initial capacity of 37,425 TPA Caustic Soda, GACL has grown to be one of the largest producer in India, with a capacity of 4,29,050 TPA. GACL's plants are spread over 2 complexes at Vadodara and Dahej.



In a chance meeting with the officials of GACL, who at that time were concerned with the pollution caused by PAC ( Poly-aluminium Chloride) and  $\text{CaCl}_2$ , Shachi Engineering's MD, Mr. Shanbhag, offered to help to solve the problems. The officials opened up the records of the plant and showed the current state. While the plant was relatively old, it was troubled with a sub-optimal performance at several levels.

## Challenge

### Pollution levels

PAC and CaCl<sub>2</sub> are highly hygroscopic materials. Back then, the pollution levels at the plant were very high, often leading to a slimy floors and road outside due to leakages from the Plant.

### Near Zero results

Living with the level of pollution had become a norm for the internal team, as all their efforts to prevent the situation had yielded little or no results.

## Solutions

Shachi Engineering's team stepped in to study the process, materials and critical paths in the existing systems. Senior personnel from Shachi Engineering and the Managing Director visited the plant before suggesting the solution.

Upon an in-depth analysis, Shachi Engineering suggested modifications in the scrubbing system, cyclones and the existing conveying system of the plant. This was delivered with a guarantee to improve the fuel consumption efficiency at the plant as well as reduce the emissions.

## Results

- The leakage of the PAC and CaCl<sub>2</sub> was prevented and with improved processing
- Delivering solution in record time
- The problems of slimy floors and roads was not to be seen anymore