

Industry Waste Control & Monitoring System.

Solution Intended for: Government/ Municipal Corporations.

Problem Area: Pollution Control.

ISSUE: Surveillance on waste dumped by Industries (Small & Large Scale) into water bodies being used by public for consumption.

DETAILS:

Indian industries are now growing rapidly, many small and large-scale industries are being established from metro cities to small towns, and due to lack of regular Surveillance over these industries, many of them are dumping their toxic waste without treatment into nearby water bodies, which is being used by Public for their daily chores and consumption.

India is highly dependent on water bodies, and we need to strictly take care of these issues as we are already facing soil infertility, water pollution, etc.

SOLUTION: Near Real time water quality monitoring system using IOT

Tool: **Azure Stream Analytics** or **Azure Data Explorer**

Steps:

1. All the Industries/Factories needs to install these IOT sensors at the waste outlets that can record the data such PH Value, turbidity, etc.
This step can be installed by GOVT bodies at the location.
2. These IOT sensors can send feed the data to the Stream system setup at Azure.
3. Our stream analytics system will read the data in real time and will check with passing parameters to decide if the waste is toxic or not.
4. We can have a dashboard application, where records of every factory can be displayed, it can show if the sensors are working or not, if any factory is violating the rules and dumping the toxic waste in open environment or water bodies, it will highlight and alerts the officials for actions at real time.

Benefits:

1. Officials will have 24/7 control of the factories waste dump.
2. Dashboard will show the complete records of the Factories and officials needs to take actions on regular basis, resulting in better pollution control.
3. Environmental pollution will decrease as compared to earlier set up.

