

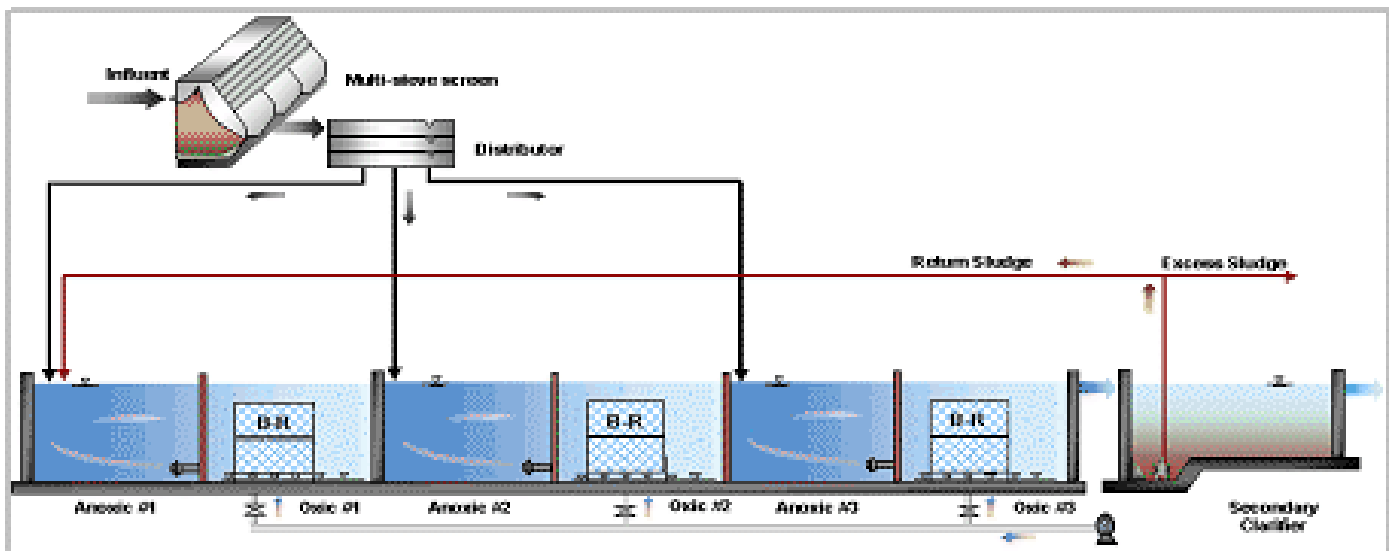
GENERAL INFORMATION

Product: **Pulsarlube M 125cc/PL1**
 Industry: Wastewater Treatment Facility
 Customer: **KOLON Water & Energy**
 Application: **Electric Motors (Compression & Dehydration)**
 Installed on: Mid-August,2010

BACKGROUND

KOLON Water & Energy provides a complete Wastewater Management service in Korea. Estimated potential of total 11 facilities would be over 400 lube points for Pulsarlube M units.

This facility is dedicated for LG-Philips LCD plant and has a capacity of 70k m³/day. There are total 50 lube points available for Pulsarlube M. The Maintenance engineer has decided to try Pulsarlube M 125cc units for 11 sets of high power electric motors in compression process (7 sets) and dehydration process (4 sets).



Bio-Sac MS-BNR Wastewater treatment process using 3 step aerated basin

INSTALLATION INFORMATION

Before installation: All electric motors have been manually lubricated without confidence and over-lubrication has been a major concern in motor maintenance.

After installation: Total 22 units of the Pulsarlube M 125cc filled with PL1 installed for high power electric motors as follows. Dispensing period is set at 12 months to avoid possible over-lubrication.



14 units of Pulsarlube M 125cc installed in Compression process



8 units of Pulsarlube M 125cc installed in Dehydration process

SUMMARY

As of May 2012, all units have been still working well after 3rd replacement of service pack. The maintenance engineer is satisfied with the performance of the units so far. However, due to uneven operating time of backup motors, he still has a concern about possible over-lubrication.

From April 2012, a trial of new MI 60 (Intelligent Vibration Detecting Pulsarlube M 60cc) unit is ongoing to confirm the right amount of relubrication vs. uneven operating time by detecting the vibration of operating motors.

The details of trial would be available in the 3rdquarter of year 2012, which would be a key factor for further expansion of the use of Pulsarlube M (or MI) at other facilities.