



Key Benefits

- Reduction in flow disturbances
- Improved filter bed efficiency
- Automatic pump duty cycling
- Detailed trend graphing
- Alarm monitoring

Eye to the future | Window on the world

Summary

One of the main problems facing the effluent plant was the inability to deal effectively with large changes in the incoming effluent flow rates. Despite the use of buffering tanks in their reception area, if the increased volume was not promptly passed on to the neutraliser, the tanks could overflow. The existing system performed this control by turning on and off three large kestner pumps. This simple control mechanism, however, had the effect of creating problems in the neutralisation and filtering processes as the volume passing through would change radically as each pump was started and stopped.

The answer was to provide finer control of the three pumps through an inverter and logic to control which pumps were running and the required variable speed of one of the pumps. The logic also allowed for the pre-emptive priming of the pumps and recovery actions in the event of a pump failure. The end result was a much smoother flow through to the neutraliser which led to an improvement in the filter bed efficiency.

The Prodigy system also monitors a number of Allen Bradley PLCs which allows the effluent pump data to be viewed in conjunction with the rest of the Effluent Plant and to provide more comprehensive alarming facilities.

Equipment Used

- CRL 460 Controller
- Brush Inverter Drive
- 3 x Allen Bradley SLC-50x PLCs (Existing Equipment)



If you would like to find out more about this application, please contact the sales office who will put you in touch with the original Systems Integrator.