




Managing an Emergency Situation at Rochester Water Treatment Plant

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Overview

- TRILITY overview
- CAMS contract overview
- Rochester Emergency
- Lessons Learned



Coliban Contract Overview

Coliban Water



Coliban



- TRILITY worked in collaboration with Coliban Water to manage operations and maintenance of Coliban Water's water and wastewater treatment facilities across north central Victoria - Providing water and wastewater services to urban and regional customers across 49 towns
- Coliban Water has a significant portfolio of water and wastewater assets including:
 - 19 water treatment plants
 - 13 water reclamation plants
 - 227 water and wastewater pumping stations
 - Approximately 2,351 km of water mains
 - Approximately 1,785 km of sewer mains
 - Approximately 438 km of rural irrigation channels



Bendigo Waste Water Treatment Plant



Rochester Emergency

Rochester Emergency January 2011



Rochester in FLOOD

Rochester Emergency January 2011



Rochester in FLOOD

Rochester Emergency January 2011



Elevated storage supply

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Common inlet/outlet to elevated storage

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Raw water inlet covered by FLOOD debris

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Ground level CWS tank

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FLOOD line outside the Alum storage bund

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FLOOD Equipment

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Water Tanker

Rochester Emergency January 2011 – The process



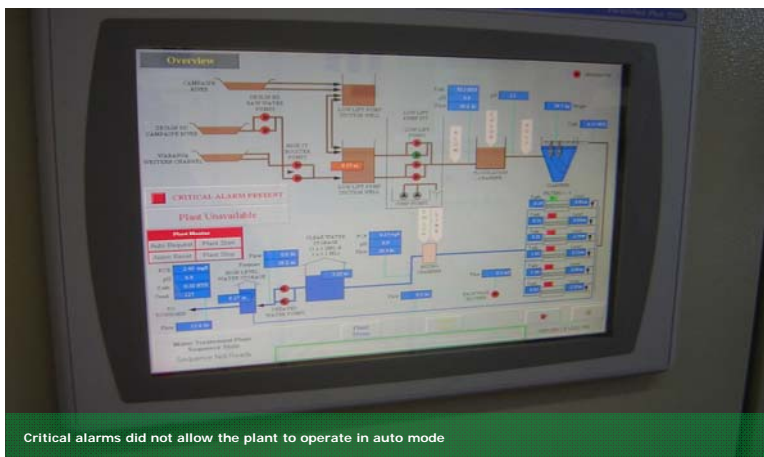
- Plant inflow restricted to 40 l/s due to caustic dose restriction
- Raw water turbidity @ 200 NTU and very high colour
- Plant attended 24hours per day until the process has settled and WTP functioning in auto mode
- WTP was operating (in manual), the site chlorine gas system was rigged to dose chlorine into the tanker water automatically as it was pumped into CWS No 2
- Continue tanker to top up CWS No2 with potable and freshly chlorinated water
- High lift pumps re-primed to enable automatic transfer of water from CWS No 2 into elevated storage
- Raw water turbidity had decreased to 120NTU by 2300PM. Clarified turbidity 6 NTU
- Continue filter to waste throughout night until raw water turbidity stabilises and jar tests can be performed

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Gravity filters after FLOOD water had sufficiently subsided

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Critical alarms did not allow the plant to operate in auto mode

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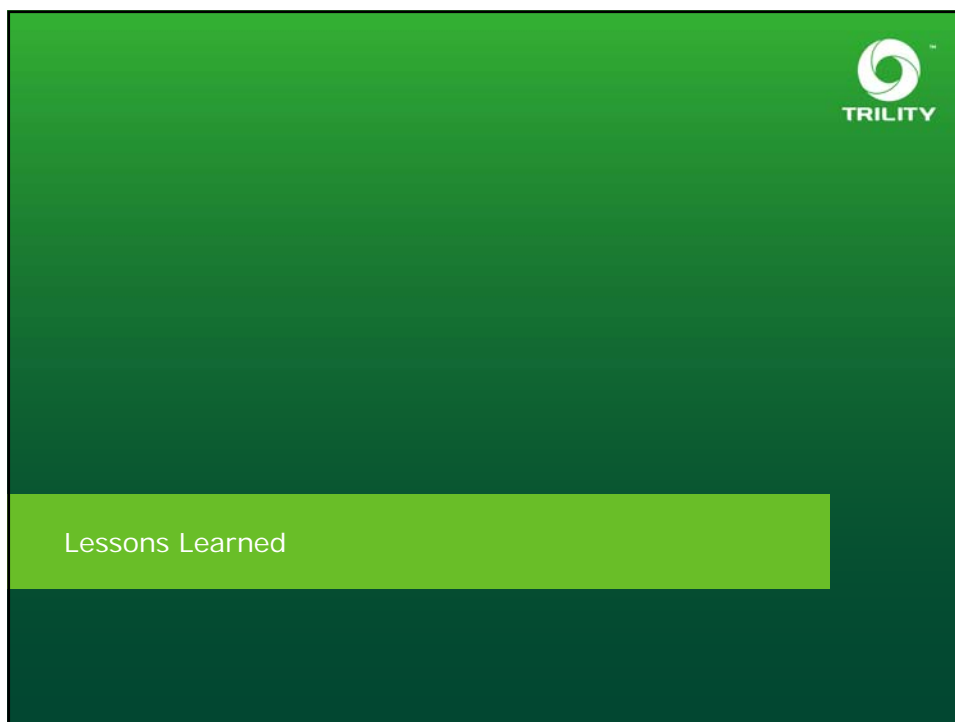


Control room FLOOD line visible (the carpet had been removed)

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FLOOD equipment in use



TRILITY

Lessons Learned

- Design in contingency from the start
- Bulk Water Management
- Drills and Emergency Preparedness are paramount
- Review of procedures
- Communication with all stakeholders
- Need to retain human element, not just automation
- PPP arrangements are successful when structured appropriately

In summary



- Clarifier the best that encountered in 35 years
- Upgrades have made the plant impressively robust
- Flood wall and gates now surround the facility

