



Acid Solutions[®] Pty Ltd

CONTAMINATED BULK WATER TREATMENT

Environmentally sensitive community lakes treated for suspended solids contamination from construction works.

May 2008

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| Name | Thiess / Trackstar |
| Site Location | South East Queensland |
| Site Problem | Community village lakes contaminated with Suspended Solids from nearby construction runoff. |
| Water Volume | 5 Lakes total of 150 Megalitres |
| Water pH | pH 6.7 to 7.1 |
| Acidity | NA |
| Suspended Solids | High |
| Treatment Objective | Treat Suspended Solids to protect aquatic life. |
| What is causing the problem | Nearby Construction runoff after rainfall. |
| Length of water body | 1150metres + Main Lake |
| Width of Water body | Narrow drains 6 to 20 metres + Main Lake 120 Metres |
| Water Depth | Up to 3.5 metres |
| Bottom Type | Irregular/snags |
| Aquatic Flora | Surrounding aquatic flora |
| Vehicle Access and Flora | Limited Access |
| Environmental Sensitivity | very sensitive |
| Aquatic Life | fish, turtles, eels, birdlife |
| Drains or Streams nearby | Yes |
| Regulatory requirements | EPA, Local Community and Company Requirements |
| Urgency level | Extremely urgent & sensitive |



BACKGROUND

In May 2008 Acid Solutions was contacted with an urgent request to treat a shopping and community water course for suspended solids caused from nearby construction operations.



SITE DESCRIPTION

The site consisted of a main head dam with 5 narrow water ways connected by weirs. The main dam was approximately 80 megalitres and up to 4.5 metres deep. The 5 narrow waterways had a depth from half a metre to up to 2.5 metres and contained approximately 70 megalitres. They contained abundant snags, rocks and shallow areas. Site access was very difficult due to the residential and offices bordering the treatment site. Several restaurants overlooked the waterways with continuous public frequenting the area.

Several issues held high importance for the client on this site.

1. Access, nothing could be disturbed. Gardens were to be undisturbed and blocking walkways and roads was not possible.
2. Disturbance to the public. Noise was a big issue as many people worked and frequented this site.
3. Abundant water flora and fauna. Not only was there abundant plant life in and surrounding the site but also many water birds, fish, turtles and eels. With a high media presence, even one injured fish could have stirred major legal implications.

TREATMENT REQUIREMENTS

The treatment objective was to reduce suspended solids to better than previous levels while not disturbing the aquatic life or public.

TREATMENT

This latest advanced CRAB system, being highly portable & fast to set up, quickly and easily treated the 5 difficult sites without disturbance to the community and sensitive ecosystem.

48 Tonne of reagent was applied in 11 days with our specially designed environmentally sensitive applicators.



Notice the lake in the bottom right of the picture above. Aerial photo was taken before this site was treated.

RESULTS

The application processes used by acid Solutions very effectively treated the high suspended solids. It ensured no harm or disturbance was caused to the aquatic flora and fauna as well as to the business and residential community as well.

All treatment operations were conducted within noise and visually sensitive areas.

The highly critical and angry community were very pleased with the outcome and very few were aware of our presence during the treatment process.

Acid Solutions was onsite treating within 10 days of initial contact.

(This included water quality trials and reagent delivery).



Aerial photo taken after treatment.



FIXING THE ENVIRONMENT

Acid Solutions[®]

Contaminated Water Treatment Services

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