N4 SECTION 4 UPGRADE

Middelburg, Mpumalanga, South Africa (Working in a sensitive riverine habitat)

PROJECT TYPE: Bulk earthworks and bridge construction

CLIENT:

South African National Roads Authority

PROJECT DURATION:

22 months

DATE OF PROJECT: September 2014

PROJECT DESCRIPTION:

The upgrade of the N4 Oliphant's river bridge came with a detailed Water Use Licence requiring 18 mechanical, chemical and biological parameters be measured upstream and downstream of the works area monthly.

CONTROLS:

Concor's main potential impact was its water based activities which included the engineering of in situ cofferdams for the new bridges pillars.

The main parameters to be controlled were:

- various hydrocarbons
- pH,
- total dissolved solids,
- temperature,
- · dissolved oxygen,
- turbidity,
- alkalinity and
- electrical conductivity

The work areas were isolated from the river with turbidity curtains, hay bale filters and silt fences.

Refuelling of construction equipment was extremely limited and the duration of their presence in the surrounding area restricted.

The efficacy of these controls were shown in the results of the water monitoring with no major deviation from the norm noted during the duration of the project.







