

Appendix 3

SAMPLING AND INSTITUTE FOR WATER QUALITY STUDIES ANALYTICAL PROCEDURES.

Water samples were collected from each site in the Mooi River with a polyethylene bucket. The bucket was first rinsed with water at the site from which the sample was to be collected. The sample was then collected in one scoop action, from the top 30cm of the water column. Samples from boreholes were collected after the pump on the borehole was allowed to run for at least 2 minutes, to ensure any resident water was removed from the pipes.

The sample containers were then filled from the single bucket of water to ensure split sample collection from the same container. The 5 litre polyethylene radioactivity sample containers were supplied by the Atomic Energy Commission (AEC). The containers were rinsed and then filled to the rim of the bottle.

Samples from each site were numbered according to the unique sampling site number provided in the main report. The date and time of sampling was also written on the sample labels.

No preservatives were added to the samples for radioactivity analysis, and samples were submitted to the AEC within 24 hours of sampling.

Samples for trace metal, major inorganic and turbidity analysis were collected in red, white and green 350 ml polyethylene bottles respectively, supplied and precleaned by the IWQS laboratories. The major inorganic samples were preserved with mercury chloride. All samples were submitted within 24 hours to the IWQS laboratories.

The analytical procedures for the trace metal, major inorganic and turbidity are described in the Analytical Methods Manual, Technical Report 151, Department of Water Affairs and Forestry.