IMPACT DESCRIPTION			Pre-Mitigation							Post Mitigation								Priority Factor Criteria			
Impact	Alternative	Phase	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Pre-mitigation ER	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Post-mitigation ER	Confidence	Cumulative Impact	Irreplaceable loss	Priority Factor	Final score
Poor housekeeping will result in the deterioration of water quality, increase in E coli resulting in potential health effects	Alternative 1	Construction	-1	3	4	4	3	4	-14	-1	1	2	3	2	2	-4	High	1	1	1,00	-4
Local spillages of oils from construction vehicles and machinery leading to groundwater contamination.	Alternative 1	Construction	-1	1	2	2	3	3	-6	-1	1	2	2	2	2	-3,5	High	1	1	1,00	-3,5
Increase in silt load in runoff due to site clearing, grubbing and the removal of topsoil from the construction footprint area.	Alternative 1	Construction	-1	1	2	3	2	3	-6	-1	1	2	1	1	2	-2,5	High	2	1	1,13	-2,8125
Disturbance of the area may release suspended solids into the river during the construction of the temporary earth berm	Alternative 1	Construction	-1	2	4	3	4	4	-13	-1	2	2	3	2	2	-4,5	Low	2	1	1,13	-5,0625
Vegetation clearance may result in loss of faunal habitat ecological structure, species diversity and loss of species of conservation concern.	Alternative 1	Construction	-1	1	2	1	3	2	-3,5	-1	1	2	1	2	1	-1,5	Low	1	1	1,00	-1,5
Potential spreading of alien invasive species as indigenous vegetation is removed, and pioneer alien species are provided with a chance to flourish.	Alternative 1	Construction	-1	2	4	3	2	3	-8,25	-1	2	4	2	2	2	-5	Medium	1	1	1,00	-5
Possible increase in dust generation, PM10 and PM2.5 because of bulk earthworks, operation of heavy machinery, and material movement.	Alternative 1	Construction	-1	1	2	3	1	4	-7	-1	1	1	2	1	2	-2,5	High	1	1	1,00	-2,5
Loss of vegetation species including vegetation species of conservational concern due to site clearance.	Alternative 1	Construction	-1	2	5	3	3	4	-13	-1	2	5	1	3	1	-2,75	Medium	1	1	1,00	-2,75
The use of vehicles and machinery during the construction phase may generate nuisance noise in the immediate vicinity	Alternative 1	Construction	-1	2	1	4	1	4	-8	-1	2	1	2	1	3	-4,5	Medium	1	1	1,00	-4,5
Localised clearing of vegetation and compaction of the construction footprint will result in the soils being particularly more vulnerable to soil erosion.	Alternative 1	Construction	-1	2	3	3	3	4	-11	-1	1	2	3	2	3	-6	High	1	1	1,00	-6
Poor waste management will result in the contamination of surface runoff resulting in the deterioration of water quality of the watercourse.	Alternative 1	Construction	-1	3	2	3	3	4	-11	-1	2	1	1	2	2	-3	Medium	1	1	1,00	-3
Impacts on heritage resource	Alternative 1	Construction	-1	1	2	1	3	2	-3,5	-1	1	2	1	2	1	-1,5	Low	1	1	1,00	-1,5
Potential leakage of sewage water may result in nuisance odor and flies which may result in conflict with communities around the project area.	Alternative 1	Operation	-1	4	2	4	3	4	-13	-1	2	1	2	2	2	-3,5	Low	1	1	1,00	-3,5
Erosion of the riverbeds and banks may result in siltation of the Vaal River	Alternative 1	Operation	-1	3	5	3	3	4	-14	-1	2	5	1	2	2	-5	Medium	1	1	1,00	-5
Disturbances to or removal of vegetation whilst accessing infrastructure to carry out maintenance activities may result in potential loss to indigenous vegetation and further proliferation of alien floral species.	Alternative 1	Operation	-1	3	2	2	3	3	-7,5	-1	2	1	1	1	1	-1,25	Low	1	1	1,00	-1,25
The use of vehicles and machinery during maintenance and/repair may generate noise in the immediate vicinity	Alternative 1	Operation	-1	3	2	3	1	4	-9	-1	2	1	1	1	2	-2,5	Medium	1	1	1,00	-2,5
Potential leakage of the proposed slurry pipeline and into the Vaal River and associated riparian zone because of maintenance activities;	Alternative 1	Operation	-1	5	4	5	4	4	-18	-1	5	4	5	4	1	-4,5	Medium	1	1	1,00	-4,5