

## OPERATIONAL PHASE

### Geographical and Physical

1. Ground water quality (There is no positive or negative impacts associated with the proposed amendment to the EA. Impacts between the current and proposed amendments will be similar).

Irrigation by effluent	Geographical and Physical Impacts
<b>OPERATIONAL PHASE</b>	
<b>Potential impact and risk:</b>	<b>Groundwater quality</b>
Nature of impact:	<b>Possible leaching leading to pollution of ground water</b>
Extent and duration of impact:	<b>Extent 1 (footprint) &amp; Duration 1 (0-1 years)</b>
Consequence of impact or risk:	<b>Ground water polluted</b>
Magnitude	<b>0 – Will have no effect on the environment</b>
Probability of occurrence:	<b>2 - Improbable: some possibility, but low likelihood</b>
Degree to which the impact may cause irreplaceable loss of resources:	<b>2 - Resource may be partly destroyed (PR)</b>
Degree to which the impact can be reversed:	<b>Completely reversible (R)</b>
Indirect impacts:	<b>None anticipated</b>
Cumulative impact prior to mitigation:	<b>None anticipated</b>
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	<b>4 - Low</b>
Degree to which the impact can be avoided:	<b>High</b>
Degree to which the impact can be managed:	<b>High</b>
Degree to which the impact can be mitigated:	<b>1-Completely mitigatable (CM)</b>
Proposed mitigation:	<ul style="list-style-type: none"> <li>• <b>A groundwater quality monitoring programme is in place to detect any contamination</b></li> </ul>
Residual impacts:	<b>It is not anticipated that the impact will be high if the mitigation measures are adhered to.</b>
Cumulative impact post mitigation:	<b>It is not anticipated that the impact will be high if the mitigation measures are adhered to.</b>
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	<b>Low</b>
<b>DECOMMISSIONING AND CLOSURE PHASE</b>	
<b>Potential impact and risk:</b>	<b>SAME AS OPERATIONAL</b>

2. Water use for irrigation and biodiversity impacts (There is no positive or negative impacts associated with the proposed amendment to the EA. Impacts between the current and proposed amendments will be similar).

<b>Irrigation by effluent</b>	<b>Geographical and Physical Impacts</b>
<b>OPERATIONAL PHASE</b>	
<b>Potential impact and risk:</b>	<b>Water usage for irrigation and spreading of Kikuyu grass</b>
Nature of impact:	<b>Water usage for irrigation and spreading of Kikuyu grass</b>
Extent and duration of impact:	<b>Extent 1 (footprint) &amp; Duration 1 (0-1 years)</b>
Consequence of impact or risk:	<b>Excessive water usage. Kikuyu grass invasion in natural environment.</b>
Magnitude	<b>0 – Will have no effect on the environment</b>
Probability of occurrence:	<b>2 - Improbable: some possibility, but low likelihood</b>
Degree to which the impact may cause irreplaceable loss of resources:	<b>2 - Resource may be partly destroyed (PR)</b>
Degree to which the impact can be reversed:	<b>Completely reversible (R)</b>
Indirect impacts:	<b>None anticipated</b>
Cumulative impact prior to mitigation:	<b>None anticipated</b>
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	<b>4 - Low</b>
Degree to which the impact can be avoided:	<b>High</b>
Degree to which the impact can be managed:	<b>High</b>
Degree to which the impact can be mitigated:	<b>1-Completely mitigatable (CM)</b>
Proposed mitigation:	<b>Monitor spread of kikuyu and spray edges if needed.</b>
Residual impacts:	<b>It is not anticipated that the impact will be high if the mitigation measures are adhered to.</b>
Cumulative impact post mitigation:	<b>It is not anticipated that the impact will be high if the mitigation measures are adhered to.</b>
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	<b>Low</b>
<b>DECOMMISSIONING AND CLOSURE PHASE</b>	
<b>Potential impact and risk:</b>	<b>SAME AS OPERATIONAL</b>