Proposal Name:	Bishopton STAG II – option 4	**Worksheet W1: Water Quality, Drainage & Flooding - Strategic / Project Level**	
Existing & Future Water Issues:	High concentrations of ammonia and zinc in existing surface waters	Assessment Date:	06/02/2006

Location[1]	Water Use[2]	Resource Quality / Status[3]	Objectives[4]	Scale it Matters[5]	Potential Impacts	Timescales: When / Duration	Ease of Substitution[6]	Uncertainty[7]	Mitigation Potential	Impact Significance Assessment[8]
Surface Waters[9]										
Southbar Landfill surface drainage	Drainage channels around landfill. Not currently abstracted.	Unclassified	To protect the water environment.	Small - not of regional or national significance and has no important attributes.	Release of contaminants during construction. Release of leachate due to disturbance of landfill if mitigation measures fail. Less effective drainage due to blockage of channels during construction.	Construction would take place for approximately 18 months.	No substitution possible	Medium	Measures can be taken to intercept and/or treat leachate. Standard mitigation measures would be taken during construction.	Slight adverse impact
Lin Burn	Not currently abstracted for use.	Unclassified	To protect the water environment.	Small – not of regional or national significance and has no important attributes.	Release of contaminants during construction. Release of leachate due to disturbance of landfill if mitigation measures fail.	Construction would take place for approximately 18 months.	No substitution possible	Medium	Measures can be taken to intercept and/or treat leachate prior to it entering Lin Burn. Standard mitigation measures would be taken during construction.	Slight adverse impact
Groundwater[10]										
Groundwater in Devensian Glaciomarine Deposits	Not currently abstracted for use.	Unclassified	To protect the water environment.	Small – not of regional or national significance and has no important attributes. Shallow groundwater could act as base flow for surface waters.	Mobilisation of contaminants during construction.	Construction would take place for approximately 18 months.	No substitution possible	Medium	Standard mitigation measures would be taken during construction.	Slight adverse impact
Groundwater in Limestone formations	Not currently abstracted for use.	Unclassified	To protect the water environment.	Small – not of regional or national significance and has no important attributes.	Mobilisation of contaminants during construction.	Construction would take place for approximately 18 months.	No substitution possible	High (Depth to deep groundwater unknown and quality of deep groundwater unknown.)	Not able to assess based on existing information.	Negligible
Land Drainage / Flood Defence										

Key Assumptions:	Disturbance of the landfill will result in release of leachate that contains contaminants. Construction works will result in mobility of suspended matter / silt. Disturbance of made ground at Site D could result in release of contaminants.
Key Data Sources:	Scottish Environmental Protection Agency, Scottish Natural Heritage, British Geological Survey, WH Malcolm

Proposal Name:	Bishopton STAG II – option 4a	**Worksheet W1: Water Quality, Drainage & Flooding - Strategic / Project Level**	
Existing & Future Water Issues:	High concentrations of ammonia and zinc in existing surface waters at Site D	Assessment Date:	06/02/2006

Location[1]	Water Use[2]	Resource Quality / Status[3]	Objectives[4]	Scale it Matters[5]	Potential Impacts	Timescales: When / Duration	Ease of Substitution[6]	Uncertainty[7]	Mitigation Potential	Impact Significance Assessment[8]
Surface Waters[9]										
No surface water present in the immediate vicinity of Site A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Low	N/A	N/A
Lin Burn	Not currently used for abstraction, recreation or fisheries.	Unclassified	To protect the water environment.	Small – not of regional or national significance and has no important attributes.	Release of contaminants during construction.	Construction would take place for approximately 18 months.	No substitution possible	Medium	Measures can be taken to intercept and/or treat leachate prior to it entering Lin Burn. Standard mitigation measures would be taken during construction.	Slight adverse impact
Groundwater[10]										
Groundwater in Devensian Glaciomarine Deposits	Not currently abstracted for use.	Unclassified	To protect the water environment.	Small – not of regional or national significance and has no important attributes. Shallow groundwater could act as base flow for surface waters.	Mobilisation of contaminants during construction.	Construction would take place for approximately 18 months.	No substitution possible	Medium	Measures can be taken to treat leachate. Standard mitigation measures would be taken during construction.	Slight adverse impact
Groundwater in Lawmuir Formation	Not currently abstracted for use.	Unclassified	To protect the water environment.	Small – not of regional or national significance and has no important attributes.	Mobilisation of contaminants during construction.	Construction would take place for approximately 18 months.	No substitution possible	High (Depth to deep groundwater unknown and quality of deep groundwater unknown.)	Not able to assess based on existing information.	Negligible
Groundwaters in Limestone formations	Not currently abstracted for use.	Unclassified	To protect the water environment.	Small – not of regional or national significance and has no important attributes.	Mobilisation of contaminants during construction.	Construction would take place for approximately 18 months.	No substitution possible	High (Depth to deep groundwater unknown and quality of deep groundwater unknown.)	Not able to assess based on existing information.	Negligible
Land Drainage / Flood Defence										

Key Assumptions:	Disturbance of the landfill will result in release of leachate that contains contaminants. Construction works will result in mobility of suspended matter / silt. Disturbance of made ground at Site D could result in release of contaminants. Groundwater is present at shallow depths on Site A.
Key Data Sources:	Scottish Environmental Protection Agency, Scottish Natural Heritage, British Geological Survey, WH Malcolm

Proposal Name:	Bishopton STAG II – option 5	**Worksheet W1: Water Quality, Drainage & Flooding - Strategic / Project Level**	
Existing & Future Water Issues:	No known issues.	Assessment Date:	06/02/2006

Location[1]	Water Use[2]	Resource Quality / Status[3]	Objectives[4]	Scale it Matters[5]	Potential Impacts	Timescales: When / Duration	Ease of Substitution[6]	Uncertainty[7]	Mitigation Potential	Impact Significance Assessment[8]
Surface Waters[9]										
No surface water present in the immediate vicinity of Site A or Site B	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Low	N/A	N/A
Groundwater[10]										
Groundwater in Devensian Glaciomarine Deposits	Not currently abstracted for use.	Unclassified	To protect the water environment.	Small – not of regional or national significance and has no important attributes. Shallow groundwater could act as base flow for surface waters.	Mobilisation of contaminants during construction.	Construction would take place for approximately 18 months.	No substitution possible	Medium	Standard mitigation measures would be taken during construction.	Negligible
Groundwater in Lawmuir Formation	Not currently used for abstraction, recreation or fisheries.	Unclassified	To protect the water environment.	Small – not of regional or national significance and has no important attributes.	Mobilisation of contaminants during construction.	Construction would take place for approximately 18 months.	No substitution possible	High (Depth to deep groundwater unknown and quality of deep groundwater unknown.)	Not able to assess based on existing information.	Negligible
Land Drainage / Flood Defence										

Key Assumptions:	Construction works will result in mobility of suspended matter / silt. Groundwater is present at shallow depths.
Key Data Sources:	Scottish Environmental Protection Agency, Scottish Natural Heritage, British Geological Survey