Appendix 16.5 Modelled Results (Ecological Receptors)

Table 1- Ecological Nutrient Deposition Results (Road traffic modelling)

Ecological Receptor Name	Worst case receptor location (X,Y)	Maximum Road Contribution NO_x (µg/m³)	Minimum Critical Load (kg n/ ha/ yr)	Process Contribution as percentage of minimum critical load (%)	Predicted Environmental Concentration (kg n/ ha/ yr)	PEC as percentage of minimum critical load
Cobham Hall Wood	558431.8, 188634.8	0.049	10	0.5	32.9	329%
Combegreen Wood	557496.1, 190104.8	0.098	10	**1.0**	37.3	373%
Darenth wood	558054.4, 172582.4	0.161	10	**1.6**	33.0	330%
Disused Hospital	556674.6, 172184.3	0.029	15	0.2	16.9	113%
Hangmans Wood	557669.9, 180288.0	0.023	10	0.2	31.2	312%
Hobbs Hole	558694.4, 188011.6	0.052	10	0.5	30.8	308%
Jackson Wood	557333.4, 190738.2	0.046	10	0.5	32.4	324%
Oakwood	557653.1, 181804.1	0.014	10	0.1	30.4	304%
Parkhill Wood	559711.7, 172635.9	0.109	10	**1.1**	30.9	309%
Rams Wood	553688.1, 169368.7	0.095	10	0.9	35.3	353%
Ebbsfleet Marsh	561566.7, 173010.5	0.220	15	**1.5**	15.8	105%
Chadwell Wood	559353.3, 172699.8	0.031	10	0.3	27.2	272%
The Thrift	559375.9, 172645.3	0.152	10	**1.5**	32.6	326%
Swanscombe Peninsula	561187, 174367	1.001	15	0.7	15.5	103%

Table 2 - Ecological Critical NO_x Level (Road traffic modelling)

Ecological Receptor Name	Worst case receptor location (X,Y)	Predicted NO_x Concentration ($\mu g/m^3$)		Operational Road Traffic Contribution (ug/m^3)	Critical Level ($\mu g/m^3$)	Operational Road Traffic Contribution (%)	PEC as percentage of ~~minimum~~ critical Level
		2038 Do Nothing	2038 Do Something				
Cobham Hall Wood	558365, 188780	76.9	77.4	0.5	30	**1.6**	201%
Combegreen Wood	557492.5, 190122.9	96.4	97.3	0.9		**3.1**	234%
Darenth wood	558054.4, 172582.4	80.9	82.3	1.4		**4.6**	218%
Disused Hospital	556674.6, 172184.3	55.3	55.7	0.4		**1.4**	124%
Hangmans Wood	557669.9, 180288.0	52.5	52.7	0.2		0.6	118%
Hobbs Hole	558694.4, 188011.6	62.6	63.0	0.4		**1.4**	153%
Jackson Wood	557333.4, 190738.2	55.2	55.6	0.4		**1.2**	142%
Low Well Wood	557887.1, 180117.7	66.1	66.4	0.3		0.9	164%
Oakwood	557653.1, 181804.1	40.9	41.0	0.1		0.3	90%
Parkhill Wood	559711.7, 172635.9	63.0	63.9	0.9		**2.9**	160%
Rams Wood	553688.2, 169368.8	71.1	71.9	0.8		**2.6**	199%
Chadwell Wood	559353, 172699	41.9	42.2	0.2		0.8	88%
Ebbsfleet Marsh	561567.3, 172981.1	49.8	52.9	3.1		**10.3**	107%
The Thrift	559375.9, 172645.3	76.0	77.3	4.3		**4.3**	205%
Swanscombe Peninsula	561187, 174367	31.3	32.3	1.0		**3**	107%

Table 3: Ecological Nutrient Deposition Results (Point Source Modelling)

Ecological Receptor name	Location (X,Y)	Process Contribution NO_x (µg/m³)	N Nutrient Deposition (kg n/ ha/ yr)	Minimum Critical Load (kg n/ ha/ yr)	Process Contribution compared to minimum critical load (%)
Swanscombe Marsh	559950.9, 175276.3	0.0028	<0.001	27.3	<0.01
Swanscombe, Alkerdane Lane	559888.7,174820.3	0.0059	0.005	27.3	<0.01
Ebbsfleet Marsh	561356.1, 174450.6	0.0111	0.001	15.4	<0.01
Thames Estuary Marsh	567298.8, 173948.3	0.0027	0.002	14.6	<0.01
Swanscombe Peninsula	560815, 174873	0.2360	0.058	15.4	0.4

Table 4: Ecological Acid Deposition Results (Point Source Modelling)

Ecological Receptor name	Location (X,Y)	Process Contribution NO_x (µg/m³)	N Acid Deposition (kg n/ ha/ yr)	Minimum Critical Load (kg n/ ha/ yr)	Process Contribution compared to minimum critical load (%)
Swanscombe Marsh	559950.9, 175276.3	0.0028	<0.001	1.83	<0.01
Swanscombe, Alkerdane Lane	559888.7,174820.3	0.0059	<0.001	1.83	<0.01
Ebbsfleet Marsh	561356.1, 174450.6	0.0111	<0.001	1.08	<0.01
Thames Estuary Marsh	567298, 173948	0.0027	<0.001	1.02	<0.01
Swanscombe Peninsula	560815, 174873	0.23595	N/A	N/A	N/A