APPENDIX I: TerrPlant Example Input and Output

Corn, Soil Application:

TerrPlant v. 1.2.2

Green values signify user inputs (Tables 1, 2 and 4).

Table 1. Chemical Identity.	
Chemical Name	**Alachlor**
PC code	**90501**
Use	**Corn**
Application Method	**Ground**
Application Form	**Spray**
Solubility in Water (ppm)	**240**

Table 2. Input parameters used to derive EECs.			
Input Parameter	**Symbol**	**Value**	**Units**
Application Rate	A	**4**	**lb/acre**
Incorporation	I	**1**	none
Runoff Fraction	R	**0.05**	none
Drift Fraction	D	**0.01**	none

Table 3. EECs for Alachlor. Units in lb/acre.		
Description	**Equation**	**EEC**
Runoff to dry areas	(A/I)*R	0.2
Runoff to semi-aquatic areas	(A/I)*R*10	2
Spray drift	**A*D**	**0.04**
Total for dry areas	**((A/I)*R)+(A*D)**	**0.24**
Total for semi-aquatic areas	**((A/I)*R*10)+(A*D)**	**2.04**

Table 4. Plant survival and growth data used for RQ derivation. Units are in lb/acre.				
	Seedling Emergence		**Vegetative Vigor**	
Plant type	**EC_{25}**	**NOAEC**	**EC_{25}**	**NOAEC**
Monocot	**0.0067**	**0.0023**	**0.068**	**0.037**
Dicot	**0.034**	**0.019**	**1.4**	**0.67**

Table 5. RQ values for plants in dry and semi-aquatic areas exposed to Alachlor through runoff and/or spray drift.*				
Plant Type	**Listed Status**	**Dry**	**Semi-Aquatic**	**Spray Drift**
Monocot	non-listed	35.82	304.48	5.97
Monocot	listed	104.35	886.96	17.39
Dicot	non-listed	7.06	60.00	1.18
Dicot	listed	12.63	107.37	2.11
*If RQ > 1.0, the LOC is exceeded, resulting in potential for risk to that plant group.				

Corn, Soil Incorporated (2-inch incorporation) Application:

Table 1. Chemical Identity.	
Chemical Name	**Alachlor**
PC code	**90501**
Use	**Corn**
Application Method	**Ground**
Application Form	**Incorporated**
Solubility in Water (ppm)	**240**

Table 2. Input parameters used to derive EECs.			
Input Parameter	**Symbol**	**Value**	**Units**
Application Rate	A	**4**	**lb/acre**
Incorporation	I	**2**	none
Runoff Fraction	R	**0.05**	none
Drift Fraction	D	**0.01**	none

Table 3. EECs for Alachlor. Units in lb/acre.		
Description	**Equation**	**EEC**
Runoff to dry areas	(A/I)*R	0.1
Runoff to semi-aquatic areas	(A/I)*R*10	1
Spray drift	**A*D**	**0.04**
Total for dry areas	**((A/I)*R)+(A*D)**	**0.14**
Total for semi-aquatic areas	**((A/I)*R*10)+(A*D)**	**1.04**

Table 4. Plant survival and growth data used for RQ derivation. Units are in lb/acre.				
	Seedling Emergence		**Vegetative Vigor**	
Plant type	**EC_{25}**	**NOAEC**	**EC_{25}**	**NOAEC**
Monocot	**0.0067**	**0.0023**	**0.068**	**0.037**
Dicot	**0.034**	**0.019**	**1.4**	**0.67**

Table 5. RQ values for plants in dry and semi-aquatic areas exposed to Alachlor through runoff and/or spray drift.*				
Plant Type	**Listed Status**	**Dry**	**Semi-Aquatic**	**Spray Drift**
Monocot	non-listed	20.90	155.22	5.97
Monocot	listed	60.87	452.17	17.39
Dicot	non-listed	4.12	30.59	1.18
Dicot	listed	7.37	54.74	2.11
*If RQ > 1.0, the LOC is exceeded, resulting in potential for risk to that plant group.				

Corn, Bulk Fertilizer Application:

Table 1. Chemical Identity.	
Chemical Name	**Alachlor**
PC code	**90501**
Use	**Corn**
Application Method	**Ground**
Application Form	**Granular**
Solubility in Water (ppm)	**240**

Table 2. Input parameters used to derive EECs.			
Input Parameter	**Symbol**	**Value**	**Units**
Application Rate	A	**4**	**lb/acre**
Incorporation	I	**2**	none
Runoff Fraction	R	**0.05**	none
Drift Fraction	D	**0**	none

Table 3. EECs for Alachlor. Units in lb/acre.		
Description	**Equation**	**EEC**
Runoff to dry areas	(A/I)*R	0.1
Runoff to semi-aquatic areas	(A/I)*R*10	1
Spray drift	**A*D**	**0**
Total for dry areas	**((A/I)*R)+(A*D)**	**0.1**
Total for semi-aquatic areas	**((A/I)*R*10)+(A*D)**	**1**

Table 4. Plant survival and growth data used for RQ derivation. Units are in lb/acre.				
	Seedling Emergence		**Vegetative Vigor**	
Plant type	**EC_{25}**	**NOAEC**	**EC_{25}**	**NOAEC**
Monocot	**0.0067**	**0.0023**	**0.068**	**0.037**
Dicot	**0.034**	**0.019**	**1.4**	**0.67**

Table 5. RQ values for plants in dry and semi-aquatic areas exposed to Alachlor through runoff and/or spray drift.*				
Plant Type	**Listed Status**	**Dry**	**Semi-Aquatic**	**Spray Drift**
Monocot	non-listed	14.93	149.25	<0.1
Monocot	listed	43.48	434.78	<0.1
Dicot	non-listed	2.94	29.41	<0.1
Dicot	listed	5.26	52.63	<0.1
*If RQ > 1.0, the LOC is exceeded, resulting in potential for risk to that plant group.				