

APPENDIX M: TERR-PLANT MODEL INPUTS AND OUTPUTS (EXAMPLE)

Aerial application

TerrPlant v. 1.2.2

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

Input and output guidance is in popups indicated by red arrows.

Table 1. Chemical Identity.	
Chemical Name	Prometryn
PC code	80805
Use	Cotton
Application Method	Aerial (in Winter: Dec-Feb)
Application Form	Liquid
Solubility in Water (ppm)	33

Table 2. Input parameters used to derive EECs.			
Input Parameter	Symbol	Value	Units
Application Rate	A	2.4	lbs a.i./L
Incorporation	I	4	none
Runoff Fraction	R	0.02	none
Drift Fraction	D	0.05	none

Table 3. EECs for Prometryn. Units in lbs a.i./L.		
Description	Equation	EEC
Runoff to dry areas	$(A/I)*R$	0.012
Runoff to semi-aquatic areas	$(A/I)*R*10$	0.12
Spray drift	$A*D$	0.12
Total for dry areas	$((A/I)*R)+(A*D)$	0.132
Total for semi-aquatic areas	$((A/I)*R*10)+(A*D)$	0.24

Table 4. Plant survival and growth data used for RQ derivation. Units are in lbs a.i./L.				
Plant type	Seedling Emergence		Vegetative Vigor	
	EC25	NOAEC	EC25	NOAEC
Monocot	0.049		0.18	
Dicot	0.02		0.01	

Table 5. RQ values for plants in dry and semi-aquatic areas exposed to Prometryn through runoff and/or spray drift.*				
Plant Type	Listed Status	Dry	Semi-Aquatic	Spray Drift
Monocot	non-listed	2.69	4.90	2.45
Monocot	listed	#DIV/0!	#DIV/0!	#DIV/0!
Dicot	non-listed	6.60	12.00	12.00
Dicot	listed	#DIV/0!	#DIV/0!	#DIV/0!

*If RQ > 1.0, the LOC is exceeded, resulting in potential for risk to that plant group.

Ground Application

TerrPlant v. 1.2.2

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

Input and output guidance is in popups indicated by red arrows.

Table 1. Chemical Identity.			
Chemical Name	Prometryn		
PC code	80805		
Use	Cotton		
Application Method	Ground Spray (March-April)		
Application Form	Liquid		
Solubility in Water (ppm)	33		
Table 2. Input parameters used to derive EECs.			
Input Parameter	Symbol	Value	Units
Application Rate	A	2.4	lbs a.i./A
Incorporation	I	1	none
Runoff Fraction	R	0.02	none
Drift Fraction	D	0.01	none
Table 3. EECs for Prometryn. Units in lbs a.i./A.			
Description	Equation		EEC
Runoff to dry areas	(A/I)*R		0.048
Runoff to semi-aquatic areas	(A/I)*R*10		0.48
Spray drift	A*D		0.024
Total for dry areas	((A/I)*R)+(A*D)		0.072
Total for semi-aquatic areas	((A/I)*R*10)+(A*D)		0.504
Table 4. Plant survival and growth data used for RQ derivation. Units are in lbs a.i./A.			
Plant type	Seedling Emergence		Vegetative
	EC25	NOAEC	EC25
Monocot	0.049		0.18
Dicot	0.02		0.01
Table 5. RQ values for plants in dry and semi-aquatic areas exposed to Prometryn and/or spray drift.*			
Plant Type	Listed Status	Dry	Semi-Aquatic
Monocot	non-listed	1.47	10.29
Monocot	listed	#DIV/0!	#DIV/0!
Dicot	non-listed	3.60	25.20
Dicot	listed	#DIV/0!	#DIV/0!
*If RQ > 1.0, the LOC is exceeded, resulting in potential for risk to that plant group.			