APPENDIX P: Example STIR Run for the Cyfluthrins.

Input:

Application and Chemical Information

Enter Chemical Name	Cyfluthrin
Enter Chemical Use	Citrus
Is the Application a Spray? (enter y or n)	y
If Spray What Type (enter ground or air)	air
Enter Chemical Molecular Weight (g/mole)	434.29
Enter Chemical Vapor Pressure (mmHg)	1.50E-08
Enter Application Rate (lb a.i./acre)	0.119

Toxicity Properties

Bird

Enter Lowest Bird Oral LD_{50} (mg/kg bw)	2000
Enter Mineau Scaling Factor	1.15
Enter Tested Bird Weight (kg)	0.178

Mammal

Enter Lowest Rat Oral LD_{50} (mg/kg bw)	16.2
Enter Lowest Rat Inhalation LC_{50} (mg/L)	1
Duration of Rat Inhalation Study (hrs)	4
Enter Rat Weight (kg)	0.35

Output:

Results Avian (0.020 kg)

Maximum Vapor Concentration in Air at Saturation (mg/m^3)	3.51E-04	
Maximum 1-hour Vapor Inhalation Dose (mg/kg)	4.41E-05	
Adjusted Inhalation LD_{50}	6.88E+02	
Ratio of Vapor Dose to Adjusted Inhalation LD_{50}	6.40E-08	**Exposure not Likely Significant**
Maximum Post-treatment Spray Inhalation Dose (mg/kg)	1.14E-02	
Ratio of Droplet Inhalation Dose to Adjusted Inhalation LD_{50}	1.66E-05	**Exposure not Likely Significant**

Results Mammalian (0.015 kg)

Maximum Vapor Concentration in Air at Saturation (mg/m^3)	3.51E-04	
Maximum 1-hour Vapor Inhalation Dose (mg/kg)	5.54E-05	
Adjusted Inhalation LD_{50}	5.95E+01	
Ratio of Vapor Dose to Adjusted Inhalation LD_{50}	9.30E-07	**Exposure not Likely Significant**
Maximum Post-treatment Spray Inhalation Dose (mg/kg)	1.44E-02	
Ratio of Droplet Inhalation Dose to Adjusted Inhalation LD_{50}	2.41E-04	**Exposure not Likely Significant**