

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Ingestion of Fish

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Water Concentration (mg/L)	Bioconcentration Factor (L/kg)	Unit Correction Factor (kg/mg)	Exposure Factor (mg/kg-day)	Absorbed Dose (mg/kg-day)	PAD (mg/kg-day) Chronic	%PAD (unitless) Chronic
Typical	Aerial	Agricultural	Plane	Angler	8.08E-03	1.03E+00	1.00E-06	9.00E+02	7.49E-06	5.00E-03	0.15%
Typical	Aerial	Agricultural	Helicopter	Angler	6.82E-03	1.03E+00	1.00E-06	9.00E+02	6.32E-06	5.00E-03	0.13%
Typical	Ground	Agricultural	Low Boom	Angler	6.82E-04	1.03E+00	1.00E-06	9.00E+02	6.32E-07	5.00E-03	0.01%
Typical	Ground	Agricultural	High Boom	Angler	1.09E-03	1.03E+00	1.00E-06	9.00E+02	1.01E-06	5.00E-03	0.02%
Max	Aerial	Agricultural	Plane	Angler	3.89E-02	1.03E+00	1.00E-06	9.00E+02	3.61E-05	5.00E-03	0.72%
Max	Aerial	Agricultural	Helicopter	Angler	3.23E-02	1.03E+00	1.00E-06	9.00E+02	2.99E-05	5.00E-03	0.60%
Max	Ground	Agricultural	Low Boom	Angler	2.73E-03	1.03E+00	1.00E-06	9.00E+02	2.53E-06	5.00E-03	0.05%
Max	Ground	Agricultural	High Boom	Angler	4.38E-03	1.03E+00	1.00E-06	9.00E+02	4.06E-06	5.00E-03	0.08%
Typical	Aerial	Agricultural	Plane	N.American - child	8.08E-03	1.03E+00	1.00E-06	1.27E+04	1.05E-04	5.00E-03	2.11%
Typical	Aerial	Agricultural	Helicopter	N.American - child	6.82E-03	1.03E+00	1.00E-06	1.27E+04	8.90E-05	5.00E-03	1.78%
Typical	Ground	Agricultural	Low Boom	N.American - child	6.82E-04	1.03E+00	1.00E-06	1.27E+04	8.90E-06	5.00E-03	0.18%
Typical	Ground	Agricultural	High Boom	N.American - child	1.09E-03	1.03E+00	1.00E-06	1.27E+04	1.42E-05	5.00E-03	0.28%
Max	Aerial	Agricultural	Plane	N.American - child	3.89E-02	1.03E+00	1.00E-06	1.27E+04	5.08E-04	5.00E-03	10.15%
Max	Aerial	Agricultural	Helicopter	N.American - child	3.23E-02	1.03E+00	1.00E-06	1.27E+04	4.21E-04	5.00E-03	8.43%
Max	Ground	Agricultural	Low Boom	N.American - child	2.73E-03	1.03E+00	1.00E-06	1.27E+04	3.56E-05	5.00E-03	0.71%
Max	Ground	Agricultural	High Boom	N.American - child	4.38E-03	1.03E+00	1.00E-06	1.27E+04	5.71E-05	5.00E-03	1.14%
Typical	Aerial	Agricultural	Plane	N.American - adult	8.08E-03	1.03E+00	1.00E-06	1.26E+04	1.05E-04	5.00E-03	2.10%
Typical	Aerial	Agricultural	Helicopter	N.American - adult	6.82E-03	1.03E+00	1.00E-06	1.26E+04	8.88E-05	5.00E-03	1.78%
Typical	Ground	Agricultural	Low Boom	N.American - adult	6.82E-04	1.03E+00	1.00E-06	1.26E+04	8.88E-06	5.00E-03	0.18%
Typical	Ground	Agricultural	High Boom	N.American - adult	1.09E-03	1.03E+00	1.00E-06	1.26E+04	1.42E-05	5.00E-03	0.28%
Max	Aerial	Agricultural	Plane	N.American - adult	3.89E-02	1.03E+00	1.00E-06	1.26E+04	5.07E-04	5.00E-03	10.13%
Max	Aerial	Agricultural	Helicopter	N.American - adult	3.23E-02	1.03E+00	1.00E-06	1.26E+04	4.21E-04	5.00E-03	8.41%
Max	Ground	Agricultural	Low Boom	N.American - adult	2.73E-03	1.03E+00	1.00E-06	1.26E+04	3.56E-05	5.00E-03	0.71%
Max	Ground	Agricultural	High Boom	N.American - adult	4.38E-03	1.03E+00	1.00E-06	1.26E+04	5.70E-05	5.00E-03	1.14%

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses and Margins of Exposure
 Scenario: Public Receptors - Routine Exposure
 Pathway: Dermal Contact with Foliage
 Pesticide: Diquat
 Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Fraction Retained on Foliage	Dermal Absorption Factor	Deposition Rate (mg/cm ²)	Dislodgeable Foliar Residue (mg/cm ²)	Exposure Factor (cm ² /kg-day)	Dermal Dose (mg/kg-day)	Dermal NOAELs (mg/kg-day)		MOE (unitless)	
											Int	Long	Int	Long
Typical	Aerial	Agricultural	Plane	Hiker/Hunter	2.00E-01	4.10E-02	1.10E-03	2.20E-04	2.86E+01	2.58E-04	5.00E-01	5.00E-01	1.94E+03	1.94E+03
Typical	Aerial	Agricultural	Helicopter	Hiker/Hunter	2.00E-01	4.10E-02	1.00E-03	2.00E-04	2.86E+01	2.34E-04	5.00E-01	5.00E-01	2.13E+03	2.13E+03
Typical	Ground	Agricultural	Low Boom	Hiker/Hunter	2.00E-01	4.10E-02	1.00E-04	2.00E-05	2.86E+01	2.34E-05	5.00E-01	5.00E-01	2.13E+04	2.13E+04
Typical	Ground	Agricultural	High Boom	Hiker/Hunter	2.00E-01	4.10E-02	2.00E-04	4.00E-05	2.86E+01	4.69E-05	5.00E-01	5.00E-01	1.07E+04	1.07E+04
Max	Aerial	Agricultural	Plane	Hiker/Hunter	2.00E-01	4.10E-02	5.10E-03	1.02E-03	2.86E+01	1.19E-03	5.00E-01	5.00E-01	4.18E+02	4.18E+02
Max	Aerial	Agricultural	Helicopter	Hiker/Hunter	2.00E-01	4.10E-02	4.40E-03	8.80E-04	2.86E+01	1.03E-03	5.00E-01	5.00E-01	4.85E+02	4.85E+02
Max	Ground	Agricultural	Low Boom	Hiker/Hunter	2.00E-01	4.10E-02	6.00E-04	1.20E-04	2.86E+01	1.41E-04	5.00E-01	5.00E-01	3.56E+03	3.56E+03
Max	Ground	Agricultural	High Boom	Hiker/Hunter	2.00E-01	4.10E-02	9.00E-04	1.80E-04	2.86E+01	2.11E-04	5.00E-01	5.00E-01	2.37E+03	2.37E+03
Typical	Aerial	Agricultural	Plane	Berry - child	2.00E-01	4.10E-02	1.10E-03	2.20E-04	4.00E+01	3.61E-04	5.00E-01	5.00E-01	1.39E+03	1.39E+03
Typical	Aerial	Agricultural	Helicopter	Berry - child	2.00E-01	4.10E-02	1.00E-03	2.00E-04	4.00E+01	3.28E-04	5.00E-01	5.00E-01	1.52E+03	1.52E+03
Typical	Ground	Agricultural	Low Boom	Berry - child	2.00E-01	4.10E-02	1.00E-04	2.00E-05	4.00E+01	3.28E-05	5.00E-01	5.00E-01	1.52E+04	1.52E+04
Typical	Ground	Agricultural	High Boom	Berry - child	2.00E-01	4.10E-02	2.00E-04	4.00E-05	4.00E+01	6.56E-05	5.00E-01	5.00E-01	7.62E+03	7.62E+03
Max	Aerial	Agricultural	Plane	Berry - child	2.00E-01	4.10E-02	5.10E-03	1.02E-03	4.00E+01	1.67E-03	5.00E-01	5.00E-01	2.99E+02	2.99E+02
Max	Aerial	Agricultural	Helicopter	Berry - child	2.00E-01	4.10E-02	4.40E-03	8.80E-04	4.00E+01	1.44E-03	5.00E-01	5.00E-01	3.46E+02	3.46E+02
Max	Ground	Agricultural	Low Boom	Berry - child	2.00E-01	4.10E-02	6.00E-04	1.20E-04	4.00E+01	1.97E-04	5.00E-01	5.00E-01	2.54E+03	2.54E+03
Max	Ground	Agricultural	High Boom	Berry - child	2.00E-01	4.10E-02	9.00E-04	1.80E-04	4.00E+01	2.95E-04	5.00E-01	5.00E-01	1.69E+03	1.69E+03
Typical	Aerial	Agricultural	Plane	Berry - adult	2.00E-01	4.10E-02	1.10E-03	2.20E-04	4.29E+01	3.87E-04	5.00E-01	5.00E-01	1.29E+03	1.29E+03
Typical	Aerial	Agricultural	Helicopter	Berry - adult	2.00E-01	4.10E-02	1.00E-03	2.00E-04	4.29E+01	3.51E-04	5.00E-01	5.00E-01	1.42E+03	1.42E+03
Typical	Ground	Agricultural	Low Boom	Berry - adult	2.00E-01	4.10E-02	1.00E-04	2.00E-05	4.29E+01	3.51E-05	5.00E-01	5.00E-01	1.42E+04	1.42E+04
Typical	Ground	Agricultural	High Boom	Berry - adult	2.00E-01	4.10E-02	2.00E-04	4.00E-05	4.29E+01	7.03E-05	5.00E-01	5.00E-01	7.11E+03	7.11E+03
Max	Aerial	Agricultural	Plane	Berry - adult	2.00E-01	4.10E-02	5.10E-03	1.02E-03	4.29E+01	1.79E-03	5.00E-01	5.00E-01	2.79E+02	2.79E+02
Max	Aerial	Agricultural	Helicopter	Berry - adult	2.00E-01	4.10E-02	4.40E-03	8.80E-04	4.29E+01	1.55E-03	5.00E-01	5.00E-01	3.23E+02	3.23E+02
Max	Ground	Agricultural	Low Boom	Berry - adult	2.00E-01	4.10E-02	6.00E-04	1.20E-04	4.29E+01	2.11E-04	5.00E-01	5.00E-01	2.37E+03	2.37E+03
Max	Ground	Agricultural	High Boom	Berry - adult	2.00E-01	4.10E-02	9.00E-04	1.80E-04	4.29E+01	3.16E-04	5.00E-01	5.00E-01	1.58E+03	1.58E+03
Typical	Aerial	Agricultural	Plane	Angler	2.00E-01	4.10E-02	1.10E-03	2.20E-04	2.86E+01	2.58E-04	5.00E-01	5.00E-01	1.94E+03	1.94E+03
Typical	Aerial	Agricultural	Helicopter	Angler	2.00E-01	4.10E-02	1.00E-03	2.00E-04	2.86E+01	2.34E-04	5.00E-01	5.00E-01	2.13E+03	2.13E+03
Typical	Ground	Agricultural	Low Boom	Angler	2.00E-01	4.10E-02	1.00E-04	2.00E-05	2.86E+01	2.34E-05	5.00E-01	5.00E-01	2.13E+04	2.13E+04
Typical	Ground	Agricultural	High Boom	Angler	2.00E-01	4.10E-02	2.00E-04	4.00E-05	2.86E+01	4.69E-05	5.00E-01	5.00E-01	1.07E+04	1.07E+04
Max	Aerial	Agricultural	Plane	Angler	2.00E-01	4.10E-02	5.10E-03	1.02E-03	2.86E+01	1.19E-03	5.00E-01	5.00E-01	4.18E+02	4.18E+02
Max	Aerial	Agricultural	Helicopter	Angler	2.00E-01	4.10E-02	4.40E-03	8.80E-04	2.86E+01	1.03E-03	5.00E-01	5.00E-01	4.85E+02	4.85E+02
Max	Ground	Agricultural	Low Boom	Angler	2.00E-01	4.10E-02	6.00E-04	1.20E-04	2.86E+01	1.41E-04	5.00E-01	5.00E-01	3.56E+03	3.56E+03
Max	Ground	Agricultural	High Boom	Angler	2.00E-01	4.10E-02	9.00E-04	1.80E-04	2.86E+01	2.11E-04	5.00E-01	5.00E-01	2.37E+03	2.37E+03

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses and Margins of Exposure

Scenario: Public Receptors - Routine Exposure

Pathway: Dermal Contact with Foliage

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Fraction a.i. Retained on Foliage	Dermal Absorption Factor	Deposition Rate (mg/cm2)	Dislodgeable Foliar Residue (mg/cm2)	Exposure Factor (cm2/kg-day)	Dermal Dose (mg/kg-day)	Dermal NOAELs (mg/kg-day)		MOE (unitless)	
											Int	Long	Int	Long
Typical	Aerial	Agricultural	Plane	Res-child	2.00E-01	4.10E-02	1.10E-03	2.20E-04	6.93E+02	6.25E-03	5.00E-01	5.00E-01	8.00E+01	8.00E+01
Typical	Aerial	Agricultural	Helicopter	Res-child	2.00E-01	4.10E-02	1.00E-03	2.00E-04	6.93E+02	5.69E-03	5.00E-01	5.00E-01	8.79E+01	8.79E+01
Typical	Ground	Agricultural	Low Boom	Res-child	2.00E-01	4.10E-02	1.00E-04	2.00E-05	6.93E+02	5.69E-04	5.00E-01	5.00E-01	8.79E+02	8.79E+02
Typical	Ground	Agricultural	High Boom	Res-child	2.00E-01	4.10E-02	2.00E-04	4.00E-05	6.93E+02	1.14E-03	5.00E-01	5.00E-01	4.40E+02	4.40E+02
Max	Aerial	Agricultural	Plane	Res-child	2.00E-01	4.10E-02	5.10E-03	1.02E-03	6.93E+02	2.90E-02	5.00E-01	5.00E-01	1.72E+01	1.72E+01
Max	Aerial	Agricultural	Helicopter	Res-child	2.00E-01	4.10E-02	4.40E-03	8.80E-04	6.93E+02	2.50E-02	5.00E-01	5.00E-01	2.00E+01	2.00E+01
Max	Ground	Agricultural	Low Boom	Res-child	2.00E-01	4.10E-02	6.00E-04	1.20E-04	6.93E+02	3.41E-03	5.00E-01	5.00E-01	1.47E+02	1.47E+02
Max	Ground	Agricultural	High Boom	Res-child	2.00E-01	4.10E-02	9.00E-04	1.80E-04	6.93E+02	5.12E-03	5.00E-01	5.00E-01	9.77E+01	9.77E+01
Typical	Aerial	Agricultural	Plane	Res-adult	2.00E-01	4.10E-02	1.10E-03	2.20E-04	4.14E+02	3.74E-03	5.00E-01	5.00E-01	1.34E+02	1.34E+02
Typical	Aerial	Agricultural	Helicopter	Res-adult	2.00E-01	4.10E-02	1.00E-03	2.00E-04	4.14E+02	3.40E-03	5.00E-01	5.00E-01	1.47E+02	1.47E+02
Typical	Ground	Agricultural	Low Boom	Res-adult	2.00E-01	4.10E-02	1.00E-04	2.00E-05	4.14E+02	3.40E-04	5.00E-01	5.00E-01	1.47E+03	1.47E+03
Typical	Ground	Agricultural	High Boom	Res-adult	2.00E-01	4.10E-02	2.00E-04	4.00E-05	4.14E+02	6.79E-04	5.00E-01	5.00E-01	7.36E+02	7.36E+02
Max	Aerial	Agricultural	Plane	Res-adult	2.00E-01	4.10E-02	5.10E-03	1.02E-03	4.14E+02	1.73E-02	5.00E-01	5.00E-01	2.89E+01	2.89E+01
Max	Aerial	Agricultural	Helicopter	Res-adult	2.00E-01	4.10E-02	4.40E-03	8.80E-04	4.14E+02	1.49E-02	5.00E-01	5.00E-01	3.35E+01	3.35E+01
Max	Ground	Agricultural	Low Boom	Res-adult	2.00E-01	4.10E-02	6.00E-04	1.20E-04	4.14E+02	2.04E-03	5.00E-01	5.00E-01	2.45E+02	2.45E+02
Max	Ground	Agricultural	High Boom	Res-adult	2.00E-01	4.10E-02	9.00E-04	1.80E-04	4.14E+02	3.06E-03	5.00E-01	5.00E-01	1.64E+02	1.64E+02
Typical	Aerial	Agricultural	Plane	N.A.-child	2.00E-01	4.10E-02	1.10E-03	2.20E-04	6.00E+01	5.41E-04	5.00E-01	5.00E-01	9.24E+02	9.24E+02
Typical	Aerial	Agricultural	Helicopter	N.A.-child	2.00E-01	4.10E-02	1.00E-03	2.00E-04	6.00E+01	4.92E-04	5.00E-01	5.00E-01	1.02E+03	1.02E+03
Typical	Ground	Agricultural	Low Boom	N.A.-child	2.00E-01	4.10E-02	1.00E-04	2.00E-05	6.00E+01	4.92E-05	5.00E-01	5.00E-01	1.02E+04	1.02E+04
Typical	Ground	Agricultural	High Boom	N.A.-child	2.00E-01	4.10E-02	2.00E-04	4.00E-05	6.00E+01	9.84E-05	5.00E-01	5.00E-01	5.08E+03	5.08E+03
Max	Aerial	Agricultural	Plane	N.A.-child	2.00E-01	4.10E-02	5.10E-03	1.02E-03	6.00E+01	2.51E-03	5.00E-01	5.00E-01	1.99E+02	1.99E+02
Max	Aerial	Agricultural	Helicopter	N.A.-child	2.00E-01	4.10E-02	4.40E-03	8.80E-04	6.00E+01	2.16E-03	5.00E-01	5.00E-01	2.31E+02	2.31E+02
Max	Ground	Agricultural	Low Boom	N.A.-child	2.00E-01	4.10E-02	6.00E-04	1.20E-04	6.00E+01	2.95E-04	5.00E-01	5.00E-01	1.69E+03	1.69E+03
Max	Ground	Agricultural	High Boom	N.A.-child	2.00E-01	4.10E-02	9.00E-04	1.80E-04	6.00E+01	4.43E-04	5.00E-01	5.00E-01	1.13E+03	1.13E+03
Typical	Aerial	Agricultural	Plane	N.A.-adult	2.00E-01	4.10E-02	1.10E-03	2.20E-04	6.43E+01	5.80E-04	5.00E-01	5.00E-01	8.62E+02	8.62E+02
Typical	Aerial	Agricultural	Helicopter	N.A.-adult	2.00E-01	4.10E-02	1.00E-03	2.00E-04	6.43E+01	5.27E-04	5.00E-01	5.00E-01	9.49E+02	9.49E+02
Typical	Ground	Agricultural	Low Boom	N.A.-adult	2.00E-01	4.10E-02	1.00E-04	2.00E-05	6.43E+01	5.27E-05	5.00E-01	5.00E-01	9.49E+03	9.49E+03
Typical	Ground	Agricultural	High Boom	N.A.-adult	2.00E-01	4.10E-02	2.00E-04	4.00E-05	6.43E+01	1.05E-04	5.00E-01	5.00E-01	4.74E+03	4.74E+03
Max	Aerial	Agricultural	Plane	N.A.-adult	2.00E-01	4.10E-02	5.10E-03	1.02E-03	6.43E+01	2.69E-03	5.00E-01	5.00E-01	1.86E+02	1.86E+02
Max	Aerial	Agricultural	Helicopter	N.A.-adult	2.00E-01	4.10E-02	4.40E-03	8.80E-04	6.43E+01	2.32E-03	5.00E-01	5.00E-01	2.16E+02	2.16E+02
Max	Ground	Agricultural	Low Boom	N.A.-adult	2.00E-01	4.10E-02	6.00E-04	1.20E-04	6.43E+01	3.16E-04	5.00E-01	5.00E-01	1.58E+03	1.58E+03
Max	Ground	Agricultural	High Boom	N.A.-adult	2.00E-01	4.10E-02	9.00E-04	1.80E-04	6.43E+01	4.74E-04	5.00E-01	5.00E-01	1.05E+03	1.05E+03

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Ingestion of Berries

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Fraction a.i. Retained on Berry	Deposition Rate (mg/cm2)	Exposure Factor (cm2/kg-day)	Absorbed Dose (mg/kg-day)	PAD (mg/kg-day) Chronic	%PAD (unitless) Chronic
Typical	Aerial	Agricultural	Plane	Berry - child	2.00E-01	1.10E-03	4.60E+00	1.01E-03	5.00E-03	20.24%
Typical	Aerial	Agricultural	Helicopter	Berry - child	2.00E-01	1.00E-03	4.60E+00	9.20E-04	5.00E-03	18.40%
Typical	Ground	Agricultural	Low Boom	Berry - child	2.00E-01	1.00E-04	4.60E+00	9.20E-05	5.00E-03	1.84%
Typical	Ground	Agricultural	High Boom	Berry - child	2.00E-01	2.00E-04	4.60E+00	1.84E-04	5.00E-03	3.68%
Max	Aerial	Agricultural	Plane	Berry - child	2.00E-01	5.10E-03	4.60E+00	4.69E-03	5.00E-03	93.84%
Max	Aerial	Agricultural	Helicopter	Berry - child	2.00E-01	4.40E-03	4.60E+00	4.05E-03	5.00E-03	80.96%
Max	Ground	Agricultural	Low Boom	Berry - child	2.00E-01	6.00E-04	4.60E+00	5.52E-04	5.00E-03	11.04%
Max	Ground	Agricultural	High Boom	Berry - child	2.00E-01	9.00E-04	4.60E+00	8.28E-04	5.00E-03	16.56%
Typical	Aerial	Agricultural	Plane	Berry - adult	2.00E-01	1.10E-03	4.57E+00	1.01E-03	5.00E-03	20.11%
Typical	Aerial	Agricultural	Helicopter	Berry - adult	2.00E-01	1.00E-03	4.57E+00	9.14E-04	5.00E-03	18.29%
Typical	Ground	Agricultural	Low Boom	Berry - adult	2.00E-01	1.00E-04	4.57E+00	9.14E-05	5.00E-03	1.83%
Typical	Ground	Agricultural	High Boom	Berry - adult	2.00E-01	2.00E-04	4.57E+00	1.83E-04	5.00E-03	3.66%
Max	Aerial	Agricultural	Plane	Berry - adult	2.00E-01	5.10E-03	4.57E+00	4.66E-03	5.00E-03	93.26%
Max	Aerial	Agricultural	Helicopter	Berry - adult	2.00E-01	4.40E-03	4.57E+00	4.02E-03	5.00E-03	80.46%
Max	Ground	Agricultural	Low Boom	Berry - adult	2.00E-01	6.00E-04	4.57E+00	5.49E-04	5.00E-03	10.97%
Max	Ground	Agricultural	High Boom	Berry - adult	2.00E-01	9.00E-04	4.57E+00	8.23E-04	5.00E-03	16.46%
Typical	Aerial	Agricultural	Plane	Res-child	2.00E-01	1.10E-03	4.60E+00	1.01E-03	5.00E-03	20.24%
Typical	Aerial	Agricultural	Helicopter	Res-child	2.00E-01	1.00E-03	4.60E+00	9.20E-04	5.00E-03	18.40%
Typical	Ground	Agricultural	Low Boom	Res-child	2.00E-01	1.00E-04	4.60E+00	9.20E-05	5.00E-03	1.84%
Typical	Ground	Agricultural	High Boom	Res-child	2.00E-01	2.00E-04	4.60E+00	1.84E-04	5.00E-03	3.68%
Max	Aerial	Agricultural	Plane	Res-child	2.00E-01	5.10E-03	4.60E+00	4.69E-03	5.00E-03	93.84%
Max	Aerial	Agricultural	Helicopter	Res-child	2.00E-01	4.40E-03	4.60E+00	4.05E-03	5.00E-03	80.96%
Max	Ground	Agricultural	Low Boom	Res-child	2.00E-01	6.00E-04	4.60E+00	5.52E-04	5.00E-03	11.04%
Max	Ground	Agricultural	High Boom	Res-child	2.00E-01	9.00E-04	4.60E+00	8.28E-04	5.00E-03	16.56%
Typical	Aerial	Agricultural	Plane	Res-adult	2.00E-01	1.10E-03	4.57E+00	1.01E-03	5.00E-03	20.11%
Typical	Aerial	Agricultural	Helicopter	Res-adult	2.00E-01	1.00E-03	4.57E+00	9.14E-04	5.00E-03	18.29%
Typical	Ground	Agricultural	Low Boom	Res-adult	2.00E-01	1.00E-04	4.57E+00	9.14E-05	5.00E-03	1.83%
Typical	Ground	Agricultural	High Boom	Res-adult	2.00E-01	2.00E-04	4.57E+00	1.83E-04	5.00E-03	3.66%
Max	Aerial	Agricultural	Plane	Res-adult	2.00E-01	5.10E-03	4.57E+00	4.66E-03	5.00E-03	93.26%
Max	Aerial	Agricultural	Helicopter	Res-adult	2.00E-01	4.40E-03	4.57E+00	4.02E-03	5.00E-03	80.46%
Max	Ground	Agricultural	Low Boom	Res-adult	2.00E-01	6.00E-04	4.57E+00	5.49E-04	5.00E-03	10.97%
Max	Ground	Agricultural	High Boom	Res-adult	2.00E-01	9.00E-04	4.57E+00	8.23E-04	5.00E-03	16.46%

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Ingestion of Berries

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Fraction a.i. Retained on Berry	Deposition Rate (mg/cm2)	Exposure Factor (cm2/kg-day)	Absorbed Dose (mg/kg-day)	PAD (mg/kg-day) Chronic	%PAD (unitless) Chronic
Typical	Aerial	Agricultural	Plane	N.American - child	2.00E-01	1.10E-03	4.60E+00	1.01E-03	5.00E-03	20.24%
Typical	Aerial	Agricultural	Helicopter	N.American - child	2.00E-01	1.00E-03	4.60E+00	9.20E-04	5.00E-03	18.40%
Typical	Ground	Agricultural	Low Boom	N.American - child	2.00E-01	1.00E-04	4.60E+00	9.20E-05	5.00E-03	1.84%
Typical	Ground	Agricultural	High Boom	N.American - child	2.00E-01	2.00E-04	4.60E+00	1.84E-04	5.00E-03	3.68%
Max	Aerial	Agricultural	Plane	N.American - child	2.00E-01	5.10E-03	4.60E+00	4.69E-03	5.00E-03	93.84%
Max	Aerial	Agricultural	Helicopter	N.American - child	2.00E-01	4.40E-03	4.60E+00	4.05E-03	5.00E-03	80.96%
Max	Ground	Agricultural	Low Boom	N.American - child	2.00E-01	6.00E-04	4.60E+00	5.52E-04	5.00E-03	11.04%
Max	Ground	Agricultural	High Boom	N.American - child	2.00E-01	9.00E-04	4.60E+00	8.28E-04	5.00E-03	16.56%
Typical	Aerial	Agricultural	Plane	N.American - adult	2.00E-01	1.10E-03	4.57E+00	1.01E-03	5.00E-03	20.11%
Typical	Aerial	Agricultural	Helicopter	N.American - adult	2.00E-01	1.00E-03	4.57E+00	9.14E-04	5.00E-03	18.29%
Typical	Ground	Agricultural	Low Boom	N.American - adult	2.00E-01	1.00E-04	4.57E+00	9.14E-05	5.00E-03	1.83%
Typical	Ground	Agricultural	High Boom	N.American - adult	2.00E-01	2.00E-04	4.57E+00	1.83E-04	5.00E-03	3.66%
Max	Aerial	Agricultural	Plane	N.American - adult	2.00E-01	5.10E-03	4.57E+00	4.66E-03	5.00E-03	93.26%
Max	Aerial	Agricultural	Helicopter	N.American - adult	2.00E-01	4.40E-03	4.57E+00	4.02E-03	5.00E-03	80.46%
Max	Ground	Agricultural	Low Boom	N.American - adult	2.00E-01	6.00E-04	4.57E+00	5.49E-04	5.00E-03	10.97%
Max	Ground	Agricultural	High Boom	N.American - adult	2.00E-01	9.00E-04	4.57E+00	8.23E-04	5.00E-03	16.46%

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses and Margins of Exposure

Scenario: Public Receptors - Routine Exposure

Pathway: Dermal Contact with Water While Swimming

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Skin Permeability Constant (cm/hr)	Water Concentration (mg/L)	Unit Correction Factor (l/cm ³)	Exposure Factor (cm ² -hr/kg-day)	Absorbed Dose (mg/kg-day)	Oral NOAEL (mg/kg-day) Int	MOE (unitless) Int
Typical	Aerial	Agricultural	Plane	Swimmer-child	7.77E-08	8.08E-03	1.00E-03	4.40E+02	2.76E-10	5.00E-01	1.81E+09
Typical	Aerial	Agricultural	Helicopter	Swimmer-child	7.77E-08	6.82E-03	1.00E-03	4.40E+02	2.33E-10	5.00E-01	2.14E+09
Typical	Ground	Agricultural	Low Boom	Swimmer-child	7.77E-08	6.82E-04	1.00E-03	4.40E+02	2.33E-11	5.00E-01	2.14E+10
Typical	Ground	Agricultural	High Boom	Swimmer-child	7.77E-08	1.09E-03	1.00E-03	4.40E+02	3.73E-11	5.00E-01	1.34E+10
Max	Aerial	Agricultural	Plane	Swimmer-child	7.77E-08	3.89E-02	1.00E-03	4.40E+02	1.33E-09	5.00E-01	3.76E+08
Max	Aerial	Agricultural	Helicopter	Swimmer-child	7.77E-08	3.23E-02	1.00E-03	4.40E+02	1.10E-09	5.00E-01	4.53E+08
Max	Ground	Agricultural	Low Boom	Swimmer-child	7.77E-08	2.73E-03	1.00E-03	4.40E+02	9.33E-11	5.00E-01	5.36E+09
Max	Ground	Agricultural	High Boom	Swimmer-child	7.77E-08	4.38E-03	1.00E-03	4.40E+02	1.50E-10	5.00E-01	3.34E+09
Typical	Aerial	Agricultural	Plane	Swimmer-adult	7.77E-08	8.08E-03	1.00E-03	2.57E+02	1.61E-10	5.00E-01	3.10E+09
Typical	Aerial	Agricultural	Helicopter	Swimmer-adult	7.77E-08	6.82E-03	1.00E-03	2.57E+02	1.36E-10	5.00E-01	3.67E+09
Typical	Ground	Agricultural	Low Boom	Swimmer-adult	7.77E-08	6.82E-04	1.00E-03	2.57E+02	1.36E-11	5.00E-01	3.67E+10
Typical	Ground	Agricultural	High Boom	Swimmer-adult	7.77E-08	1.09E-03	1.00E-03	2.57E+02	2.18E-11	5.00E-01	2.30E+10
Max	Aerial	Agricultural	Plane	Swimmer-adult	7.77E-08	3.89E-02	1.00E-03	2.57E+02	7.77E-10	5.00E-01	6.43E+08
Max	Aerial	Agricultural	Helicopter	Swimmer-adult	7.77E-08	3.23E-02	1.00E-03	2.57E+02	6.45E-10	5.00E-01	7.75E+08
Max	Ground	Agricultural	Low Boom	Swimmer-adult	7.77E-08	2.73E-03	1.00E-03	2.57E+02	5.45E-11	5.00E-01	9.17E+09
Max	Ground	Agricultural	High Boom	Swimmer-adult	7.77E-08	4.38E-03	1.00E-03	2.57E+02	8.75E-11	5.00E-01	5.71E+09
Typical	Aerial	Agricultural	Plane	N.American-child	7.77E-08	8.08E-03	1.00E-03	1.14E+03	7.18E-10	5.00E-01	6.96E+08
Typical	Aerial	Agricultural	Helicopter	N.American-child	7.77E-08	6.82E-03	1.00E-03	1.14E+03	6.06E-10	5.00E-01	8.25E+08
Typical	Ground	Agricultural	Low Boom	N.American-child	7.77E-08	6.82E-04	1.00E-03	1.14E+03	6.06E-11	5.00E-01	8.25E+09
Typical	Ground	Agricultural	High Boom	N.American-child	7.77E-08	1.09E-03	1.00E-03	1.14E+03	9.69E-11	5.00E-01	5.16E+09
Max	Aerial	Agricultural	Plane	N.American-child	7.77E-08	3.89E-02	1.00E-03	1.14E+03	3.46E-09	5.00E-01	1.45E+08
Max	Aerial	Agricultural	Helicopter	N.American-child	7.77E-08	3.23E-02	1.00E-03	1.14E+03	2.87E-09	5.00E-01	1.74E+08
Max	Ground	Agricultural	Low Boom	N.American-child	7.77E-08	2.73E-03	1.00E-03	1.14E+03	2.43E-10	5.00E-01	2.06E+09
Max	Ground	Agricultural	High Boom	N.American-child	7.77E-08	4.38E-03	1.00E-03	1.14E+03	3.89E-10	5.00E-01	1.28E+09
Typical	Aerial	Agricultural	Plane	N.American-adult	7.77E-08	8.08E-03	1.00E-03	6.69E+02	4.20E-10	5.00E-01	1.19E+09
Typical	Aerial	Agricultural	Helicopter	N.American-adult	7.77E-08	6.82E-03	1.00E-03	6.69E+02	3.54E-10	5.00E-01	1.41E+09
Typical	Ground	Agricultural	Low Boom	N.American-adult	7.77E-08	6.82E-04	1.00E-03	6.69E+02	3.54E-11	5.00E-01	1.41E+10
Typical	Ground	Agricultural	High Boom	N.American-adult	7.77E-08	1.09E-03	1.00E-03	6.69E+02	5.66E-11	5.00E-01	8.83E+09
Max	Aerial	Agricultural	Plane	N.American-adult	7.77E-08	3.89E-02	1.00E-03	6.69E+02	2.02E-09	5.00E-01	2.47E+08
Max	Aerial	Agricultural	Helicopter	N.American-adult	7.77E-08	3.23E-02	1.00E-03	6.69E+02	1.68E-09	5.00E-01	2.98E+08
Max	Ground	Agricultural	Low Boom	N.American-adult	7.77E-08	2.73E-03	1.00E-03	6.69E+02	1.42E-10	5.00E-01	3.53E+09
Max	Ground	Agricultural	High Boom	N.American-adult	7.77E-08	4.38E-03	1.00E-03	6.69E+02	2.28E-10	5.00E-01	2.20E+09

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses, Margins of Exposure, and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Incidental Ingestion of Water while Swimming

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Water Concentration (mg/L)	Exposure Factor (L/kg-day)	Absorbed Dose (mg/kg-day)	Incidental Ingestion	
								Oral NOAEL (mg/kg-day) Int	MOE (unitless) Int
Typical	Aerial	Agricultural	Plane	Swimmer-child	8.08E-03	3.33E-03	2.69E-05	5.00E-01	1.86E+04
Typical	Aerial	Agricultural	Helicopter	Swimmer-child	6.82E-03	3.33E-03	2.27E-05	5.00E-01	2.20E+04
Typical	Ground	Agricultural	Low Boom	Swimmer-child	6.82E-04	3.33E-03	2.27E-06	5.00E-01	2.20E+05
Typical	Ground	Agricultural	High Boom	Swimmer-child	1.09E-03	3.33E-03	3.63E-06	5.00E-01	1.38E+05
Max	Aerial	Agricultural	Plane	Swimmer-child	3.89E-02	3.33E-03	1.30E-04	5.00E-01	3.86E+03
Max	Aerial	Agricultural	Helicopter	Swimmer-child	3.23E-02	3.33E-03	1.08E-04	5.00E-01	4.64E+03
Max	Ground	Agricultural	Low Boom	Swimmer-child	2.73E-03	3.33E-03	9.10E-06	5.00E-01	5.49E+04
Max	Ground	Agricultural	High Boom	Swimmer-child	4.38E-03	3.33E-03	1.46E-05	5.00E-01	3.42E+04
Typical	Aerial	Agricultural	Plane	Swimmer-adult	8.08E-03	7.14E-04	5.77E-06	5.00E-01	8.66E+04
Typical	Aerial	Agricultural	Helicopter	Swimmer-adult	6.82E-03	7.14E-04	4.87E-06	5.00E-01	1.03E+05
Typical	Ground	Agricultural	Low Boom	Swimmer-adult	6.82E-04	7.14E-04	4.87E-07	5.00E-01	1.03E+06
Typical	Ground	Agricultural	High Boom	Swimmer-adult	1.09E-03	7.14E-04	7.79E-07	5.00E-01	6.42E+05
Max	Aerial	Agricultural	Plane	Swimmer-adult	3.89E-02	7.14E-04	2.78E-05	5.00E-01	1.80E+04
Max	Aerial	Agricultural	Helicopter	Swimmer-adult	3.23E-02	7.14E-04	2.31E-05	5.00E-01	2.17E+04
Max	Ground	Agricultural	Low Boom	Swimmer-adult	2.73E-03	7.14E-04	1.95E-06	5.00E-01	2.56E+05
Max	Ground	Agricultural	High Boom	Swimmer-adult	4.38E-03	7.14E-04	3.13E-06	5.00E-01	1.60E+05

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses, Margins of Exposure, and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Drinking Water Ingestion

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Water Concentration (mg/L)	Exposure Factor (L/kg-day)	Absorbed Dose (mg/kg-day)	Drinking Water	
								PAD (mg/kg-day) Chronic	%PAD (unitless) Chronic
Typical	Aerial	Agricultural	Plane	Hiker/Hunter	8.08E-03	2.86E-02	2.31E-04	5.00E-03	4.62%
Typical	Aerial	Agricultural	Helicopter	Hiker/Hunter	6.82E-03	2.86E-02	1.95E-04	5.00E-03	3.90%
Typical	Ground	Agricultural	Low Boom	Hiker/Hunter	6.82E-04	2.86E-02	1.95E-05	5.00E-03	0.39%
Typical	Ground	Agricultural	High Boom	Hiker/Hunter	1.09E-03	2.86E-02	3.11E-05	5.00E-03	0.62%
Max	Aerial	Agricultural	Plane	Hiker/Hunter	3.89E-02	2.86E-02	1.11E-03	5.00E-03	22.23%
Max	Aerial	Agricultural	Helicopter	Hiker/Hunter	3.23E-02	2.86E-02	9.23E-04	5.00E-03	18.46%
Max	Ground	Agricultural	Low Boom	Hiker/Hunter	2.73E-03	2.86E-02	7.80E-05	5.00E-03	1.56%
Max	Ground	Agricultural	High Boom	Hiker/Hunter	4.38E-03	2.86E-02	1.25E-04	5.00E-03	2.50%
Typical	Aerial	Agricultural	Plane	Berry - child	8.08E-03	6.67E-02	5.39E-04	5.00E-03	10.77%
Typical	Aerial	Agricultural	Helicopter	Berry - child	6.82E-03	6.67E-02	4.55E-04	5.00E-03	9.09%
Typical	Ground	Agricultural	Low Boom	Berry - child	6.82E-04	6.67E-02	4.55E-05	5.00E-03	0.91%
Typical	Ground	Agricultural	High Boom	Berry - child	1.09E-03	6.67E-02	7.27E-05	5.00E-03	1.45%
Max	Aerial	Agricultural	Plane	Berry - child	3.89E-02	6.67E-02	2.59E-03	5.00E-03	51.87%
Max	Aerial	Agricultural	Helicopter	Berry - child	3.23E-02	6.67E-02	2.15E-03	5.00E-03	43.07%
Max	Ground	Agricultural	Low Boom	Berry - child	2.73E-03	6.67E-02	1.82E-04	5.00E-03	3.64%
Max	Ground	Agricultural	High Boom	Berry - child	4.38E-03	6.67E-02	2.92E-04	5.00E-03	5.84%
Typical	Aerial	Agricultural	Plane	Berry - adult	8.08E-03	2.86E-02	2.31E-04	5.00E-03	4.62%
Typical	Aerial	Agricultural	Helicopter	Berry - adult	6.82E-03	2.86E-02	1.95E-04	5.00E-03	3.90%
Typical	Ground	Agricultural	Low Boom	Berry - adult	6.82E-04	2.86E-02	1.95E-05	5.00E-03	0.39%
Typical	Ground	Agricultural	High Boom	Berry - adult	1.09E-03	2.86E-02	3.11E-05	5.00E-03	0.62%
Max	Aerial	Agricultural	Plane	Berry - adult	3.89E-02	2.86E-02	1.11E-03	5.00E-03	22.23%
Max	Aerial	Agricultural	Helicopter	Berry - adult	3.23E-02	2.86E-02	9.23E-04	5.00E-03	18.46%
Max	Ground	Agricultural	Low Boom	Berry - adult	2.73E-03	2.86E-02	7.80E-05	5.00E-03	1.56%
Max	Ground	Agricultural	High Boom	Berry - adult	4.38E-03	2.86E-02	1.25E-04	5.00E-03	2.50%
Typical	Aerial	Agricultural	Plane	Angler	8.08E-03	2.86E-02	2.31E-04	5.00E-03	4.62%
Typical	Aerial	Agricultural	Helicopter	Angler	6.82E-03	2.86E-02	1.95E-04	5.00E-03	3.90%
Typical	Ground	Agricultural	Low Boom	Angler	6.82E-04	2.86E-02	1.95E-05	5.00E-03	0.39%
Typical	Ground	Agricultural	High Boom	Angler	1.09E-03	2.86E-02	3.11E-05	5.00E-03	0.62%
Max	Aerial	Agricultural	Plane	Angler	3.89E-02	2.86E-02	1.11E-03	5.00E-03	22.23%
Max	Aerial	Agricultural	Helicopter	Angler	3.23E-02	2.86E-02	9.23E-04	5.00E-03	18.46%
Max	Ground	Agricultural	Low Boom	Angler	2.73E-03	2.86E-02	7.80E-05	5.00E-03	1.56%
Max	Ground	Agricultural	High Boom	Angler	4.38E-03	2.86E-02	1.25E-04	5.00E-03	2.50%

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses, Margins of Exposure, and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Drinking Water Ingestion

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Water Concentration (mg/L)	Exposure Factor (L/kg-day)	Absorbed Dose (mg/kg-day)	Drinking Water	
								PAD (mg/kg-day) Chronic	%PAD (unitless) Chronic
Typical	Aerial	Agricultural	Plane	N.American - child	8.08E-03	3.33E-02	2.69E-04	5.00E-03	5.39%
Typical	Aerial	Agricultural	Helicopter	N.American - child	6.82E-03	3.33E-02	2.27E-04	5.00E-03	4.55%
Typical	Ground	Agricultural	Low Boom	N.American - child	6.82E-04	3.33E-02	2.27E-05	5.00E-03	0.45%
Typical	Ground	Agricultural	High Boom	N.American - child	1.09E-03	3.33E-02	3.63E-05	5.00E-03	0.73%
Max	Aerial	Agricultural	Plane	N.American - child	3.89E-02	3.33E-02	1.30E-03	5.00E-03	25.93%
Max	Aerial	Agricultural	Helicopter	N.American - child	3.23E-02	3.33E-02	1.08E-03	5.00E-03	21.53%
Max	Ground	Agricultural	Low Boom	N.American - child	2.73E-03	3.33E-02	9.10E-05	5.00E-03	1.82%
Max	Ground	Agricultural	High Boom	N.American - child	4.38E-03	3.33E-02	1.46E-04	5.00E-03	2.92%
Typical	Aerial	Agricultural	Plane	N.American - adult	8.08E-03	1.43E-02	1.15E-04	5.00E-03	2.31%
Typical	Aerial	Agricultural	Helicopter	N.American - adult	6.82E-03	1.43E-02	9.74E-05	5.00E-03	1.95%
Typical	Ground	Agricultural	Low Boom	N.American - adult	6.82E-04	1.43E-02	9.74E-06	5.00E-03	0.19%
Typical	Ground	Agricultural	High Boom	N.American - adult	1.09E-03	1.43E-02	1.56E-05	5.00E-03	0.31%
Max	Aerial	Agricultural	Plane	N.American - adult	3.89E-02	1.43E-02	5.56E-04	5.00E-03	11.11%
Max	Aerial	Agricultural	Helicopter	N.American - adult	3.23E-02	1.43E-02	4.61E-04	5.00E-03	9.23%
Max	Ground	Agricultural	Low Boom	N.American - adult	2.73E-03	1.43E-02	3.90E-05	5.00E-03	0.78%
Max	Ground	Agricultural	High Boom	N.American - adult	4.38E-03	1.43E-02	6.26E-05	5.00E-03	1.25%

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Ingestion of Fish

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Water Concentration (mg/L)	Bioconcentration Factor (L/kg)	Unit Correction Factor (kg/mg)	Exposure Factor (mg/kg-day)	Absorbed Dose (mg/kg-day)	PAD (mg/kg-day) Chronic	%PAD (unitless) Chronic
Typical	Aerial	Agricultural	Plane	Angler	8.08E-03	1.03E+00	1.00E-06	9.00E+02	7.49E-06	5.00E-03	0.15%
Typical	Aerial	Agricultural	Helicopter	Angler	6.82E-03	1.03E+00	1.00E-06	9.00E+02	6.32E-06	5.00E-03	0.13%
Typical	Ground	Agricultural	Low Boom	Angler	6.82E-04	1.03E+00	1.00E-06	9.00E+02	6.32E-07	5.00E-03	0.01%
Typical	Ground	Agricultural	High Boom	Angler	1.09E-03	1.03E+00	1.00E-06	9.00E+02	1.01E-06	5.00E-03	0.02%
Max	Aerial	Agricultural	Plane	Angler	3.89E-02	1.03E+00	1.00E-06	9.00E+02	3.61E-05	5.00E-03	0.72%
Max	Aerial	Agricultural	Helicopter	Angler	3.23E-02	1.03E+00	1.00E-06	9.00E+02	2.99E-05	5.00E-03	0.60%
Max	Ground	Agricultural	Low Boom	Angler	2.73E-03	1.03E+00	1.00E-06	9.00E+02	2.53E-06	5.00E-03	0.05%
Max	Ground	Agricultural	High Boom	Angler	4.38E-03	1.03E+00	1.00E-06	9.00E+02	4.06E-06	5.00E-03	0.08%
Typical	Aerial	Agricultural	Plane	N.American - child	8.08E-03	1.03E+00	1.00E-06	1.27E+04	1.05E-04	5.00E-03	2.11%
Typical	Aerial	Agricultural	Helicopter	N.American - child	6.82E-03	1.03E+00	1.00E-06	1.27E+04	8.90E-05	5.00E-03	1.78%
Typical	Ground	Agricultural	Low Boom	N.American - child	6.82E-04	1.03E+00	1.00E-06	1.27E+04	8.90E-06	5.00E-03	0.18%
Typical	Ground	Agricultural	High Boom	N.American - child	1.09E-03	1.03E+00	1.00E-06	1.27E+04	1.42E-05	5.00E-03	0.28%
Max	Aerial	Agricultural	Plane	N.American - child	3.89E-02	1.03E+00	1.00E-06	1.27E+04	5.08E-04	5.00E-03	10.15%
Max	Aerial	Agricultural	Helicopter	N.American - child	3.23E-02	1.03E+00	1.00E-06	1.27E+04	4.21E-04	5.00E-03	8.43%
Max	Ground	Agricultural	Low Boom	N.American - child	2.73E-03	1.03E+00	1.00E-06	1.27E+04	3.56E-05	5.00E-03	0.71%
Max	Ground	Agricultural	High Boom	N.American - child	4.38E-03	1.03E+00	1.00E-06	1.27E+04	5.71E-05	5.00E-03	1.14%
Typical	Aerial	Agricultural	Plane	N.American - adult	8.08E-03	1.03E+00	1.00E-06	1.26E+04	1.05E-04	5.00E-03	2.10%
Typical	Aerial	Agricultural	Helicopter	N.American - adult	6.82E-03	1.03E+00	1.00E-06	1.26E+04	8.88E-05	5.00E-03	1.78%
Typical	Ground	Agricultural	Low Boom	N.American - adult	6.82E-04	1.03E+00	1.00E-06	1.26E+04	8.88E-06	5.00E-03	0.18%
Typical	Ground	Agricultural	High Boom	N.American - adult	1.09E-03	1.03E+00	1.00E-06	1.26E+04	1.42E-05	5.00E-03	0.28%
Max	Aerial	Agricultural	Plane	N.American - adult	3.89E-02	1.03E+00	1.00E-06	1.26E+04	5.07E-04	5.00E-03	10.13%
Max	Aerial	Agricultural	Helicopter	N.American - adult	3.23E-02	1.03E+00	1.00E-06	1.26E+04	4.21E-04	5.00E-03	8.41%
Max	Ground	Agricultural	Low Boom	N.American - adult	2.73E-03	1.03E+00	1.00E-06	1.26E+04	3.56E-05	5.00E-03	0.71%
Max	Ground	Agricultural	High Boom	N.American - adult	4.38E-03	1.03E+00	1.00E-06	1.26E+04	5.70E-05	5.00E-03	1.14%

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Aggregate Risk Index - Intermediate Term Exposure Scenario

Scenario: Public Receptors - Routine Exposure

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Target MOE	Dermal Exposure Pathways			Incidental Ingestion Int. Term Oral Water MOE	Dietary Exposure Pathways			Int-Term Aggregate Risk Index
						Intermediate-Term Dermal Drift MOE	Foliage MOE	Int. Term Oral Water MOE		Chronic Water %PAD	Chronic Berries %PAD	Chronic Fish %PAD	
Typical	Aerial	Agricultural	Plane	Hiker/Hunter	1.00E+02	1.72E+02	1.94E+03	--	--	4.62%	--	--	1.47E+00
Typical	Aerial	Agricultural	Helicopter	Hiker/Hunter	1.00E+02	1.90E+02	2.13E+03	--	--	3.90%	--	--	1.63E+00
Typical	Ground	Agricultural	Low Boom	Hiker/Hunter	1.00E+02	1.90E+03	2.13E+04	--	--	0.39%	--	--	1.63E+01
Typical	Ground	Agricultural	High Boom	Hiker/Hunter	1.00E+02	9.48E+02	1.07E+04	--	--	0.62%	--	--	8.26E+00
Max	Aerial	Agricultural	Plane	Hiker/Hunter	1.00E+02	3.72E+01	4.18E+02	--	--	22.23%	--	--	3.17E-01
Max	Aerial	Agricultural	Helicopter	Hiker/Hunter	1.00E+02	4.31E+01	4.85E+02	--	--	18.46%	--	--	3.69E-01
Max	Ground	Agricultural	Low Boom	Hiker/Hunter	1.00E+02	3.16E+02	3.56E+03	--	--	1.56%	--	--	2.78E+00
Max	Ground	Agricultural	High Boom	Hiker/Hunter	1.00E+02	2.11E+02	2.37E+03	--	--	2.50%	--	--	1.85E+00
Typical	Aerial	Agricultural	Plane	Berry - child	1.00E+02	1.03E+02	1.39E+03	--	--	10.77%	20.24%	--	7.41E-01
Typical	Aerial	Agricultural	Helicopter	Berry - child	1.00E+02	1.14E+02	1.52E+03	--	--	9.09%	18.40%	--	8.20E-01
Typical	Ground	Agricultural	Low Boom	Berry - child	1.00E+02	1.14E+03	1.52E+04	--	--	0.91%	1.84%	--	8.20E+00
Typical	Ground	Agricultural	High Boom	Berry - child	1.00E+02	5.69E+02	7.62E+03	--	--	1.45%	3.68%	--	4.16E+00
Max	Aerial	Agricultural	Plane	Berry - child	1.00E+02	2.23E+01	2.99E+02	--	--	51.87%	93.84%	--	1.59E-01
Max	Aerial	Agricultural	Helicopter	Berry - child	1.00E+02	2.59E+01	3.46E+02	--	--	43.07%	80.96%	--	1.85E-01
Max	Ground	Agricultural	Low Boom	Berry - child	1.00E+02	1.90E+02	2.54E+03	--	--	3.64%	11.04%	--	1.40E+00
Max	Ground	Agricultural	High Boom	Berry - child	1.00E+02	1.26E+02	1.69E+03	--	--	5.84%	16.56%	--	9.31E-01
Typical	Aerial	Agricultural	Plane	Berry - adult	1.00E+02	1.72E+02	1.29E+03	--	--	4.62%	20.11%	--	1.11E+00
Typical	Aerial	Agricultural	Helicopter	Berry - adult	1.00E+02	1.90E+02	1.42E+03	--	--	3.90%	18.29%	--	1.22E+00
Typical	Ground	Agricultural	Low Boom	Berry - adult	1.00E+02	1.90E+03	1.42E+04	--	--	0.39%	1.83%	--	1.22E+01
Typical	Ground	Agricultural	High Boom	Berry - adult	1.00E+02	9.48E+02	7.11E+03	--	--	0.62%	3.66%	--	6.16E+00
Max	Aerial	Agricultural	Plane	Berry - adult	1.00E+02	3.72E+01	2.79E+02	--	--	22.23%	93.26%	--	2.38E-01
Max	Aerial	Agricultural	Helicopter	Berry - adult	1.00E+02	4.31E+01	3.23E+02	--	--	18.46%	80.46%	--	2.76E-01
Max	Ground	Agricultural	Low Boom	Berry - adult	1.00E+02	3.16E+02	2.37E+03	--	--	1.56%	10.97%	--	2.07E+00
Max	Ground	Agricultural	High Boom	Berry - adult	1.00E+02	2.11E+02	1.58E+03	--	--	2.50%	16.46%	--	1.37E+00
Typical	Aerial	Agricultural	Plane	Angler	1.00E+02	1.72E+02	1.94E+03	--	--	4.62%	--	0.15%	1.47E+00
Typical	Aerial	Agricultural	Helicopter	Angler	1.00E+02	1.90E+02	2.13E+03	--	--	3.90%	--	0.13%	1.63E+00
Typical	Ground	Agricultural	Low Boom	Angler	1.00E+02	1.90E+03	2.13E+04	--	--	0.39%	--	0.01%	1.63E+01
Typical	Ground	Agricultural	High Boom	Angler	1.00E+02	9.48E+02	1.07E+04	--	--	0.62%	--	0.02%	8.24E+00
Max	Aerial	Agricultural	Plane	Angler	1.00E+02	3.72E+01	4.18E+02	--	--	22.23%	--	0.72%	3.17E-01
Max	Aerial	Agricultural	Helicopter	Angler	1.00E+02	4.31E+01	4.85E+02	--	--	18.46%	--	0.60%	3.68E-01
Max	Ground	Agricultural	Low Boom	Angler	1.00E+02	3.16E+02	3.56E+03	--	--	1.56%	--	0.05%	2.77E+00
Max	Ground	Agricultural	High Boom	Angler	1.00E+02	2.11E+02	2.37E+03	--	--	2.50%	--	0.08%	1.84E+00

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Aggregate Risk Index - Intermediate Term Exposure Scenario

Scenario: Public Receptors - Routine Exposure

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Target MOE	Dermal Exposure Pathways			Incidental Ingestion Int. Term Oral MOE	Dietary Exposure Pathways			Int-Term Aggregate Risk Index
						Intermediate-Term Dermal Drift MOE	Foliage MOE	Int. Term Oral Water MOE		Chronic Water %PAD	Chronic Berries %PAD	Chronic Fish %PAD	
Typical	Aerial	Agricultural	Plane	Res-child	1.00E+02	1.03E+02	8.00E+01	--	--	--	20.24%	--	4.13E-01
Typical	Aerial	Agricultural	Helicopter	Res-child	1.00E+02	1.14E+02	8.79E+01	--	--	--	18.40%	--	4.55E-01
Typical	Ground	Agricultural	Low Boom	Res-child	1.00E+02	1.14E+03	8.79E+02	--	--	--	1.84%	--	4.55E+00
Typical	Ground	Agricultural	High Boom	Res-child	1.00E+02	5.69E+02	4.40E+02	--	--	--	3.68%	--	2.27E+00
Max	Aerial	Agricultural	Plane	Res-child	1.00E+02	2.23E+01	1.72E+01	--	--	--	93.84%	--	8.91E-02
Max	Aerial	Agricultural	Helicopter	Res-child	1.00E+02	2.59E+01	2.00E+01	--	--	--	80.96%	--	1.03E-01
Max	Ground	Agricultural	Low Boom	Res-child	1.00E+02	1.90E+02	1.47E+02	--	--	--	11.04%	--	7.58E-01
Max	Ground	Agricultural	High Boom	Res-child	1.00E+02	1.26E+02	9.77E+01	--	--	--	16.56%	--	5.05E-01
Typical	Aerial	Agricultural	Plane	Res-adult	1.00E+02	1.72E+02	1.34E+02	--	--	--	20.11%	--	6.54E-01
Typical	Aerial	Agricultural	Helicopter	Res-adult	1.00E+02	1.90E+02	1.47E+02	--	--	--	18.29%	--	7.20E-01
Typical	Ground	Agricultural	Low Boom	Res-adult	1.00E+02	1.90E+03	1.47E+03	--	--	--	1.83%	--	7.20E+00
Typical	Ground	Agricultural	High Boom	Res-adult	1.00E+02	9.48E+02	7.36E+02	--	--	--	3.66%	--	3.60E+00
Max	Aerial	Agricultural	Plane	Res-adult	1.00E+02	3.72E+01	2.89E+01	--	--	--	93.26%	--	1.41E-01
Max	Aerial	Agricultural	Helicopter	Res-adult	1.00E+02	4.31E+01	3.35E+01	--	--	--	80.46%	--	1.64E-01
Max	Ground	Agricultural	Low Boom	Res-adult	1.00E+02	3.16E+02	2.45E+02	--	--	--	10.97%	--	1.20E+00
Max	Ground	Agricultural	High Boom	Res-adult	1.00E+02	2.11E+02	1.64E+02	--	--	--	16.46%	--	7.99E-01
Typical	Aerial	Agricultural	Plane	N.A.-child	1.00E+02	1.03E+02	9.24E+02	6.96E+08	--	5.39%	20.24%	2.11%	7.40E-01
Typical	Aerial	Agricultural	Helicopter	N.A.-child	1.00E+02	1.14E+02	1.02E+03	8.25E+08	--	4.55%	18.40%	1.78%	8.17E-01
Typical	Ground	Agricultural	Low Boom	N.A.-child	1.00E+02	1.14E+03	1.02E+04	8.25E+09	--	0.45%	1.84%	0.18%	8.17E+00
Typical	Ground	Agricultural	High Boom	N.A.-child	1.00E+02	5.69E+02	5.08E+03	5.16E+09	--	0.73%	3.68%	0.28%	4.13E+00
Max	Aerial	Agricultural	Plane	N.A.-child	1.00E+02	2.23E+01	1.99E+02	1.45E+08	--	25.93%	93.84%	10.15%	1.59E-01
Max	Aerial	Agricultural	Helicopter	N.A.-child	1.00E+02	2.59E+01	2.31E+02	1.74E+08	--	21.53%	80.96%	8.43%	1.85E-01
Max	Ground	Agricultural	Low Boom	N.A.-child	1.00E+02	1.90E+02	1.69E+03	2.06E+09	--	1.82%	11.04%	0.71%	1.39E+00
Max	Ground	Agricultural	High Boom	N.A.-child	1.00E+02	1.26E+02	1.13E+03	1.28E+09	--	2.92%	16.56%	1.14%	9.21E-01
Typical	Aerial	Agricultural	Plane	N.A.-adult	1.00E+02	1.72E+02	8.62E+02	1.19E+09	--	2.31%	20.11%	2.10%	1.06E+00
Typical	Aerial	Agricultural	Helicopter	N.A.-adult	1.00E+02	1.90E+02	9.49E+02	1.41E+09	--	1.95%	18.29%	1.78%	1.17E+00
Typical	Ground	Agricultural	Low Boom	N.A.-adult	1.00E+02	1.90E+03	9.49E+03	1.41E+10	--	0.19%	1.83%	0.18%	1.17E+01
Typical	Ground	Agricultural	High Boom	N.A.-adult	1.00E+02	9.48E+02	4.74E+03	8.83E+09	--	0.31%	3.66%	0.28%	5.91E+00
Max	Aerial	Agricultural	Plane	N.A.-adult	1.00E+02	3.72E+01	1.86E+02	2.47E+08	--	11.11%	93.26%	10.13%	2.29E-01
Max	Aerial	Agricultural	Helicopter	N.A.-adult	1.00E+02	4.31E+01	2.16E+02	2.98E+08	--	9.23%	80.46%	8.41%	2.66E-01
Max	Ground	Agricultural	Low Boom	N.A.-adult	1.00E+02	3.16E+02	1.58E+03	3.53E+09	--	0.78%	10.97%	0.71%	1.98E+00
Max	Ground	Agricultural	High Boom	N.A.-adult	1.00E+02	2.11E+02	1.05E+03	2.20E+09	--	1.25%	16.46%	1.14%	1.32E+00

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Aggregate Risk Index - Intermediate Term Exposure Scenario

Scenario: Public Receptors - Routine Exposure

Pesticide: Diquat

Program: Aquatic

						Dermal Exposure Pathways			Incidental Ingestion	Dietary Exposure Pathways			Int-Term
						Intermediate-Term Dermal		Int. Term Oral	Int. Term Oral	Chronic Water	Chronic Berries	Chronic Fish	Aggregate Risk
Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Target MOE	Drift MOE	Foliage MOE	Water MOE	Water MOE	%PAD	%PAD	%PAD	Index
Typical	Aerial	Agricultural	Plane	Swimmer-child	1.00E+02	--	--	1.81E+09	1.86E+04	--	--	--	1.86E+02
Typical	Aerial	Agricultural	Helicopter	Swimmer-child	1.00E+02	--	--	2.14E+09	2.20E+04	--	--	--	2.20E+02
Typical	Ground	Agricultural	Low Boom	Swimmer-child	1.00E+02	--	--	2.14E+10	2.20E+05	--	--	--	2.20E+03
Typical	Ground	Agricultural	High Boom	Swimmer-child	1.00E+02	--	--	1.34E+10	1.38E+05	--	--	--	1.38E+03
Max	Aerial	Agricultural	Plane	Swimmer-child	1.00E+02	--	--	3.76E+08	3.86E+03	--	--	--	3.86E+01
Max	Aerial	Agricultural	Helicopter	Swimmer-child	1.00E+02	--	--	4.53E+08	4.64E+03	--	--	--	4.64E+01
Max	Ground	Agricultural	Low Boom	Swimmer-child	1.00E+02	--	--	5.36E+09	5.49E+04	--	--	--	5.49E+02
Max	Ground	Agricultural	High Boom	Swimmer-child	1.00E+02	--	--	3.34E+09	3.42E+04	--	--	--	3.42E+02
Typical	Aerial	Agricultural	Plane	Swimmer-adult	1.00E+02	--	--	3.10E+09	8.66E+04	--	--	--	8.66E+02
Typical	Aerial	Agricultural	Helicopter	Swimmer-adult	1.00E+02	--	--	3.67E+09	1.03E+05	--	--	--	1.03E+03
Typical	Ground	Agricultural	Low Boom	Swimmer-adult	1.00E+02	--	--	3.67E+10	1.03E+06	--	--	--	1.03E+04
Typical	Ground	Agricultural	High Boom	Swimmer-adult	1.00E+02	--	--	2.30E+10	6.42E+05	--	--	--	6.42E+03
Max	Aerial	Agricultural	Plane	Swimmer-adult	1.00E+02	--	--	6.43E+08	1.80E+04	--	--	--	1.80E+02
Max	Aerial	Agricultural	Helicopter	Swimmer-adult	1.00E+02	--	--	7.75E+08	2.17E+04	--	--	--	2.17E+02
Max	Ground	Agricultural	Low Boom	Swimmer-adult	1.00E+02	--	--	9.17E+09	2.56E+05	--	--	--	2.56E+03
Max	Ground	Agricultural	High Boom	Swimmer-adult	1.00E+02	--	--	5.71E+09	1.60E+05	--	--	--	1.60E+03

--Receptor not exposed via this pathway.

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Aggregate Risk Index - Long Term Exposure Scenario

Scenario: Public Receptors - Routine Exposure

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Target MOE	Dermal Exposure Pathways			Incidental Ingestion Int. Term Oral Water MOE	Dietary Exposure Pathways			Long-Term Aggregate Risk Index
						Long-Term Dermal Drift MOE	Foliage MOE	Int. Term Oral Water MOE		Chronic Water %PAD	Chronic Berries %PAD	Chronic Fish %PAD	
Typical	Aerial	Agricultural	Plane	Hiker/Hunter	1.00E+02	1.72E+02	1.94E+03	--	--	4.62%	--	--	1.47E+00
Typical	Aerial	Agricultural	Helicopter	Hiker/Hunter	1.00E+02	1.90E+02	2.13E+03	--	--	3.90%	--	--	1.63E+00
Typical	Ground	Agricultural	Low Boom	Hiker/Hunter	1.00E+02	1.90E+03	2.13E+04	--	--	0.39%	--	--	1.63E+01
Typical	Ground	Agricultural	High Boom	Hiker/Hunter	1.00E+02	9.48E+02	1.07E+04	--	--	0.62%	--	--	8.26E+00
Max	Aerial	Agricultural	Plane	Hiker/Hunter	1.00E+02	3.72E+01	4.18E+02	--	--	22.23%	--	--	3.17E-01
Max	Aerial	Agricultural	Helicopter	Hiker/Hunter	1.00E+02	4.31E+01	4.85E+02	--	--	18.46%	--	--	3.69E-01
Max	Ground	Agricultural	Low Boom	Hiker/Hunter	1.00E+02	3.16E+02	3.56E+03	--	--	1.56%	--	--	2.78E+00
Max	Ground	Agricultural	High Boom	Hiker/Hunter	1.00E+02	2.11E+02	2.37E+03	--	--	2.50%	--	--	1.85E+00
Typical	Aerial	Agricultural	Plane	Berry - child	1.00E+02	1.03E+02	1.39E+03	--	--	10.77%	20.24%	--	7.41E-01
Typical	Aerial	Agricultural	Helicopter	Berry - child	1.00E+02	1.14E+02	1.52E+03	--	--	9.09%	18.40%	--	8.20E-01
Typical	Ground	Agricultural	Low Boom	Berry - child	1.00E+02	1.14E+03	1.52E+04	--	--	0.91%	1.84%	--	8.20E+00
Typical	Ground	Agricultural	High Boom	Berry - child	1.00E+02	5.69E+02	7.62E+03	--	--	1.45%	3.68%	--	4.16E+00
Max	Aerial	Agricultural	Plane	Berry - child	1.00E+02	2.23E+01	2.99E+02	--	--	51.87%	93.84%	--	1.59E-01
Max	Aerial	Agricultural	Helicopter	Berry - child	1.00E+02	2.59E+01	3.46E+02	--	--	43.07%	80.96%	--	1.85E-01
Max	Ground	Agricultural	Low Boom	Berry - child	1.00E+02	1.90E+02	2.54E+03	--	--	3.64%	11.04%	--	1.40E+00
Max	Ground	Agricultural	High Boom	Berry - child	1.00E+02	1.26E+02	1.69E+03	--	--	5.84%	16.56%	--	9.31E-01
Typical	Aerial	Agricultural	Plane	Berry - adult	1.00E+02	1.72E+02	1.29E+03	--	--	4.62%	20.11%	--	1.11E+00
Typical	Aerial	Agricultural	Helicopter	Berry - adult	1.00E+02	1.90E+02	1.42E+03	--	--	3.90%	18.29%	--	1.22E+00
Typical	Ground	Agricultural	Low Boom	Berry - adult	1.00E+02	1.90E+03	1.42E+04	--	--	0.39%	1.83%	--	1.22E+01
Typical	Ground	Agricultural	High Boom	Berry - adult	1.00E+02	9.48E+02	7.11E+03	--	--	0.62%	3.66%	--	6.16E+00
Max	Aerial	Agricultural	Plane	Berry - adult	1.00E+02	3.72E+01	2.79E+02	--	--	22.23%	93.26%	--	2.38E-01
Max	Aerial	Agricultural	Helicopter	Berry - adult	1.00E+02	4.31E+01	3.23E+02	--	--	18.46%	80.46%	--	2.76E-01
Max	Ground	Agricultural	Low Boom	Berry - adult	1.00E+02	3.16E+02	2.37E+03	--	--	1.56%	10.97%	--	2.07E+00
Max	Ground	Agricultural	High Boom	Berry - adult	1.00E+02	2.11E+02	1.58E+03	--	--	2.50%	16.46%	--	1.37E+00
Typical	Aerial	Agricultural	Plane	Angler	1.00E+02	1.72E+02	1.94E+03	--	--	4.62%	--	0.15%	1.47E+00
Typical	Aerial	Agricultural	Helicopter	Angler	1.00E+02	1.90E+02	2.13E+03	--	--	3.90%	--	0.13%	1.63E+00
Typical	Ground	Agricultural	Low Boom	Angler	1.00E+02	1.90E+03	2.13E+04	--	--	0.39%	--	0.01%	1.63E+01
Typical	Ground	Agricultural	High Boom	Angler	1.00E+02	9.48E+02	1.07E+04	--	--	0.62%	--	0.02%	8.24E+00
Max	Aerial	Agricultural	Plane	Angler	1.00E+02	3.72E+01	4.18E+02	--	--	22.23%	--	0.72%	3.17E-01
Max	Aerial	Agricultural	Helicopter	Angler	1.00E+02	4.31E+01	4.85E+02	--	--	18.46%	--	0.60%	3.68E-01
Max	Ground	Agricultural	Low Boom	Angler	1.00E+02	3.16E+02	3.56E+03	--	--	1.56%	--	0.05%	2.77E+00
Max	Ground	Agricultural	High Boom	Angler	1.00E+02	2.11E+02	2.37E+03	--	--	2.50%	--	0.08%	1.84E+00

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Aggregate Risk Index - Long Term Exposure Scenario

Scenario: Public Receptors - Routine Exposure

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Target MOE	Dermal Exposure Pathways			Incidental Ingestion	Dietary Exposure Pathways			Long-Term
						Long-Term Dermal		Int. Term Oral	Int. Term Oral	Chronic Water	Chronic Berries	Chronic Fish	Aggregate Risk
						Drift MOE	Foliage MOE	Water MOE	Water MOE	%PAD	%PAD	%PAD	Risk Index
Typical	Aerial	Agricultural	Plane	Res-child	1.00E+02	1.03E+02	8.00E+01	--	--	--	20.24%	--	4.13E-01
Typical	Aerial	Agricultural	Helicopter	Res-child	1.00E+02	1.14E+02	8.79E+01	--	--	--	18.40%	--	4.55E-01
Typical	Ground	Agricultural	Low Boom	Res-child	1.00E+02	1.14E+03	8.79E+02	--	--	--	1.84%	--	4.55E+00
Typical	Ground	Agricultural	High Boom	Res-child	1.00E+02	5.69E+02	4.40E+02	--	--	--	3.68%	--	2.27E+00
Max	Aerial	Agricultural	Plane	Res-child	1.00E+02	2.23E+01	1.72E+01	--	--	--	93.84%	--	8.91E-02
Max	Aerial	Agricultural	Helicopter	Res-child	1.00E+02	2.59E+01	2.00E+01	--	--	--	80.96%	--	1.03E-01
Max	Ground	Agricultural	Low Boom	Res-child	1.00E+02	1.90E+02	1.47E+02	--	--	--	11.04%	--	7.58E-01
Max	Ground	Agricultural	High Boom	Res-child	1.00E+02	1.26E+02	9.77E+01	--	--	--	16.56%	--	5.05E-01
Typical	Aerial	Agricultural	Plane	Res-adult	1.00E+02	1.72E+02	1.34E+02	--	--	--	20.11%	--	6.54E-01
Typical	Aerial	Agricultural	Helicopter	Res-adult	1.00E+02	1.90E+02	1.47E+02	--	--	--	18.29%	--	7.20E-01
Typical	Ground	Agricultural	Low Boom	Res-adult	1.00E+02	1.90E+03	1.47E+03	--	--	--	1.83%	--	7.20E+00
Typical	Ground	Agricultural	High Boom	Res-adult	1.00E+02	9.48E+02	7.36E+02	--	--	--	3.66%	--	3.60E+00
Max	Aerial	Agricultural	Plane	Res-adult	1.00E+02	3.72E+01	2.89E+01	--	--	--	93.26%	--	1.41E-01
Max	Aerial	Agricultural	Helicopter	Res-adult	1.00E+02	4.31E+01	3.35E+01	--	--	--	80.46%	--	1.64E-01
Max	Ground	Agricultural	Low Boom	Res-adult	1.00E+02	3.16E+02	2.45E+02	--	--	--	10.97%	--	1.20E+00
Max	Ground	Agricultural	High Boom	Res-adult	1.00E+02	2.11E+02	1.64E+02	--	--	--	16.46%	--	7.99E-01
Typical	Aerial	Agricultural	Plane	N.A.-child	1.00E+02	1.03E+02	9.24E+02	6.96E+08	--	5.39%	20.24%	2.11%	7.40E-01
Typical	Aerial	Agricultural	Helicopter	N.A.-child	1.00E+02	1.14E+02	1.02E+03	8.25E+08	--	4.55%	18.40%	1.78%	8.17E-01
Typical	Ground	Agricultural	Low Boom	N.A.-child	1.00E+02	1.14E+03	1.02E+04	8.25E+09	--	0.45%	1.84%	0.18%	8.17E+00
Typical	Ground	Agricultural	High Boom	N.A.-child	1.00E+02	5.69E+02	5.08E+03	5.16E+09	--	0.73%	3.68%	0.28%	4.13E+00
Max	Aerial	Agricultural	Plane	N.A.-child	1.00E+02	2.23E+01	1.99E+02	1.45E+08	--	25.93%	93.84%	10.15%	1.59E-01
Max	Aerial	Agricultural	Helicopter	N.A.-child	1.00E+02	2.59E+01	2.31E+02	1.74E+08	--	21.53%	80.96%	8.43%	1.85E-01
Max	Ground	Agricultural	Low Boom	N.A.-child	1.00E+02	1.90E+02	1.69E+03	2.06E+09	--	1.82%	11.04%	0.71%	1.39E+00
Max	Ground	Agricultural	High Boom	N.A.-child	1.00E+02	1.26E+02	1.13E+03	1.28E+09	--	2.92%	16.56%	1.14%	9.21E-01
Typical	Aerial	Agricultural	Plane	N.A.-adult	1.00E+02	1.72E+02	8.62E+02	1.19E+09	--	2.31%	20.11%	2.10%	1.06E+00
Typical	Aerial	Agricultural	Helicopter	N.A.-adult	1.00E+02	1.90E+02	9.49E+02	1.41E+09	--	1.95%	18.29%	1.78%	1.17E+00
Typical	Ground	Agricultural	Low Boom	N.A.-adult	1.00E+02	1.90E+03	9.49E+03	1.41E+10	--	0.19%	1.83%	0.18%	1.17E+01
Typical	Ground	Agricultural	High Boom	N.A.-adult	1.00E+02	9.48E+02	4.74E+03	8.83E+09	--	0.31%	3.66%	0.28%	5.91E+00
Max	Aerial	Agricultural	Plane	N.A.-adult	1.00E+02	3.72E+01	1.86E+02	2.47E+08	--	11.11%	93.26%	10.13%	2.29E-01
Max	Aerial	Agricultural	Helicopter	N.A.-adult	1.00E+02	4.31E+01	2.16E+02	2.98E+08	--	9.23%	80.46%	8.41%	2.66E-01
Max	Ground	Agricultural	Low Boom	N.A.-adult	1.00E+02	3.16E+02	1.58E+03	3.53E+09	--	0.78%	10.97%	0.71%	1.98E+00
Max	Ground	Agricultural	High Boom	N.A.-adult	1.00E+02	2.11E+02	1.05E+03	2.20E+09	--	1.25%	16.46%	1.14%	1.32E+00

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Aggregate Risk Index - Long Term Exposure Scenario

Scenario: Public Receptors - Routine Exposure

Pesticide: Diquat

Program: Aquatic

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Target MOE	Dermal Exposure Pathways			Incidental Ingestion Int. Term Oral Water MOE	Dietary Exposure Pathways			Long-Term Aggregate Risk Index
						Long-Term Dermal Drift MOE	Foliage MOE	Int. Term Oral Water MOE		Chronic Water %PAD	Chronic Berries %PAD	Chronic Fish %PAD	
Typical	Aerial	Agricultural	Plane	Swimmer-child	1.00E+02	--	--	1.81E+09	1.86E+04	--	--	--	1.86E+02
Typical	Aerial	Agricultural	Helicopter	Swimmer-child	1.00E+02	--	--	2.14E+09	2.20E+04	--	--	--	2.20E+02
Typical	Ground	Agricultural	Low Boom	Swimmer-child	1.00E+02	--	--	2.14E+10	2.20E+05	--	--	--	2.20E+03
Typical	Ground	Agricultural	High Boom	Swimmer-child	1.00E+02	--	--	1.34E+10	1.38E+05	--	--	--	1.38E+03
Max	Aerial	Agricultural	Plane	Swimmer-child	1.00E+02	--	--	3.76E+08	3.86E+03	--	--	--	3.86E+01
Max	Aerial	Agricultural	Helicopter	Swimmer-child	1.00E+02	--	--	4.53E+08	4.64E+03	--	--	--	4.64E+01
Max	Ground	Agricultural	Low Boom	Swimmer-child	1.00E+02	--	--	5.36E+09	5.49E+04	--	--	--	5.49E+02
Max	Ground	Agricultural	High Boom	Swimmer-child	1.00E+02	--	--	3.34E+09	3.42E+04	--	--	--	3.42E+02
Typical	Aerial	Agricultural	Plane	Swimmer-adult	1.00E+02	--	--	3.10E+09	8.66E+04	--	--	--	8.66E+02
Typical	Aerial	Agricultural	Helicopter	Swimmer-adult	1.00E+02	--	--	3.67E+09	1.03E+05	--	--	--	1.03E+03
Typical	Ground	Agricultural	Low Boom	Swimmer-adult	1.00E+02	--	--	3.67E+10	1.03E+06	--	--	--	1.03E+04
Typical	Ground	Agricultural	High Boom	Swimmer-adult	1.00E+02	--	--	2.30E+10	6.42E+05	--	--	--	6.42E+03
Max	Aerial	Agricultural	Plane	Swimmer-adult	1.00E+02	--	--	6.43E+08	1.80E+04	--	--	--	1.80E+02
Max	Aerial	Agricultural	Helicopter	Swimmer-adult	1.00E+02	--	--	7.75E+08	2.17E+04	--	--	--	2.17E+02
Max	Ground	Agricultural	Low Boom	Swimmer-adult	1.00E+02	--	--	9.17E+09	2.56E+05	--	--	--	2.56E+03
Max	Ground	Agricultural	High Boom	Swimmer-adult	1.00E+02	--	--	5.71E+09	1.60E+05	--	--	--	1.60E+03

--Receptor not exposed via this pathway.

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Aggregate Risk Indices - Routine Exposure Scenarios for Public Receptors

Herbicide: Diquat

Programs: Aquatic

EIS HHRA

BLM

AgDrift Scenario: Land Type (a): Equipment (b):	Typical Application Rate Scenario ARIs (d)				Maximum Application Rate Scenario ARIs (d)			
	Aerial	Aerial	Ground	Ground	Aerial	Aerial	Ground	Ground
	Agricultural	Agricultural	Agricultural	Agricultural	Agricultural	Agricultural	Agricultural	Agricultural
	Plane	Helicopter	Low boom	High boom	Plane	Helicopter	Low boom	High boom
Intermediate-Term Exposure (c)								
Hiker/Hunter (Adult)	1.475	1.630	16.303	8.257	0.317	0.369	2.776	1.845
Berry Picker (Child)	0.741	0.820	8.203	4.164	0.159	0.185	1.402	0.931
Berry Picker (Adult)	1.105	1.220	12.200	6.159	0.238	0.276	2.066	1.374
Angler (Adult)	1.472	1.627	16.270	8.243	0.317	0.368	2.772	1.842
Residential (Child)	0.413	0.455	4.546	2.273	0.089	0.103	0.758	0.505
Residential (Adult)	0.654	0.720	7.195	3.598	0.141	0.164	1.199	0.799
Native American (Child)	0.740	0.817	8.169	4.127	0.159	0.185	1.385	0.921
Native American (Adult)	1.062	1.172	11.722	5.913	0.229	0.266	1.983	1.319
Swimmer (Child)	185.642	219.939	2199.391	1376.133	38.560	46.439	549.445	342.462
Swimmer (Adult)	866.312	1026.364	10263.643	6421.839	179.944	216.712	2564.031	1598.129
Long-Term Exposure (c)								
Hiker/Hunter (Adult)	1.475	1.630	16.303	8.257	0.317	0.369	2.776	1.845
Berry Picker (Child)	0.741	0.820	8.203	4.164	0.159	0.185	1.402	0.931
Berry Picker (Adult)	1.105	1.220	12.200	6.159	0.238	0.276	2.066	1.374
Angler (Adult)	1.472	1.627	16.270	8.243	0.317	0.368	2.772	1.842
Residential (Child)	0.413	0.455	4.546	2.273	0.089	0.103	0.758	0.505
Residential (Adult)	0.654	0.720	7.195	3.598	0.141	0.164	1.199	0.799
Native American (Child)	0.740	0.817	8.169	4.127	0.159	0.185	1.385	0.921
Native American (Adult)	1.062	1.172	11.722	5.913	0.229	0.266	1.983	1.319
Swimmer (Child)	185.642	219.939	2199.391	1376.133	38.560	46.439	549.445	342.462
Swimmer (Adult)	866.312	1026.364	10263.643	6421.839	179.944	216.712	2564.031	1598.129
Notes: ARI - Aggregate Risk Index. Values less than one represent a level of concern. ARIs less than one are highlighted. (a) - AgDrift® was used to predict spray drift deposition onto a pond. Agricultural land type is used as a proxy for a pond for aerial scenarios. Ground scenarios are not differentiated in AgDRIFT® by land type. (b) - Low and High Boom applies to a truck-mount or an All-Terrain Vehicle (ATV)-mount boom. (c) - ARIs are based on oral, dermal, and dietary exposure. (d) - Application rates are shown on Table 4-1.								