

US EPA ARCHIVE DOCUMENT

90th Percentile Risks from Application of Fertilizer Products  
Arsenic (Child)

Climate Region	Product	Soil Ingestion	Fruit Ingestion	Vegetable Ingestion	Below-ground Vegetable Ingestion	Beef Ingestion	Milk Ingestion	Fish Ingestion	Direct Inhalation	All Indirect Pathways Combined
Seattle, WA	Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	8.E-12	2.E-08	9.E-07
	Gypsum Products	3.E-07	7.E-08	1.E-07	4.E-08	5.E-07	9.E-08	8.E-12	1.E-08	8.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	9.E-07	1.E-10	3.E-07	1.E-05
	Liming Materials	5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	2.E-06	1.E-10	3.E-07	1.E-05
	Micronutrients	2.E-08	4.E-09	7.E-09	1.E-09	3.E-08	4.E-09	4.E-13	1.E-09	4.E-08
	Mn	5.E-09	1.E-09	1.E-09	4.E-10	7.E-09	1.E-09	1.E-13	2.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	8.E-08	3.E-08	4.E-07	6.E-08	6.E-12	1.E-08	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	2.E-12	3.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	2.E-12	3.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	4.E-14	1.E-10	4.E-09
	S as Nutrient	5.E-09	1.E-09	2.E-09	5.E-10	9.E-09	1.E-09	1.E-13	3.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	6.E-12	1.E-08	6.E-07
	Zinc	2.E-08	4.E-09	7.E-09	2.E-09	3.E-08	5.E-09	5.E-13	8.E-10	5.E-08
	Albuquerque, NM	Boron	4.E-07	1.E-07	1.E-07	3.E-08	5.E-07	9.E-08	4.E-12	9.E-09
Gypsum Products		3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	4.E-12	7.E-09	8.E-07
Iron		6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	8.E-07	5.E-11	2.E-07	1.E-05
Liming Materials		6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	7.E-11	2.E-07	1.E-05
Micronutrients		2.E-08	5.E-09	7.E-09	1.E-09	3.E-08	4.E-09	2.E-13	6.E-10	5.E-08
Mn		5.E-09	1.E-09	2.E-09	5.E-10	7.E-09	1.E-09	6.E-14	1.E-10	1.E-08
NPK as N		2.E-07	5.E-08	8.E-08	4.E-08	4.E-07	6.E-08	3.E-12	6.E-09	6.E-07
NPK for P2O5		8.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	1.E-12	2.E-09	2.E-07
P2O5 - 1		8.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	1.E-12	1.E-09	2.E-07
Potash		2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	2.E-14	5.E-11	4.E-09
S as Nutrient		6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	6.E-14	2.E-10	1.E-08
S as Ph		2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	3.E-12	7.E-09	6.E-07
Zinc		2.E-08	4.E-09	7.E-09	3.E-09	3.E-08	5.E-09	3.E-13	4.E-10	5.E-08
Atlanta, GA		Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	3.E-12	1.E-08
	Gypsum Products	3.E-07	6.E-08	9.E-08	4.E-08	4.E-07	9.E-08	3.E-12	7.E-09	7.E-07
	Iron	6.E-06	1.E-06	2.E-06	3.E-07	5.E-06	8.E-07	3.E-11	2.E-07	9.E-06
	Liming Materials	5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	5.E-11	2.E-07	1.E-05
	Micronutrients	2.E-08	4.E-09	7.E-09	1.E-09	3.E-08	4.E-09	1.E-13	6.E-10	4.E-08
	Mn	4.E-09	1.E-09	1.E-09	4.E-10	6.E-09	1.E-09	4.E-14	1.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	2.E-12	6.E-09	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	7.E-13	2.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	8.E-13	2.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	2.E-14	6.E-11	4.E-09
	S as Nutrient	5.E-09	1.E-09	2.E-09	5.E-10	8.E-09	1.E-09	5.E-14	2.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	2.E-12	7.E-09	6.E-07
	Zinc	2.E-08	4.E-09	6.E-09	2.E-09	3.E-08	5.E-09	2.E-13	5.E-10	4.E-08

90th Percentile Risks from Application of Fertilizer Products  
Arsenic (Child)

Climate Region	Product	Soil Ingestion	Fruit Ingestion	Vegetable Ingestion	Below-ground Vegetable Ingestion	Beef Ingestion	Milk Ingestion	Fish Ingestion	Direct Inhalation	All Indirect Pathways Combined
Bismarck, ND	Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	9.E-12	3.E-08	8.E-07
	Gypsum Products	3.E-07	7.E-08	9.E-08	5.E-08	5.E-07	1.E-07	9.E-12	2.E-08	8.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	5.E-06	8.E-07	9.E-11	6.E-07	1.E-05
	Liming Materials	6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	1.E-10	6.E-07	1.E-05
	Micronutrients	2.E-08	5.E-09	7.E-09	1.E-09	2.E-08	4.E-09	4.E-13	2.E-09	4.E-08
	Mn	5.E-09	1.E-09	1.E-09	5.E-10	6.E-09	1.E-09	1.E-13	4.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	7.E-08	4.E-08	4.E-07	6.E-08	6.E-12	2.E-08	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	2.E-12	6.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	2.E-12	5.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	4.E-14	2.E-10	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	1.E-13	6.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	7.E-08	2.E-08	4.E-07	6.E-08	6.E-12	2.E-08	6.E-07
	Zinc	2.E-08	4.E-09	6.E-09	3.E-09	3.E-08	5.E-09	5.E-13	2.E-09	5.E-08
	Boise, ID	Boron	4.E-07	1.E-07	1.E-07	3.E-08	6.E-07	1.E-07	9.E-12	2.E-08
Gypsum Products		3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	7.E-12	1.E-08	8.E-07
Iron		7.E-06	1.E-06	2.E-06	4.E-07	6.E-06	9.E-07	9.E-11	3.E-07	1.E-05
Liming Materials		6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	2.E-06	1.E-10	3.E-07	1.E-05
Micronutrients		2.E-08	5.E-09	8.E-09	1.E-09	3.E-08	5.E-09	4.E-13	9.E-10	5.E-08
Mn		5.E-09	1.E-09	2.E-09	5.E-10	7.E-09	1.E-09	1.E-13	2.E-10	1.E-08
NPK as N		2.E-07	5.E-08	8.E-08	4.E-08	4.E-07	7.E-08	5.E-12	9.E-09	7.E-07
NPK for P2O5		8.E-08	2.E-08	3.E-08	1.E-08	1.E-07	3.E-08	2.E-12	3.E-09	2.E-07
P2O5 - 1		8.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	2.E-12	3.E-09	2.E-07
Potash		2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	4.E-14	9.E-11	4.E-09
S as Nutrient		6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	1.E-13	3.E-10	1.E-08
S as Ph		2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	6.E-12	1.E-08	6.E-07
Zinc		2.E-08	5.E-09	7.E-09	3.E-09	3.E-08	5.E-09	5.E-13	7.E-10	5.E-08
Boulder, CO		Boron	4.E-07	1.E-07	1.E-07	3.E-08	5.E-07	9.E-08	8.E-12	1.E-07
	Gypsum Products	3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	7.E-12	8.E-08	8.E-07
	Iron	7.E-06	1.E-06	2.E-06	4.E-07	6.E-06	9.E-07	9.E-11	2.E-06	1.E-05
	Liming Materials	6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	2.E-06	1.E-10	2.E-06	1.E-05
	Micronutrients	2.E-08	5.E-09	8.E-09	1.E-09	3.E-08	5.E-09	3.E-13	7.E-09	5.E-08
	Mn	5.E-09	1.E-09	2.E-09	5.E-10	7.E-09	1.E-09	1.E-13	1.E-09	1.E-08
	NPK as N	2.E-07	5.E-08	8.E-08	4.E-08	4.E-07	7.E-08	5.E-12	7.E-08	6.E-07
	NPK for P2O5	8.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	2.E-12	2.E-08	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	2.E-12	2.E-08	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	4.E-14	6.E-10	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	1.E-13	2.E-09	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	5.E-12	8.E-08	6.E-07
	Zinc	2.E-08	5.E-09	7.E-09	3.E-09	3.E-08	5.E-09	5.E-13	5.E-09	5.E-08

90th Percentile Risks from Application of Fertilizer Products  
Arsenic (Child)

Climate Region	Product	Soil Ingestion	Fruit Ingestion	Vegetable Ingestion	Below-ground Vegetable Ingestion	Beef Ingestion	Milk Ingestion	Fish Ingestion	Direct Inhalation	All Indirect Pathways Combined
Casper, WY	Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	1.E-11	4.E-08	8.E-07
	Gypsum Products	3.E-07	7.E-08	9.E-08	5.E-08	5.E-07	1.E-07	1.E-11	3.E-08	8.E-07
	Iron	6.E-06	1.E-06	2.E-06	3.E-07	5.E-06	8.E-07	1.E-10	7.E-07	1.E-05
	Liming Materials	6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	1.E-10	9.E-07	1.E-05
	Micronutrients	2.E-08	5.E-09	7.E-09	1.E-09	3.E-08	4.E-09	5.E-13	3.E-09	4.E-08
	Mn	5.E-09	1.E-09	1.E-09	5.E-10	6.E-09	1.E-09	1.E-13	5.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	7.E-12	2.E-08	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	2.E-12	7.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	3.E-12	7.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	5.E-14	2.E-10	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	1.E-13	8.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	7.E-12	3.E-08	6.E-07
	Zinc	2.E-08	4.E-09	7.E-09	3.E-09	3.E-08	5.E-09	7.E-13	2.E-09	5.E-08
	Charleston, SC	Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	3.E-11	6.E-09
Gypsum Products		3.E-07	6.E-08	9.E-08	4.E-08	4.E-07	9.E-08	3.E-11	5.E-09	7.E-07
Iron		6.E-06	1.E-06	2.E-06	4.E-07	5.E-06	8.E-07	3.E-10	1.E-07	9.E-06
Liming Materials		5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	4.E-10	1.E-07	1.E-05
Micronutrients		2.E-08	4.E-09	7.E-09	1.E-09	3.E-08	4.E-09	1.E-12	4.E-10	4.E-08
Mn		5.E-09	1.E-09	1.E-09	4.E-10	6.E-09	1.E-09	4.E-13	8.E-11	1.E-08
NPK as N		2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	2.E-11	4.E-09	6.E-07
NPK for P2O5		7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	7.E-12	1.E-09	2.E-07
P2O5 - 1		7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	7.E-12	1.E-09	2.E-07
Potash		2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	1.E-13	4.E-11	4.E-09
S as Nutrient		5.E-09	1.E-09	2.E-09	5.E-10	8.E-09	1.E-09	4.E-13	1.E-10	1.E-08
S as Ph		2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	2.E-11	5.E-09	6.E-07
Zinc		2.E-08	4.E-09	6.E-09	2.E-09	3.E-08	5.E-09	2.E-12	3.E-10	4.E-08
Chicago, IL		Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	3.E-11	1.E-08
	Gypsum Products	3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	2.E-11	8.E-09	8.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	9.E-07	3.E-10	2.E-07	1.E-05
	Liming Materials	6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	2.E-06	4.E-10	2.E-07	1.E-05
	Micronutrients	2.E-08	5.E-09	8.E-09	1.E-09	3.E-08	4.E-09	1.E-12	7.E-10	4.E-08
	Mn	5.E-09	1.E-09	2.E-09	5.E-10	7.E-09	1.E-09	3.E-13	2.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	8.E-08	3.E-08	4.E-07	7.E-08	2.E-11	7.E-09	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	5.E-12	2.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	5.E-12	2.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	1.E-13	7.E-11	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	3.E-13	2.E-10	1.E-08
	S as Ph	2.E-07	7.E-08	9.E-08	2.E-08	4.E-07	6.E-08	2.E-11	8.E-09	6.E-07
	Zinc	2.E-08	5.E-09	7.E-09	3.E-09	3.E-08	5.E-09	1.E-12	5.E-10	5.E-08

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Arsenic (Child)

Climate Region	Product	Soil Ingestion	Fruit Ingestion	Vegetable Ingestion	Below-ground Vegetable Ingestion	Beef Ingestion	Milk Ingestion	Fish Ingestion	Direct Inhalation	All Indirect Pathways Combined
Cleveland, OH	Boron	4.E-07	1.E-07	1.E-07	3.E-08	5.E-07	9.E-08	2.E-11	2.E-08	9.E-07
	Gypsum Products	3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	2.E-11	1.E-08	8.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	9.E-07	2.E-10	3.E-07	1.E-05
	Liming Materials	5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	2.E-06	3.E-10	3.E-07	1.E-05
	Micronutrients	2.E-08	5.E-09	7.E-09	1.E-09	3.E-08	4.E-09	1.E-12	1.E-09	5.E-08
	Mn	5.E-09	1.E-09	2.E-09	5.E-10	7.E-09	1.E-09	3.E-13	2.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	8.E-08	3.E-08	4.E-07	7.E-08	1.E-11	1.E-08	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	5.E-12	3.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	5.E-12	3.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	1.E-13	1.E-10	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	5.E-10	9.E-09	1.E-09	3.E-13	3.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	2.E-11	1.E-08	6.E-07
	Zinc	2.E-08	4.E-09	7.E-09	3.E-09	3.E-08	5.E-09	1.E-12	8.E-10	5.E-08
	Fresno, CA	Boron	4.E-07	1.E-07	1.E-07	3.E-08	5.E-07	9.E-08	8.E-12	1.E-08
Gypsum Products		3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	7.E-12	8.E-09	8.E-07
Iron		6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	8.E-07	9.E-11	2.E-07	1.E-05
Liming Materials		6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	2.E-06	1.E-10	2.E-07	1.E-05
Micronutrients		2.E-08	5.E-09	7.E-09	1.E-09	3.E-08	4.E-09	3.E-13	7.E-10	5.E-08
Mn		5.E-09	1.E-09	2.E-09	5.E-10	7.E-09	1.E-09	1.E-13	1.E-10	1.E-08
NPK as N		2.E-07	5.E-08	8.E-08	4.E-08	4.E-07	7.E-08	5.E-12	7.E-09	6.E-07
NPK for P2O5		8.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	2.E-12	2.E-09	2.E-07
P2O5 - 1		7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	2.E-12	2.E-09	2.E-07
Potash		2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	4.E-14	6.E-11	4.E-09
S as Nutrient		6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	1.E-13	2.E-10	1.E-08
S as Ph		2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	5.E-12	8.E-09	6.E-07
Zinc		2.E-08	4.E-09	7.E-09	3.E-09	3.E-08	5.E-09	4.E-13	5.E-10	5.E-08
Grand Island, NE		Boron	4.E-07	1.E-07	1.E-07	3.E-08	5.E-07	9.E-08	3.E-11	3.E-08
	Gypsum Products	3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	3.E-11	2.E-08	8.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	8.E-07	3.E-10	5.E-07	1.E-05
	Liming Materials	6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	2.E-06	4.E-10	6.E-07	1.E-05
	Micronutrients	2.E-08	4.E-09	7.E-09	1.E-09	3.E-08	4.E-09	1.E-12	2.E-09	4.E-08
	Mn	5.E-09	1.E-09	1.E-09	5.E-10	7.E-09	1.E-09	4.E-13	3.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	7.E-08	4.E-08	4.E-07	7.E-08	2.E-11	2.E-08	6.E-07
	NPK for P2O5	8.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	6.E-12	5.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	6.E-12	4.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	1.E-13	2.E-10	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	4.E-13	5.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	2.E-11	2.E-08	6.E-07
	Zinc	2.E-08	4.E-09	7.E-09	3.E-09	3.E-08	5.E-09	2.E-12	1.E-09	5.E-08

90th Percentile Risks from Application of Fertilizer Products  
Arsenic (Child)

Climate Region	Product	Soil Ingestion	Fruit Ingestion	Vegetable Ingestion	Below-ground Vegetable Ingestion	Beef Ingestion	Milk Ingestion	Fish Ingestion	Direct Inhalation	All Indirect Pathways Combined
Harrisburg, PA	Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	2.E-11	1.E-08	8.E-07
	Gypsum Products	3.E-07	6.E-08	1.E-07	4.E-08	5.E-07	9.E-08	2.E-11	1.E-08	8.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	5.E-06	8.E-07	3.E-10	2.E-07	1.E-05
	Liming Materials	5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	3.E-10	3.E-07	1.E-05
	Micronutrients	2.E-08	4.E-09	7.E-09	1.E-09	3.E-08	4.E-09	1.E-12	9.E-10	4.E-08
	Mn	5.E-09	1.E-09	1.E-09	4.E-10	7.E-09	1.E-09	3.E-13	2.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	1.E-11	8.E-09	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	5.E-12	2.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	5.E-12	2.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	1.E-13	8.E-11	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	5.E-10	9.E-09	1.E-09	3.E-13	3.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	2.E-11	1.E-08	6.E-07
	Zinc	2.E-08	4.E-09	6.E-09	3.E-09	3.E-08	5.E-09	1.E-12	7.E-10	5.E-08
	Hartford, CT	Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	2.E-11	1.E-08
Gypsum Products		3.E-07	6.E-08	9.E-08	4.E-08	5.E-07	9.E-08	2.E-11	8.E-09	7.E-07
Iron		6.E-06	1.E-06	2.E-06	4.E-07	5.E-06	8.E-07	2.E-10	2.E-07	9.E-06
Liming Materials		5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	3.E-10	2.E-07	1.E-05
Micronutrients		2.E-08	4.E-09	7.E-09	1.E-09	3.E-08	4.E-09	1.E-12	7.E-10	4.E-08
Mn		5.E-09	1.E-09	1.E-09	4.E-10	6.E-09	1.E-09	3.E-13	1.E-10	1.E-08
NPK as N		2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	1.E-11	7.E-09	6.E-07
NPK for P2O5		7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	5.E-12	2.E-09	2.E-07
P2O5 - 1		7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	5.E-12	2.E-09	2.E-07
Potash		2.E-09	4.E-10	6.E-10	2.E-10	2.E-09	4.E-10	1.E-13	7.E-11	4.E-09
S as Nutrient		6.E-09	1.E-09	2.E-09	5.E-10	8.E-09	1.E-09	3.E-13	2.E-10	1.E-08
S as Ph		2.E-07	6.E-08	7.E-08	2.E-08	4.E-07	6.E-08	2.E-11	8.E-09	6.E-07
Zinc		2.E-08	4.E-09	6.E-09	2.E-09	3.E-08	5.E-09	1.E-12	5.E-10	4.E-08
Houston, TX		Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	6.E-11	9.E-09
	Gypsum Products	3.E-07	6.E-08	9.E-08	4.E-08	4.E-07	9.E-08	5.E-11	7.E-09	7.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	5.E-06	8.E-07	7.E-10	2.E-07	9.E-06
	Liming Materials	5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	8.E-10	2.E-07	1.E-05
	Micronutrients	2.E-08	4.E-09	7.E-09	1.E-09	2.E-08	4.E-09	3.E-12	5.E-10	4.E-08
	Mn	5.E-09	1.E-09	1.E-09	4.E-10	6.E-09	1.E-09	8.E-13	1.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	4.E-11	6.E-09	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	1.E-11	2.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	1.E-11	2.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	2.E-09	4.E-10	3.E-13	5.E-11	4.E-09
	S as Nutrient	5.E-09	1.E-09	2.E-09	5.E-10	8.E-09	1.E-09	8.E-13	2.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	7.E-08	2.E-08	4.E-07	6.E-08	4.E-11	6.E-09	6.E-07
	Zinc	2.E-08	4.E-09	6.E-09	2.E-09	3.E-08	5.E-09	3.E-12	5.E-10	4.E-08

90th Percentile Risks from Application of Fertilizer Products  
Arsenic (Child)

Climate Region	Product	Soil Ingestion	Fruit Ingestion	Vegetable Ingestion	Below-ground Vegetable Ingestion	Beef Ingestion	Milk Ingestion	Fish Ingestion	Direct Inhalation	All Indirect Pathways Combined
Huntington, WV	Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	2.E-11	1.E-08	8.E-07
	Gypsum Products	3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	9.E-08	2.E-11	1.E-08	8.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	8.E-07	2.E-10	3.E-07	1.E-05
	Liming Materials	5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	3.E-10	3.E-07	1.E-05
	Micronutrients	2.E-08	4.E-09	7.E-09	1.E-09	3.E-08	4.E-09	1.E-12	9.E-10	4.E-08
	Mn	5.E-09	1.E-09	1.E-09	4.E-10	7.E-09	1.E-09	3.E-13	2.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	1.E-11	9.E-09	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	5.E-12	3.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	5.E-12	2.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	1.E-13	8.E-11	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	5.E-10	9.E-09	1.E-09	3.E-13	3.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	2.E-11	1.E-08	6.E-07
	Zinc	2.E-08	4.E-09	6.E-09	2.E-09	3.E-08	5.E-09	1.E-12	7.E-10	5.E-08
	Las Vegas, NV	Boron	4.E-07	1.E-07	1.E-07	3.E-08	5.E-07	9.E-08	5.E-12	1.E-08
Gypsum Products		3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	4.E-12	1.E-08	8.E-07
Iron		6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	8.E-07	5.E-11	2.E-07	1.E-05
Liming Materials		6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	7.E-11	3.E-07	1.E-05
Micronutrients		2.E-08	5.E-09	7.E-09	1.E-09	3.E-08	4.E-09	2.E-13	9.E-10	4.E-08
Mn		5.E-09	1.E-09	2.E-09	5.E-10	7.E-09	1.E-09	7.E-14	2.E-10	1.E-08
NPK as N		2.E-07	5.E-08	7.E-08	4.E-08	4.E-07	6.E-08	3.E-12	8.E-09	6.E-07
NPK for P2O5		8.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	1.E-12	3.E-09	2.E-07
P2O5 - 1		7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	1.E-12	2.E-09	2.E-07
Potash		2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	2.E-14	9.E-11	4.E-09
S as Nutrient		6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	7.E-14	3.E-10	1.E-08
S as Ph		2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	3.E-12	1.E-08	6.E-07
Zinc		2.E-08	4.E-09	7.E-09	3.E-09	3.E-08	5.E-09	3.E-13	7.E-10	5.E-08
Los Angeles, CA		Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	6.E-12	1.E-08
	Gypsum Products	3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	6.E-12	7.E-09	8.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	8.E-07	7.E-11	2.E-07	1.E-05
	Liming Materials	6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	9.E-11	2.E-07	1.E-05
	Micronutrients	2.E-08	5.E-09	8.E-09	1.E-09	3.E-08	4.E-09	3.E-13	6.E-10	5.E-08
	Mn	5.E-09	1.E-09	2.E-09	5.E-10	7.E-09	1.E-09	8.E-14	1.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	8.E-08	4.E-08	4.E-07	6.E-08	4.E-12	6.E-09	6.E-07
	NPK for P2O5	8.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	1.E-12	2.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	1.E-12	2.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	3.E-14	6.E-11	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	8.E-14	2.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	4.E-12	7.E-09	6.E-07
	Zinc	2.E-08	4.E-09	7.E-09	3.E-09	3.E-08	5.E-09	4.E-13	5.E-10	5.E-08

90th Percentile Risks from Application of Fertilizer Products  
Arsenic (Child)

Climate Region	Product	Soil Ingestion	Fruit Ingestion	Vegetable Ingestion	Below-ground Vegetable Ingestion	Beef Ingestion	Milk Ingestion	Fish Ingestion	Direct Inhalation	All Indirect Pathways Combined
Memphis, TN	Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	5.E-11	1.E-08	8.E-07
	Gypsum Products	3.E-07	6.E-08	1.E-07	4.E-08	5.E-07	9.E-08	5.E-11	7.E-09	7.E-07
	Iron	6.E-06	1.E-06	2.E-06	3.E-07	6.E-06	8.E-07	5.E-10	2.E-07	1.E-05
	Liming Materials	5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	7.E-10	2.E-07	1.E-05
	Micronutrients	2.E-08	4.E-09	7.E-09	1.E-09	3.E-08	4.E-09	2.E-12	6.E-10	4.E-08
	Mn	5.E-09	1.E-09	1.E-09	4.E-10	7.E-09	1.E-09	6.E-13	1.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	3.E-11	6.E-09	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	1.E-11	2.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	1.E-11	2.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	2.E-13	6.E-11	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	5.E-10	8.E-09	1.E-09	6.E-13	2.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	4.E-11	7.E-09	6.E-07
	Zinc	2.E-08	4.E-09	6.E-09	2.E-09	3.E-08	4.E-09	3.E-12	5.E-10	4.E-08
	Miami, FL	Boron	3.E-07	8.E-08	1.E-07	3.E-08	4.E-07	7.E-08	2.E-11	6.E-09
Gypsum Products		3.E-07	6.E-08	8.E-08	4.E-08	4.E-07	8.E-08	2.E-11	4.E-09	7.E-07
Iron		5.E-06	1.E-06	1.E-06	3.E-07	5.E-06	7.E-07	2.E-10	1.E-07	8.E-06
Liming Materials		5.E-06	1.E-06	1.E-06	4.E-07	7.E-06	1.E-06	3.E-10	1.E-07	1.E-05
Micronutrients		1.E-08	4.E-09	6.E-09	1.E-09	2.E-08	3.E-09	9.E-13	4.E-10	4.E-08
Mn		4.E-09	9.E-10	1.E-09	4.E-10	6.E-09	9.E-10	2.E-13	8.E-11	9.E-09
NPK as N		2.E-07	5.E-08	6.E-08	3.E-08	3.E-07	5.E-08	1.E-11	4.E-09	5.E-07
NPK for P2O5		6.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	5.E-12	1.E-09	2.E-07
P2O5 - 1		6.E-08	2.E-08	2.E-08	9.E-09	1.E-07	2.E-08	4.E-12	1.E-09	2.E-07
Potash		2.E-09	3.E-10	5.E-10	2.E-10	2.E-09	4.E-10	1.E-13	4.E-11	4.E-09
S as Nutrient		5.E-09	1.E-09	2.E-09	5.E-10	7.E-09	1.E-09	3.E-13	1.E-10	1.E-08
S as Ph		2.E-07	5.E-08	7.E-08	2.E-08	3.E-07	5.E-08	1.E-11	5.E-09	5.E-07
Zinc		2.E-08	4.E-09	5.E-09	2.E-09	2.E-08	4.E-09	1.E-12	3.E-10	4.E-08
Minneapolis, MN		Boron	4.E-07	1.E-07	1.E-07	3.E-08	5.E-07	9.E-08	2.E-11	2.E-08
	Gypsum Products	3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	2.E-11	1.E-08	8.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	9.E-07	2.E-10	4.E-07	1.E-05
	Liming Materials	6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	2.E-06	3.E-10	5.E-07	1.E-05
	Micronutrients	2.E-08	5.E-09	8.E-09	1.E-09	3.E-08	4.E-09	1.E-12	1.E-09	5.E-08
	Mn	5.E-09	1.E-09	2.E-09	5.E-10	7.E-09	1.E-09	3.E-13	3.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	8.E-08	3.E-08	4.E-07	7.E-08	1.E-11	1.E-08	6.E-07
	NPK for P2O5	8.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	4.E-12	4.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	5.E-12	3.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	9.E-14	1.E-10	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	3.E-13	4.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	1.E-11	1.E-08	6.E-07
	Zinc	2.E-08	5.E-09	7.E-09	3.E-09	3.E-08	5.E-09	1.E-12	1.E-09	5.E-08



90th Percentile Risks from Application of Fertilizer Products  
Arsenic (Child)

Climate Region	Product	Soil Ingestion	Fruit Ingestion	Vegetable Ingestion	Below-ground Vegetable Ingestion	Beef Ingestion	Milk Ingestion	Fish Ingestion	Direct Inhalation	All Indirect Pathways Combined
Philadelphia, PA	Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	3.E-11	1.E-08	8.E-07
	Gypsum Products	3.E-07	6.E-08	9.E-08	4.E-08	4.E-07	9.E-08	2.E-11	9.E-09	7.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	5.E-06	8.E-07	3.E-10	2.E-07	1.E-05
	Liming Materials	5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	4.E-10	2.E-07	1.E-05
	Micronutrients	2.E-08	4.E-09	7.E-09	1.E-09	3.E-08	4.E-09	1.E-12	7.E-10	4.E-08
	Mn	5.E-09	1.E-09	1.E-09	4.E-10	6.E-09	1.E-09	3.E-13	2.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	2.E-11	7.E-09	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	6.E-12	2.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	7.E-12	2.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	2.E-09	4.E-10	1.E-13	7.E-11	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	5.E-10	8.E-09	1.E-09	4.E-13	2.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	2.E-11	9.E-09	6.E-07
	Zinc	2.E-08	4.E-09	6.E-09	2.E-09	3.E-08	5.E-09	2.E-12	6.E-10	4.E-08
	Phoenix, AZ	Boron	4.E-07	1.E-07	1.E-07	3.E-08	5.E-07	9.E-08	6.E-12	1.E-08
Gypsum Products		3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	6.E-12	8.E-09	8.E-07
Iron		6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	8.E-07	7.E-11	2.E-07	1.E-05
Liming Materials		6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	2.E-06	8.E-11	2.E-07	1.E-05
Micronutrients		2.E-08	5.E-09	7.E-09	1.E-09	3.E-08	4.E-09	3.E-13	6.E-10	4.E-08
Mn		5.E-09	1.E-09	2.E-09	5.E-10	7.E-09	1.E-09	8.E-14	1.E-10	1.E-08
NPK as N		2.E-07	5.E-08	7.E-08	4.E-08	4.E-07	7.E-08	4.E-12	6.E-09	6.E-07
NPK for P2O5		8.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	1.E-12	2.E-09	2.E-07
P2O5 - 1		7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	1.E-12	2.E-09	2.E-07
Potash		2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	3.E-14	6.E-11	4.E-09
S as Nutrient		6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	8.E-14	2.E-10	1.E-08
S as Ph		2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	5.E-12	8.E-09	6.E-07
Zinc		2.E-08	4.E-09	7.E-09	3.E-09	3.E-08	5.E-09	4.E-13	5.E-10	5.E-08
Portland, ME		Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	2.E-11	1.E-08
	Gypsum Products	3.E-07	6.E-08	9.E-08	4.E-08	4.E-07	9.E-08	2.E-11	9.E-09	7.E-07
	Iron	6.E-06	1.E-06	2.E-06	3.E-07	5.E-06	8.E-07	2.E-10	2.E-07	9.E-06
	Liming Materials	5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	2.E-10	3.E-07	1.E-05
	Micronutrients	2.E-08	4.E-09	7.E-09	1.E-09	3.E-08	4.E-09	7.E-13	8.E-10	4.E-08
	Mn	4.E-09	1.E-09	1.E-09	4.E-10	6.E-09	1.E-09	2.E-13	2.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	1.E-11	8.E-09	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	4.E-12	2.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	9.E-09	1.E-07	2.E-08	4.E-12	2.E-09	2.E-07
	Potash	1.E-09	4.E-10	6.E-10	2.E-10	2.E-09	4.E-10	8.E-14	8.E-11	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	5.E-10	8.E-09	1.E-09	2.E-13	2.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	7.E-08	2.E-08	4.E-07	5.E-08	1.E-11	9.E-09	6.E-07
	Zinc	2.E-08	4.E-09	6.E-09	3.E-09	3.E-08	4.E-09	1.E-12	7.E-10	4.E-08

90th Percentile Risks from Application of Fertilizer Products  
Arsenic (Child)

Climate Region	Product	Soil Ingestion	Fruit Ingestion	Vegetable Ingestion	Below-ground Vegetable Ingestion	Beef Ingestion	Milk Ingestion	Fish Ingestion	Direct Inhalation	All Indirect Pathways Combined
Raleigh-Durham, NC	Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	3.E-11	9.E-09	8.E-07
	Gypsum Products	3.E-07	6.E-08	1.E-07	4.E-08	5.E-07	9.E-08	3.E-11	6.E-09	8.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	5.E-06	9.E-07	3.E-10	2.E-07	1.E-05
	Liming Materials	5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	2.E-06	5.E-10	2.E-07	1.E-05
	Micronutrients	2.E-08	4.E-09	7.E-09	1.E-09	3.E-08	4.E-09	1.E-12	5.E-10	4.E-08
	Mn	5.E-09	1.E-09	1.E-09	4.E-10	6.E-09	1.E-09	4.E-13	1.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	2.E-11	6.E-09	6.E-07
	NPK for P2O5	7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	7.E-12	2.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	7.E-12	2.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	2.E-13	6.E-11	4.E-09
	S as Nutrient	5.E-09	1.E-09	2.E-09	5.E-10	8.E-09	1.E-09	4.E-13	2.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	2.E-11	7.E-09	6.E-07
	Zinc	2.E-08	4.E-09	6.E-09	3.E-09	3.E-08	5.E-09	2.E-12	5.E-10	5.E-08
	Salem, OR	Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	8.E-12	1.E-08
Gypsum Products		3.E-07	6.E-08	9.E-08	4.E-08	4.E-07	9.E-08	7.E-12	9.E-09	7.E-07
Iron		6.E-06	1.E-06	2.E-06	4.E-07	5.E-06	8.E-07	9.E-11	2.E-07	9.E-06
Liming Materials		5.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	1.E-10	3.E-07	1.E-05
Micronutrients		2.E-08	4.E-09	7.E-09	1.E-09	3.E-08	4.E-09	4.E-13	8.E-10	4.E-08
Mn		5.E-09	1.E-09	1.E-09	4.E-10	6.E-09	1.E-09	1.E-13	2.E-10	1.E-08
NPK as N		2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	5.E-12	8.E-09	6.E-07
NPK for P2O5		7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	2.E-12	2.E-09	2.E-07
P2O5 - 1		7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	2.E-12	2.E-09	2.E-07
Potash		2.E-09	4.E-10	6.E-10	2.E-10	2.E-09	4.E-10	4.E-14	8.E-11	4.E-09
S as Nutrient		5.E-09	1.E-09	2.E-09	5.E-10	8.E-09	1.E-09	1.E-13	3.E-10	1.E-08
S as Ph		2.E-07	6.E-08	7.E-08	2.E-08	4.E-07	6.E-08	6.E-12	1.E-08	6.E-07
Zinc		2.E-08	4.E-09	6.E-09	2.E-09	3.E-08	5.E-09	5.E-13	6.E-10	4.E-08
Salt Lake City, UT		Boron	4.E-07	1.E-07	1.E-07	3.E-08	5.E-07	1.E-07	5.E-12	1.E-08
	Gypsum Products	3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	5.E-12	1.E-08	8.E-07
	Iron	7.E-06	1.E-06	2.E-06	4.E-07	6.E-06	9.E-07	7.E-11	2.E-07	1.E-05
	Liming Materials	6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	2.E-06	8.E-11	3.E-07	1.E-05
	Micronutrients	2.E-08	5.E-09	8.E-09	1.E-09	3.E-08	5.E-09	3.E-13	8.E-10	5.E-08
	Mn	5.E-09	1.E-09	2.E-09	5.E-10	7.E-09	1.E-09	7.E-14	2.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	8.E-08	4.E-08	4.E-07	7.E-08	4.E-12	8.E-09	6.E-07
	NPK for P2O5	8.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	1.E-12	2.E-09	2.E-07
	P2O5 - 1	8.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	1.E-12	2.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	3.E-14	8.E-11	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	7.E-14	3.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	4.E-12	1.E-08	6.E-07
	Zinc	2.E-08	4.E-09	7.E-09	3.E-09	3.E-08	5.E-09	3.E-13	6.E-10	5.E-08

90th Percentile Risks from Application of Fertilizer Products  
Arsenic (Child)

Climate Region	Product	Soil Ingestion	Fruit Ingestion	Vegetable Ingestion	Below-ground Vegetable Ingestion	Beef Ingestion	Milk Ingestion	Fish Ingestion	Direct Inhalation	All Indirect Pathways Combined
San Francisco, CA	Boron	4.E-07	9.E-08	1.E-07	3.E-08	5.E-07	9.E-08	7.E-12	3.E-08	8.E-07
	Gypsum Products	3.E-07	7.E-08	9.E-08	5.E-08	5.E-07	1.E-07	7.E-12	2.E-08	8.E-07
	Iron	6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	8.E-07	8.E-11	5.E-07	1.E-05
	Liming Materials	6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	9.E-11	5.E-07	1.E-05
	Micronutrients	2.E-08	5.E-09	7.E-09	1.E-09	3.E-08	4.E-09	3.E-13	2.E-09	4.E-08
	Mn	5.E-09	1.E-09	2.E-09	5.E-10	6.E-09	1.E-09	9.E-14	4.E-10	1.E-08
	NPK as N	2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	5.E-12	2.E-08	6.E-07
	NPK for P2O5	8.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	2.E-12	5.E-09	2.E-07
	P2O5 - 1	7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	2.E-12	4.E-09	2.E-07
	Potash	2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	3.E-14	2.E-10	4.E-09
	S as Nutrient	6.E-09	1.E-09	2.E-09	6.E-10	9.E-09	1.E-09	9.E-14	5.E-10	1.E-08
	S as Ph	2.E-07	6.E-08	7.E-08	2.E-08	4.E-07	6.E-08	5.E-12	2.E-08	6.E-07
	Zinc	2.E-08	4.E-09	6.E-09	2.E-09	3.E-08	5.E-09	4.E-13	1.E-09	5.E-08
	Winnemucca, NV	Boron	4.E-07	1.E-07	1.E-07	3.E-08	5.E-07	9.E-08	2.E-12	1.E-08
Gypsum Products		3.E-07	7.E-08	1.E-07	5.E-08	5.E-07	1.E-07	2.E-12	8.E-09	8.E-07
Iron		6.E-06	1.E-06	2.E-06	4.E-07	6.E-06	8.E-07	2.E-11	2.E-07	1.E-05
Liming Materials		6.E-06	1.E-06	2.E-06	5.E-07	8.E-06	1.E-06	2.E-11	2.E-07	1.E-05
Micronutrients		2.E-08	5.E-09	7.E-09	1.E-09	3.E-08	4.E-09	7.E-14	7.E-10	4.E-08
Mn		5.E-09	1.E-09	1.E-09	5.E-10	6.E-09	1.E-09	2.E-14	1.E-10	1.E-08
NPK as N		2.E-07	5.E-08	7.E-08	3.E-08	4.E-07	6.E-08	1.E-12	7.E-09	6.E-07
NPK for P2O5		7.E-08	2.E-08	3.E-08	1.E-08	1.E-07	2.E-08	4.E-13	2.E-09	2.E-07
P2O5 - 1		7.E-08	2.E-08	2.E-08	1.E-08	1.E-07	2.E-08	4.E-13	2.E-09	2.E-07
Potash		2.E-09	4.E-10	6.E-10	2.E-10	3.E-09	4.E-10	8.E-15	7.E-11	4.E-09
S as Nutrient		6.E-09	1.E-09	2.E-09	6.E-10	8.E-09	1.E-09	2.E-14	2.E-10	1.E-08
S as Ph		2.E-07	6.E-08	8.E-08	2.E-08	4.E-07	6.E-08	1.E-12	8.E-09	6.E-07
Zinc		2.E-08	4.E-09	7.E-09	3.E-09	3.E-08	5.E-09	9.E-14	5.E-10	5.E-08

Numbers less than 0.00001 appear as a default of 0.00000.