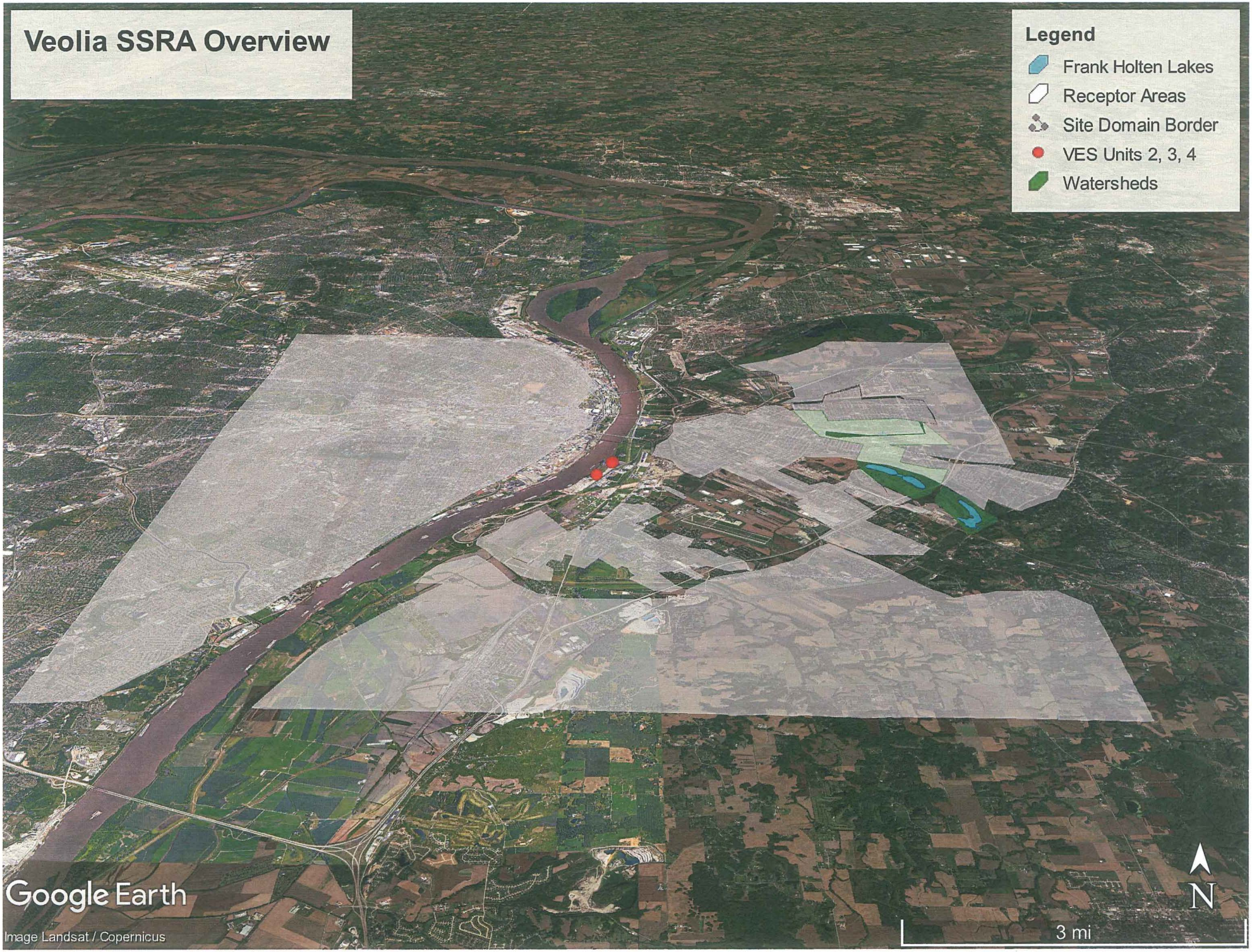
Veolia SSRA Overview
Legend
Frank Holten Lakes
Receptor Areas
Site Domain Border
VES Units 2, 3, 4
Watersheds
Google Earth
Image Landsat / Copernicus
N
3 mi

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Source List

SOURCE	UTM X	UTM Y	ACTIVE
S2	745302.110	4275918.170	Yes
S3	745334.500	4275964.870	Yes
S4	744975.550	4275207.530	Yes

Source Specific Emission Rate

SOURCE :	S2	UTM X :	745302.110	UTM Y :	4275918.170

Active: Yes

CAS NO.	COPC NAME	EMISSION RATE
7440-38-2	Arsenic	2.27E-4
7440-41-7	Beryllium	2.27E-4
7440-43-9	Cadmium	5.68E-04
7440-47-3	Chromium	1.14E-04
18540-29-9	Chromium, hexavalent	1.14E-04
7439-92-1	Lead	5.68E-4
7487-94-7	Mercuric chloride	1.90E-004
7439-97-6	Mercury	4.11E-007
1746-01-6	TetraCDD, 2,3,7,8-	4.94E-10

SOURCE :	S3	UTM X :	745334.500	UTM Y :	4275964.870

Active: Yes

CAS NO.	COPC NAME	EMISSION RATE
7440-38-2	Arsenic	2.37E-4
7440-41-7	Beryllium	2.37E-4
7440-43-9	Cadmium	5.93E-4
7440-47-3	Chromium	1.19E-04
18540-29-9	Chromium, hexavalent	1.19E-04
7439-92-1	Lead	5.93E-4
7487-94-7	Mercuric chloride	2.07E-004
7439-97-6	Mercury	2.98E-007
1746-01-6	TetraCDD, 2,3,7,8-	5.15E-10

Source Specific Emission Rate

SOURCE :	S4	UTM X :	744975.550	UTM Y :	4275207.530

Active: Yes

CAS NO.	COPC NAME	EMISSION RATE
7440-38-2	Arsenic	7.15E-4
7440-41-7	Beryllium	7.15E-4
7440-43-9	Cadmium	1.79E-3
7440-47-3	Chromium	3.58E-04
18540-29-9	Chromium, hexavalent	3.58E-04
7439-92-1	Lead	1.79E-3
7487-94-7	Mercuric chloride	6.65E-004
7439-97-6	Mercury	2.96E-007
1746-01-6	TetraCDD, 2,3,7,8-	3.11E-9

EXPOSURE SCENARIOS EVALUATED

Date : 8/23/2019

 Resident Adult  Resident Child  Farmer Adult  Farmer Child  Fisher Adultt  Fisher Child

RECEPTOR	UTM X	UTM Y	WB TYPE	WB ID						
RI_1	746,304.06	4,276,997.00		Grand Marais	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : ESL										
RI_10	739,704.06	4,265,697.00		Grand Marais	No	No	Yes	Yes	No	No
Based on Receptor I.D. : FSE										
RI_11	750,204.06	4,272,197.00		Grand Marais	No	No	Yes	Yes	No	No
Based on Receptor I.D. : FSE										
RI_12	741,704.06	4,270,697.00		Grand Marais	No	No	Yes	Yes	No	No
Based on Receptor I.D. : FSE										
RI_13	749,204.06	4,271,197.00		Grand Marais	No	No	Yes	Yes	No	No
Based on Receptor I.D. : FSE										
RI_14	749,204.06	4,283,197.00		Grand Marais	No	No	Yes	Yes	No	No
Based on Receptor I.D. : FNE										
RI_15	750,204.06	4,281,697.00		Grand Marais	No	No	Yes	Yes	No	No
Based on Receptor I.D. : FNE										
RI_16	750,204.06	4,280,697.00		Grand Marais	No	No	Yes	Yes	No	No
Based on Receptor I.D. : FNE										
RI_17	742,704.06	4,272,197.00		Grand Marais	No	No	Yes	Yes	No	No
Based on Receptor I.D. : PF1										

EXPOSURE SCENARIOS EVALUATED

Date : 8/23/2019

 Resident Adult  Resident Child  Farmer Adult  Farmer Child  Fisher Adultt  Fisher Child

RECEPTOR	UTM X	UTM Y	WB TYPE	WB ID						
RI_18	744,404.06	4,272,697.00		Grand Marai:	No	No	Yes	Yes	No	No
Based on Receptor I.D. : PF1										
RI_19	743,704.06	4,273,697.00		Grand Marai:	No	No	Yes	Yes	No	No
Based on Receptor I.D. : PF1										
RI_2	746,904.06	4,276,297.00		Grand Marai:	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : ESL										
RI_20	744,204.06	4,272,997.00		Grand Marai:	No	No	Yes	Yes	No	No
Based on Receptor I.D. : PF1										
RI_21	744,004.06	4,273,297.00		Grand Marai:	No	No	Yes	Yes	No	No
Based on Receptor I.D. : PF1										
RI_22	747,204.06	4,270,697.00		Grand Marai:	No	No	Yes	Yes	No	No
Based on Receptor I.D. : PF2										
RI_23	751,204.06	4,274,697.00		Grand Marai:	No	No	Yes	Yes	No	No
Based on Receptor I.D. : PF3										
RI_24	735,204.06	4,265,697.00		Grand Marai:	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : STL										
RI_25	744,004.06	4,277,697.00		Grand Marai:	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : STL										

EXPOSURE SCENARIOS EVALUATED

Date : 8/23/2019

Resident Adult | Resident Child | Farmer Adult | Farmer Child | Fisher Adultt | Fisher Child

RECEPTOR	UTM X	UTM Y	WB TYPE	WB ID						
RI_26	744,104.06	4,277,897.00		Grand Marais	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : STL										
RI_27	744,604.06	4,278,697.00		Grand Marais	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : STL										
RI_28	743,504.06	4,276,697.00		Grand Marais	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : STL										
RI_29	743,404.06	4,276,497.00		Grand Marais	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : STL										
RI_3	746,604.06	4,274,997.00		Grand Marais	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : SVP										
RI_4	746,604.06	4,275,097.00		Grand Marais	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : SVP										
RI_5	743,704.06	4,270,697.00		Grand Marais	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : CHK										
RI_6	745,704.06	4,274,097.00		Grand Marais	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : CHK										
RI_7	745,604.06	4,274,097.00		Grand Marais	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : CHK										

EXPOSURE SCENARIOS EVALUATED

Date : 8/23/2019

 Resident Adult  Resident Child  Farmer Adult  Farmer Child  Fisher Adultt  Fisher Child

RECEPTOR	UTM X	UTM Y	WB TYPE	WB ID						
RI_8	745,904.06	4,274,097.00		Grand Marais	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : CHK										
RI_9	745,804.06	4,274,097.00		Grand Marais	Yes	Yes	No	No	Yes	Yes
Based on Receptor I.D. : CHK										

RECEPTOR : RI_4 UTM X: 746,604.06 UTM Y: 4,275,097.00

Based on Receptor I.D. : SVP

SOURCE: S2

AIR PARAMETER DESCRIPTION	VALUE	SYMBOL	UNITS
Hourly air concentration - particle phase	0	chp	ug-s/g-m^3
Hourly air concentration - particle bound	0	chp_pb	ug-s/g-m^3
Hourly air concentration - vapor phase	0	chv	ug-s/g-m^3
Hourly air concentration - vapor phase hg	0	chv_hg	ug-s/g-m^3
Air concentration - particle phase	0.1193	cyp	ug-s/g-m^3
Air concentration - particle bound	0.1193	cyp_pb	ug-s/g-m^3
Air concentration - vapor phase	0.1192	cyv	ug-s/g-m^3
Air concentration - vapor phase hg	0.1171	cyv_hg	ug-s/g-m^3
Dry deposition - particle phase	0.00392	dydp	s/m^2 year
Dry deposition - particle bound	0.00221	dydp_pb	s/m^2 year
Dry deposition - vapor phase	0.00021	dydv	s/m^2 year
Dry deposition - vapor phase hg	0.0472	dydv_hg	s/m^2 year
Wet deposition - particle phase	0.00046	dywp	s/m^2 year
Wet deposition - particle bound	0.00015	dywp_pb	s/m^2 year
Wet deposition - vapor phase	0	dywv	s/m^2 year
Wet deposition - vapor phase hg	0.00098	dywv_hg	s/m^2 year

SOURCE: S3

AIR PARAMETER DESCRIPTION	VALUE	SYMBOL	UNITS
Hourly air concentration - particle phase	0	chp	ug-s/g-m^3
Hourly air concentration - particle bound	0	chp_pb	ug-s/g-m^3
Hourly air concentration - vapor phase	0	chv	ug-s/g-m^3
Hourly air concentration - vapor phase hg	0	chv_hg	ug-s/g-m^3
Air concentration - particle phase	0.1173	cyp	ug-s/g-m^3
Air concentration - particle bound	0.1173	cyp_pb	ug-s/g-m^3
Air concentration - vapor phase	0.1172	cyv	ug-s/g-m^3
Air concentration - vapor phase hg	0.1151	cyv_hg	ug-s/g-m^3
Dry deposition - particle phase	0.00389	dydp	s/m^2 year
Dry deposition - particle bound	0.00219	dydp_pb	s/m^2 year
Dry deposition - vapor phase	0.00021	dydv	s/m^2 year
Dry deposition - vapor phase hg	0.04596	dydv_hg	s/m^2 year
Wet deposition - particle phase	0.00045	dywp	s/m^2 year
Wet deposition - particle bound	0.00015	dywp_pb	s/m^2 year
Wet deposition - vapor phase	0	dywv	s/m^2 year
Wet deposition - vapor phase hg	0.00096	dywv_hg	s/m^2 year

SOURCE: S4

AIR PARAMETER DESCRIPTION	VALUE	SYMBOL	UNITS
Hourly air concentration - particle phase	0	chp	ug-s/g-m^3
Hourly air concentration - particle bound	0	chp_pb	ug-s/g-m^3
Hourly air concentration - vapor phase	0	chv	ug-s/g-m^3
Hourly air concentration - vapor phase hg	0	chv_hg	ug-s/g-m^3

RECEPTOR : RI_4 UTM X: 746,604.06 UTM Y: 4,275,097.00

Based on Receptor I.D. : SVP

Air concentration - particle phase	0.05018	cyp	ug-s/g-m^3
Air concentration - particle bound	0.05015	cyp_pb	ug-s/g-m^3
Air concentration - vapor phase	0.05013	cyv	ug-s/g-m^3
Air concentration - vapor phase hg	0.04964	cyv_hg	ug-s/g-m^3
Dry deposition - particle phase	0.00264	dydp	s/m^2 year
Dry deposition - particle bound	0.00138	dydp_pb	s/m^2 year
Dry deposition - vapor phase	0.00013	dydv	s/m^2 year
Dry deposition - vapor phase hg	0.01391	dydv_hg	s/m^2 year
Wet deposition - particle phase	0.00023	dywp	s/m^2 year
Wet deposition - particle bound	8E-5	dywp_pb	s/m^2 year
Wet deposition - vapor phase	0	dywv	s/m^2 year
Wet deposition - vapor phase hg	0.00049	dywv_hg	s/m^2 year

RECEPTOR: RI_4 UTM X: 746,604.06 UTM Y: 4,275,097.00

SITE PARAMETER	VALUE	SYMBOL	UNITS
Soil dry bulk density	1.5	bd	g/cm^3
Forage fraction grown on contam. soil eaten by CATTLE	1.0	beef_fi_forage	--
Grain fraction grown on contam. soil eaten by CATTLE	1.0	beef_fi_grain	--
Silage fraction grown on contam. eaten by CATTLE	1.0	beef_fi_silage	--
Qty of forage eaten by CATTLE each day	8.8	beef_qp_forage	kg DW/day
Qty of grain eaten by CATTLE each day	0.47	beef_qp_grain	kg DW/day
Qty of silage eaten by CATTLE each day	2.5	beef_qp_silage	kg DW/day
Grain fraction grown on contam. soil eaten by CHICKEN	1.0	chick_fi_grain	--
Qty of grain eaten by CHICKEN each day	0.2	chick_qp_grain	kg DW/day
Average annual evapotranspiration	54.3	e_v	cm/yr
Fish lipid content	0.07	f_lipid	--
Universal gas constant	8.205e-5	gas_r	atm-m^3/mol-K
Average annual irrigation	12.5	i	cm/yr
Plant surface loss coefficient	18	kp	yr^-1
Fraction of mercury emissions NOT lost to the global cycle	0.48	merc_q_corr	--
Fraction of mercury speciated into methyl mercury in Abovegroun	0.22	mercmethyl_pd	--
Fraction of mercury speciated into methyl mercury in Abovegroun	0.22	mercmethyl_pv	--
Fraction of mercury speciated into methyl mercury in soil	0.02	mercmethyl_sc	--
Forage fraction grown contam. soil, eaten by MILK CATTLE	1.0	milk_fi_forage	--
Grain fraction grown contam. soil, eaten by MILK CATTLE	1.0	milk_fi_grain	--
Silage fraction grown contam. soil, eaten by MILK CATTLE	1.0	milk_fi_silage	--
Qty of forage eaten by MILK CATTLE each day	13.2	milk_qp_forage	kg DW/day
Qty of grain eaten by MILK CATTLE each day	3.0	milk_qp_grain	kg DW/day
Qty of silage eaten by MILK CATTLE each day	4.1	milk_qp_silage	kg DW/day
Averaging time	1	milkfat_at	yr
Body weight of infant	9.4	milfat_bw_infant	kg
Exposure duration of infant to breast milk	1	milkfat_ed	yr
Proportion of ingested dioxin that is stored in fat	0.9	milkfat_f1	--
Proportion of mothers weight that is fat	0.3	milkfat_f2	--
Fraction of fat in breast milk	0.04	milkfat_f3	--
Fraction of ingested contaminant that is absorbed	0.9	milkfat_f4	--
Half-life of dioxin in adults	2555	milkfat_h	days
Ingestion rate of breast milk	0.688	milkfat_ir_milk	kg/day
Viscosity of air corresponding to air temp.	1.81e-04	mu_a	g/cm-s
Average annual precipitation	104.04	p	cm/yr

RECEPTOR: RI_4 UTM X: 746,604.06 UTM Y: 4,275,097.00

SITE PARAMETER	VALUE	SYMBOL	UNITS
Fraction of grain grown on contam. soil eaten by PIGS	1.0	pork_fi_grain	--
Fraction of silage grown on contam. soil and eaten by PIGS	1.0	pork_fi_silage	--
Qty of grain eaten by PIGS each day	3.3	pork_qp_grain	kg DW/day
Qty of silage eaten by PIGS each day	1.4	pork_qp_silage	kg DW/day
Qty of soil eaten by CATTLE	0.5	qs_beef	kg/day
Qty of soil eaten by CHICKEN	0.022	qs_chick	kg/day
Qty of soil eaten by DAIRY CATTLE	0.4	qs_milk	kg/day
Qty of soil eaten by PIGS	0.37	qs_pork	kg/day
Average annual runoff	12.5	r	cm/yr
Density of air	1.2e-3	rho_a	g/cm^3
Solids particle density	2.7	rho_s	g/cm^3
Interception fraction - edible portion ABOVEGROUND	0.39	rp	--
Interception fraction - edible portion FORAGE	0.5	rp_forage	--
Interception fraction - edible portion SILAGE	0.46	rp_silage	--
Ambient air temperature	298	t	K
Temperature correction factor	1.026	theta	--
Soil volumetric water content	0.2	theta_s	mL/cm^3
Length of plant expos. to depos. - ABOVEGROUND	0.16	tp	Yr
Length of plant expos. to depos. - FORAGE	0.12	tp_forage	Yr
Length of plant expos. to depos. - SILAGE	0.16	tp_silage	Yr
Wind velocity	4.05	w	m/s
Yield/standing crop biomass - edible portion ABOVEGROUND	2.24	yp	kg DW/m^2
Yield/standing crop biomass - edible portion FORAGE	0.24	yp_forage	kg DW/m^2
Yield/standing crop biomass - edible portion SILAGE	0.8	yp_silage	kg DW/m^2
Soil mixing zone depth (Tilled=20.0, Un-tilled=2.0)	2	z	cm
Soil mixing zone depth for produce (Tilled=20.0, Un-tilled=2.0)	20	z_p	cm

RECEPTOR: RI_4 **UTM X: 746,604.06** **UTM Y: 4,275,097.00**

Resident Adult	Resident Child	Farmer Adult	Farmer Child	Fisher Adult	Fisher Child
Yes	Yes	No	No	Yes	Yes

DESCRIPTION	A	C	A	C	A	C	UNITS
Averaging time for carcinogens	70	70	70	70	70	70	yr
Averaging time for noncarcinogens	30	6	40	6	30	6	yr
Consumption rate of BEEF	0.0	0.0	0.00122	0.00075	0.0	0.0	kg/kg-day FW
Body weight	70	15	70	15	70	15	kg
Consumption rate of POULTRY	0.0	0.0	0.00066	0.00045	0.0	0.0	kg/kg-day FW
Consumption rate of ABOVEGROUND PRODUCE	0.00032	0.00077	0.00047	0.00113	0.00032	0.00077	kg/kg-day DW
Consumption rate of BELOWGROUND PRODUCE	0.00014	0.00023	0.00017	0.00028	0.00014	0.00023	kg/kg-day DW
Consumption rate of DRINKING WATER	1.4	0.67	1.4	0.67	1.4	0.67	L/day
Consumption rate of PROTECTED ABOVEGROUND P	0.00061	0.0015	0.00064	0.00157	0.00061	0.00150	kg/kg-day DW
Consumption rate of SOIL	0.0001	0.0002	0.0001	0.0002	0.0001	0.0002	kg/d
Exposure duration	30	6	40	6	30	6	yr
Exposure frequency	350	350	350	350	350	350	day/yr
Consumption rate of EGGS	0.0	0.0	0.00075	0.00054	0.0	0.0	kg/kg-day FW
Fraction of contaminated ABOVEGROUND PRODUCE	1.0	1.0	1.0	1.0	1.0	1.0	--
Fraction of contaminated DRINKING WATER	1.0	1.0	1.0	1.0	1.0	1.0	--
Fraction contaminated SOIL	1.0	1.0	1.0	1.0	1.0	1.0	--
Consumption rate of FISH	0.0	0.0	0.0	0.0	0.00125	0.00088	kg/kg-day FW
Fraction of contaminated FISH	1.0	1.0	1.0	1.0	1.0	1.0	--
Inhalation exposure duration	30	6	40	6	30	6	yr
Inhalation exposure frequency	350	350	350	350	350	350	day/yr
Inhalation exposure time	24	24	24	24	24	24	hr/day
Fraction of contaminated BEEF	1	1	1	1	1	1	--
Fraction of contaminated POULTRY	1	1	1	1	1	1	--
Fraction of contaminated EGGS	1	1	1	1	1	1	--
Fraction of contaminated MILK	1	1	1	1	1	1	--
Fraction of contaminated PORK	1	1	1	1	1	1	--
Inhalation rate	0.83	0.30	0.83	0.30	0.83	0.30	m^3/hr
Consumption rate of MILK	0.0	0.0	0.01367	0.02268	0.0	0.0	kg/kg-day FW
Consumption rate of PORK	0.0	0.0	0.00055	0.00042	0.0	0.0	kg/kg-day FW
Time period at the beginning of combustion	0	0	0	0	0	0	yr
Length of exposure duration	30	6	40	6	30	6	yr

Desc

RECEPTOR : RI_4 UTM X: 746,604.06 UTM Y: 4,275,097.00

Based on Receptor I.D. : SVP

COPC: TetraCDD, 2,3,7,8- 1746-01-6

COPC-Site PARAMETER DESCRIPTION	VALUE	SYMBOL	UNITS
Soil bioavailability factor	1	bs_avail	--
Soil enrichment ratio	3	er	--
Fraction of COPC wet deposition that adheres to plant surfaces	0.6	fw	--
Metabolism factor	1	mf	--
Empirical correction factor for ABOVEGROUND PRODUCE	0.01	vg_ag	--
Empirical correction factor for FORAGE	1	vg_ag_forage	--
Empirical correction factor for SILAGE	0.5	vg_ag_silage	--
Empirical correction factor for BELOWGROUND PRODUCE	0.01	vg_bg	--

COPC: Chromium, hexavalent 18540-29-9

COPC-Site PARAMETER DESCRIPTION	VALUE	SYMBOL	UNITS
Soil bioavailability factor	1	bs_avail	--
Soil enrichment ratio	1	er	--
Fraction of COPC wet deposition that adheres to plant surfaces	0.2	fw	--
Metabolism factor	1	mf	--
Empirical correction factor for ABOVEGROUND PRODUCE	1	vg_ag	--
Empirical correction factor for FORAGE	1	vg_ag_forage	--
Empirical correction factor for SILAGE	0.5	vg_ag_silage	--
Empirical correction factor for BELOWGROUND PRODUCE	1	vg_bg	--

COPC: Methyl mercury 22967-92-6

COPC-Site PARAMETER DESCRIPTION	VALUE	SYMBOL	UNITS
Soil bioavailability factor	1	bs_avail	--
Soil enrichment ratio	3	er	--
Fraction of COPC wet deposition that adheres to plant surfaces	0.6	fw	--
Metabolism factor	1	mf	--
Empirical correction factor for ABOVEGROUND PRODUCE	1	vg_ag	--
Empirical correction factor for FORAGE	1	vg_ag_forage	--
Empirical correction factor for SILAGE	0.5	vg_ag_silage	--
Empirical correction factor for BELOWGROUND PRODUCE	1	vg_bg	--

COPC: Lead 7439-92-1

COPC-Site PARAMETER DESCRIPTION	VALUE	SYMBOL	UNITS
Soil bioavailability factor	1	bs_avail	--
Soil enrichment ratio	1	er	--
Fraction of COPC wet deposition that adheres to plant surfaces	0.2	fw	--

Desc

RECEPTOR : RI_4 UTM X: 746,604.06 UTM Y: 4,275,097.00

Based on Receptor I.D. : SVP

Metabolism factor	1	mf	--
Empirical correction factor for ABOVEGROUND PRODUCE	1	vg_ag	--
Empirical correction factor for FORAGE	1	vg_ag_forage	--
Empirical correction factor for SILAGE	0.5	vg_ag_silage	--
Empirical correction factor for BELOWGROUND PRODUCE	1	vg_bg	--

COPC: Mercury 7439-97-6

COPC-Site PARAMETER DESCRIPTION	VALUE	SYMBOL	UNITS
Soil bioavailability factor	1	bs_avail	--
Soil enrichment ratio	1	er	--
Fraction of COPC wet deposition that adheres to plant surfaces	0.2	fw	--
Metabolism factor	1	mf	--
Empirical correction factor for ABOVEGROUND PRODUCE	1	vg_ag	--
Empirical correction factor for FORAGE	1	vg_ag_forage	--
Empirical correction factor for SILAGE	0.5	vg_ag_silage	--
Empirical correction factor for BELOWGROUND PRODUCE	1	vg_bg	--

COPC: Arsenic 7440-38-2

COPC-Site PARAMETER DESCRIPTION	VALUE	SYMBOL	UNITS
Soil bioavailability factor	1	bs_avail	--
Soil enrichment ratio	1	er	--
Fraction of COPC wet deposition that adheres to plant surfaces	0.2	fw	--
Metabolism factor	1	mf	--
Empirical correction factor for ABOVEGROUND PRODUCE	1	vg_ag	--
Empirical correction factor for FORAGE	1	vg_ag_forage	--
Empirical correction factor for SILAGE	0.5	vg_ag_silage	--
Empirical correction factor for BELOWGROUND PRODUCE	1	vg_bg	--

COPC: Beryllium 7440-41-7

COPC-Site PARAMETER DESCRIPTION	VALUE	SYMBOL	UNITS
Soil bioavailability factor	1	bs_avail	--
Soil enrichment ratio	1	er	--
Fraction of COPC wet deposition that adheres to plant surfaces	0.2	fw	--
Metabolism factor	1	mf	--
Empirical correction factor for ABOVEGROUND PRODUCE	1	vg_ag	--
Empirical correction factor for FORAGE	1	vg_ag_forage	--
Empirical correction factor for SILAGE	0.5	vg_ag_silage	--
Empirical correction factor for BELOWGROUND PRODUCE	1	vg_bg	--

Desc

RECEPTOR : RI_4 UTM X: 746,604.06 UTM Y: 4,275,097.00

Based on Receptor I.D. : SVP

COPC: Cadmium	7440-43-9		
COPC-Site PARAMETER DESCRIPTION	**VALUE**	**SYMBOL**	**UNITS**
Soil bioavailability factor	1	bs_avail	--
Soil enrichment ratio	1	er	--
Fraction of COPC wet deposition that adheres to plant surfaces	0.2	fw	--
Metabolism factor	1	mf	--
Empirical correction factor for ABOVEGROUND PRODUCE	1	vg_ag	--
Empirical correction factor for FORAGE	1	vg_ag_forage	--
Empirical correction factor for SILAGE	0.5	vg_ag_silage	--
Empirical correction factor for BELOWGROUND PRODUCE	1	vg_bg	--

COPC: Chromium	7440-47-3		
COPC-Site PARAMETER DESCRIPTION	**VALUE**	**SYMBOL**	**UNITS**
Soil bioavailability factor	1	bs_avail	--
Soil enrichment ratio	1	er	--
Fraction of COPC wet deposition that adheres to plant surfaces	0.2	fw	--
Metabolism factor	1	mf	--
Empirical correction factor for ABOVEGROUND PRODUCE	1	vg_ag	--
Empirical correction factor for FORAGE	1	vg_ag_forage	--
Empirical correction factor for SILAGE	0.5	vg_ag_silage	--
Empirical correction factor for BELOWGROUND PRODUCE	1	vg_bg	--

COPC: Mercuric chloride	7487-94-7		
COPC-Site PARAMETER DESCRIPTION	**VALUE**	**SYMBOL**	**UNITS**
Soil bioavailability factor	1	bs_avail	--
Soil enrichment ratio	1	er	--
Fraction of COPC wet deposition that adheres to plant surfaces	0.6	fw	--
Metabolism factor	1	mf	--
Empirical correction factor for ABOVEGROUND PRODUCE	1	vg_ag	--
Empirical correction factor for FORAGE	1	vg_ag_forage	--
Empirical correction factor for SILAGE	0.5	vg_ag_silage	--
Empirical correction factor for BELOWGROUND PRODUCE	1	vg_bg	--

Site-Specific Modified Parameters

Risk Receptor	Description	Symbol	Current	Original	Comments
RI_1	Average annual evapotranspiration	e_v	54.3		
RI_1	Average annual irrigation	i	12.5		
RI_1	Average annual precipitation	p	104.04		
RI_10	Average annual evapotranspiration	e_v	54.3		
RI_10	Average annual irrigation	i	12.5		
RI_10	Average annual precipitation	p	104.04		
RI_10	Average annual runoff	r	12.5		
RI_11	Average annual evapotranspiration	e_v	54.3		
RI_11	Average annual irrigation	i	12.5		
RI_11	Average annual precipitation	p	104.04		
RI_12	Average annual evapotranspiration	e_v	54.3		
RI_12	Average annual irrigation	i	12.5		
RI_12	Average annual precipitation	p	104.04		
RI_13	Average annual evapotranspiration	e_v	54.3		
RI_13	Average annual irrigation	i	12.5		
RI_13	Average annual precipitation	p	104.04		
RI_13	Average annual runoff	r	12.5		
RI_14	Average annual evapotranspiration	e_v	54.3		
RI_14	Average annual irrigation	i	12.5		
RI_14	Average annual precipitation	p	104.04		
RI_14	Average annual runoff	r	12.5		
RI_15	Average annual evapotranspiration	e_v	54.3		
RI_15	Average annual irrigation	i	12.5		
RI_15	Average annual precipitation	p	104.04		
RI_16	Average annual evapotranspiration	e_v	54.3		
RI_16	Average annual irrigation	i	12.5		
RI_16	Average annual precipitation	p	104.04		
RI_17	Average annual evapotranspiration	e_v	54.3		
RI_17	Average annual irrigation	i	12.5		
RI_17	Average annual precipitation	p	104.04		
RI_17	Average annual runoff	r	12.5		

Site-Specific Modified Parameters

Risk Receptor	Description	Symbol	Current	Original	Comments
RI_18	Average annual evapotranspiration	e_v	54.3		
RI_18	Average annual irrigation	i	12.5		
RI_18	Average annual precipitation	p	104.04		
RI_18	Average annual runoff	r	12.5		
RI_19	Average annual evapotranspiration	e_v	54.3		
RI_19	Average annual irrigation	i	12.5		
RI_19	Average annual precipitation	p	104.04		
RI_2	Average annual evapotranspiration	e_v	54.3		
RI_2	Average annual irrigation	i	12.5		
RI_2	Average annual precipitation	p	104.04		
RI_20	Average annual evapotranspiration	e_v	54.3		
RI_20	Average annual irrigation	i	12.5		
RI_20	Average annual precipitation	p	104.04		
RI_20	Average annual runoff	r	12.5		
RI_21	Average annual evapotranspiration	e_v	54.3		
RI_21	Average annual irrigation	i	12.5		
RI_21	Average annual precipitation	p	104.04		
RI_21	Average annual runoff	r	12.5		
RI_22	Average annual evapotranspiration	e_v	54.3		
RI_22	Average annual irrigation	i	12.5		
RI_22	Average annual precipitation	p	104.04		
RI_22	Average annual runoff	r	12.5		
RI_23	Average annual evapotranspiration	e_v	54.3		
RI_23	Average annual irrigation	i	12.5		
RI_23	Average annual precipitation	p	104.04		
RI_24	Average annual evapotranspiration	e_v	54.3		
RI_24	Average annual irrigation	i	12.5		
RI_24	Average annual precipitation	p	104.04		
RI_25	Average annual evapotranspiration	e_v	54.3		
RI_25	Average annual irrigation	i	12.5		
RI_25	Average annual precipitation	p	104.04		

Site-Specific Modified Parameters

Risk Receptor	Description	Symbol	Current	Original	Comments
RI_25	Average annual runoff	r	12.5		
RI_26	Average annual evapotranspiration	e_v	54.3		
RI_26	Average annual irrigation	i	12.5		
RI_26	Average annual precipitation	p	104.04		
RI_26	Average annual runoff	r	12.5		
RI_27	Average annual evapotranspiration	e_v	54.3		
RI_27	Average annual irrigation	i	12.5		
RI_27	Average annual precipitation	p	104.04		
RI_27	Average annual runoff	r	12.5		
RI_28	Average annual evapotranspiration	e_v	54.3		
RI_28	Average annual irrigation	i	12.5		
RI_28	Average annual precipitation	p	104.04		
RI_28	Average annual runoff	r	12.5		
RI_29	Average annual evapotranspiration	e_v	54.3		
RI_29	Average annual irrigation	i	12.5		
RI_29	Average annual precipitation	p	104.04		
RI_29	Average annual runoff	r	12.5		
RI_3	Average annual evapotranspiration	e_v	54.3		
RI_3	Average annual irrigation	i	12.5		
RI_3	Average annual precipitation	p	104.04		
RI_4	Average annual evapotranspiration	e_v	54.3		
RI_4	Average annual irrigation	i	12.5		
RI_4	Average annual precipitation	p	104.04		
RI_5	Average annual evapotranspiration	e_v	54.3		
RI_5	Average annual irrigation	i	12.5		
RI_5	Average annual precipitation	p	104.04		
RI_5	Average annual runoff	r	12.5		
RI_6	Average annual evapotranspiration	e_v	54.3		
RI_6	Average annual irrigation	i	12.5		
RI_6	Average annual precipitation	p	104.04		

Site-Specific Modified Parameters

Risk Receptor	*Description*	*Symbol*	*Current*	*Original*	*Comments*
RI_7	Average annual evapotranspiration	e_v	54.3		
RI_7	Average annual irrigation	i	12.5		
RI_7	Average annual precipitation	p	104.04		
RI_8	Average annual evapotranspiration	e_v	54.3		
RI_8	Average annual irrigation	i	12.5		
RI_8	Average annual precipitation	p	104.04		
RI_9	Average annual evapotranspiration	e_v	54.3		
RI_9	Average annual irrigation	i	12.5		
RI_9	Average annual precipitation	p	104.04		

COPC

CAS No.	COPC Name	Symbol	Current	Original
1746-01-6	TetraCDD, 2,3,7,8-	rfd	7.0E-10	1E-9
1746-01-6	TetraCDD, 2,3,7,8-	rfc	4.00E-08	0
18540-29-9	Chromium, hexavalent	inhalation_urf	8.4E-2	0.012
18540-29-9	Chromium, hexavalent	inhalation_rfd	2.86E-05	0.005
22967-92-6	Methyl mercury	baf_fish	5.03E06	6800000
7440-38-2	Arsenic	rfc	1.5E-05	3E-5
7440-43-9	Cadmium	rfc	1.0E-05	0.0002
7440-47-3	Chromium	rfc	0	5.3
7440-47-3	Chromium	inhalation_rfd	0	1
7487-94-7	Mercuric chloride	h	2.34E-10	7.1E-10
7487-94-7	Mercuric chloride	f_v	1.0	0.85