C A P 8 8 - P C

Version 3.0

Clean Air Act Assessment Package - 1988

S Y N O P S I S R E P O R T

Non-Radon Population Assessment
Nov 21, 2010 01:26 pm

Facility: Kingsville Dome
Address:
City: Kingsville
State: TX Zip: 78363

Source Category: Rn-222
Source Type: Area
Emission Year: 2010

Comments: NA
NA

Effective Dose Equivalent (mrem/year)
5.45E-03

At This Location: 2500 Meters North Northwest

Dataset Name: Kingsville
Dataset Date: 11/21/2010 1:15:00 PM
Wind File: C:\Documents and Settings\Administrator.SC&A
Population File: C:\Program Files\CAP88-PC30\Popfiles\Kingsvi

MAXIMALLY EXPOSED INDIVIDUAL

Location Of The Individual: 2500 Meters North Northwest
Lifetime Fatal Cancer Risk: 2.92E-09

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem/y)	Collective Population (person-rem/y)
Adrenals	2.49E-03	1.27E-02
B Surfac	5.47E-03	3.20E-02
Breasts	2.92E-03	1.49E-02
St Wall	2.69E-03	1.37E-02
ULI Wall	2.68E-03	1.37E-02
Kidneys	3.00E-03	1.62E-02
Lungs	3.31E-03	1.63E-02
Ovaries	2.61E-03	1.33E-02
R Marrow	3.02E-03	1.59E-02
Spleen	2.90E-03	1.55E-02
Thymus	2.67E-03	1.36E-02
Uterus	2.62E-03	1.34E-02
Bld Wall	2.78E-03	1.42E-02
Brain	2.67E-03	1.36E-02
Esophagu	3.10E-03	1.50E-02
SI Wall	2.65E-03	1.36E-02
LLI Wall	2.74E-03	1.40E-02
Liver	2.83E-03	1.49E-02
Muscle	3.03E-03	1.55E-02
Pancreas	2.53E-03	1.29E-02
Skin	1.66E-02	8.50E-02
Testes	3.03E-03	1.55E-02
Thyroid	2.77E-03	1.42E-02
EFFEC	5.45E-03	2.88E-02

FREQUENCY DISTRIBUTION OF LIFETIME FATAL CANCER RISKS

Risk Range	# of People	# of People in This Risk Range or Higher	Deaths/Year in This Risk Range	Deaths/Year in This Risk Range or Higher

1.0E+00 TO 1.0E-01	0	0	0.00E+00	0.00E+00
1.0E-01 TO 1.0E-02	0	0	0.00E+00	0.00E+00
1.0E-02 TO 1.0E-03	0	0	0.00E+00	0.00E+00
1.0E-03 TO 1.0E-04	0	0	0.00E+00	0.00E+00
1.0E-04 TO 1.0E-05	0	0	0.00E+00	0.00E+00
1.0E-05 TO 1.0E-06	0	0	0.00E+00	0.00E+00
LESS THAN 1.0E-06	535315	535315	1.89E-07	1.89E-07

RADIONUCLIDE EMISSIONS DURING THE YEAR 2010

Nuclide	Type	Size	Source #1 Ci/y	TOTAL Ci/y
Rn-222	G	0	1.0E+00	1.0E+00
Po-218	M	1	0.0E+00	0.0E+00
Pb-214	M	1	0.0E+00	0.0E+00
At-218	M	1	0.0E+00	0.0E+00
Bi-214	M	1	0.0E+00	0.0E+00
Po-214	M	1	0.0E+00	0.0E+00
Pb-210	M	1	0.0E+00	0.0E+00
Bi-210	M	1	0.0E+00	0.0E+00
Po-210	M	1	0.0E+00	0.0E+00

SITE INFORMATION

Temperature:	10	degrees C
Precipitation:	100	cm/y
Humidity:	8	g/cu m
Mixing Height:	1000	m

SOURCE INFORMATION

Source Number: 1

Source Height (m): 0.00
Area (sq m): 1.00

Plume Rise Pasquill Cat:	A	B	C	D	E	F	G
Zero:	0.00	0.00	0.00	0.00	0.00	0.00	0.00

AGRICULTURAL DATA

	Vegetable	Milk	Meat
Fraction Home Produced:	0.700	0.400	0.440
Fraction From Assessment Area:	0.300	0.600	0.560
Fraction Imported:	0.000	0.000	0.000

Beef Cattle Density: 1.90E-01
Milk Cattle Density: 5.30E-03
Land Fraction Cultivated for Vegetable Crops: 5.77E-03

POPULATION DATA

Direction	Distance (m) 500	1500	2500	3500	4500	7500	15000
N	0	0	0	0	0	54	3796
NNW	0	0	7	0	0	74	7920
NW	0	0	0	0	0	537	18252
WNW	0	0	0	91	30	369	265
W	0	0	0	39	27	677	409
WSW	0	0	66	0	0	461	288
SW	0	0	0	0	138	0	0
SSW	0	0	0	0	0	240	512
S	0	0	0	0	0	41	248
SSE	0	0	0	0	0	37	189
SE	0	0	3	0	0	87	393
ESE	0	0	82	0	0	0	0
E	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	21

Direction	Distance (m) 25000	35000	45000	55000	65000	75000
N	1134	1242	2185	3921	2450	8983
NNW	126	617	18706	1729	1075	182
NW	0	649	23849	69944	1116	52
WNW	0	26	469	259	2036	125
W	0	2495	503	189	301	276
WSW	0	1724	6133	99	26	22
SW	25	613	68	8	160	235
SSW	80	6	4	0	172	8
S	148	5	0	51	5	30
SSE	30	0	0	0	0	0
SE	0	0	0	0	0	0
ESE	0	0	0	0	0	0
E	0	0	6	0	0	0
ENE	0	77	2009	29018	305	181

NE	276	296	60486	159467	14418	15036
NNE	330	1026	19092	24698	4509	14441