APPENDIX C
NONROAD 2005 INPUTS AND OUTPUTS

ks/inv-2005/nonrd-summary/ Oct-7/2008

TABLE C.1 SUMMARY NONROAD MOBILE 2005 RUNS EMISSIONS*

	VOC	NOx	CO	SO2	PM10	PM2.5
TONS PER SUMMER DAY	198.05	104.11	2,060.05	11.47	10.05	9.56
TONS PER WINTER DAY	77.86	63.45	756.03	7.00	5.91	5.64
SPRING PERIOD	9,621.9	7,260.7	99,583.2	815.1	650.5	621.2
SUMMER PERIOD	23,306.7	9,687.9	199,347.3	990.4	999.9	945.9
FALL PERIOD	9,323.1	6,981.6	99,890.5	775.3	627.8	599.2
WINTER PERIOD	7,469.3	4,999.9	64,747.5	549.7	497.2	473.1
ANNUAL TOTAL EMISSIONS	49,721.0	28,930.1	463,568.5	3,130.5	2,775.4	2,639.4

* NONROAD emissions together with Aircraft, Locomotives, and Commercial Vessels comprise the Off-Road category.

APPENDIX C TABLE C.2 TYPICAL OZONE SUMMER DAY -NONROAD INPUT FILE

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EPA`s NONROAD Emissions Model, Core Model Ver 2005a, Feb 2006    Apr 23 16:39:04: 2008
        *** Output Files *** T
    Output data file    :c:\nonroad\outputs\pei05cty.out
        *** Input Files ***
    Options file        :C:\nonroad\PEI05CTY.opt
    Allocation XREF file:data\allocate\allocate.xrf
    Activity file       :data\activity\activity.dat
    State/Regions file  :data\season\season.dat
    Seasonality file    :data\season\season.dat
    Exh Tech fractions  :data\tech\tech-exh.dat
    Evap Tech fractions :data\tech\tech-evp.dat
    US Counties FIPS    :data\allocate\fips.dat
    Retrofit file       :
        *** Population Files ***
            :c:\nonroad\data\pop\ma.pop
        *** Emission Factors Files ***
    BSFC file           :data\emsfac\bsfc.emf
    THC EXHAUST file    :data\emsfac\exhthc.emf
    CO EXHAUST file     :data\emsfac\exhco.emf
    NOX EXHAUST file    :data\emsfac\exhnox.emf
    CO2 EXHAUST file    : Not Supplied.
    SO2 EXHAUST file    : Not Supplied.
    PM EXHAUST file     :data\emsfac\exhpm.emf
    CRANKCASE file      :data\emsfac\crank.emf
    DIURNAL file        :data\emsfac\evdiu.emf
    TANK PERM file      :data\emsfac\evtank.emf
    NON-RM HOSE PERM fil:data\emsfac\evhose.emf
    RM FILL NECK PERM fi:data\emsfac\evneck.emf
    RM SUPPLY/RETURN fil:data\emsfac\evsupret.emf
    RM VENT PERM file   :data\emsfac\evvent.emf
    HOT SOAKS file      :data\emsfac\evhotsk.emf
    DISPLACEMENT file   : Not Supplied.
    SPILLAGE file       :data\emsfac\spillage.emf
    RUNINGLOSS file     :data\emsfac\evrunls.emf

        *** Deterioration Factors Files ***

    THC EXHAUST file    :data\detfac\exhthc.det
    CO EXHAUST file     :data\detfac\exhco.det
    NOX EXHAUST file    :data\detfac\exhnox.det
    CO2 EXHAUST file    : Not Supplied.
    SO2 EXHAUST file    : Not Supplied.
    PM EXHAUST file     :data\detfac\exhpm.det
    CRANKCASE file      : Not Supplied.
    DIURNAL file        :data\detfac\evdiu.det
    TANK PERM file      : Not Supplied.
    NON-RM HOSE PERM fil: Not Supplied.
    RM FILL NECK PERM fi: Not Supplied.
```

RM SUPPLY/RETURN fil: Not Supplied.
RM VENT PERM file : Not Supplied.
HOT SOAKS file : Not Supplied.
DISPLACEMENT file : Not Supplied.
SPILLAGE file : Not Supplied.
RUNINGLOSS file : Not Supplied.

*** Spatial Allocation Files ***

:c:\nonroad\data\allocate\ma_airtr.alo
:c:\nonroad\data\allocate\ma_coal.alo
:c:\nonroad\data\allocate\ma_const.alo
:c:\nonroad\data\allocate\ma_farms.alo
:c:\nonroad\data\allocate\ma_golf.alo
:c:\nonroad\data\allocate\ma_holsl.alo
:c:\nonroad\data\allocate\ma_house.alo
:c:\nonroad\data\allocate\ma_loggn.alo
:c:\nonroad\data\allocate\ma_lscap.alo
:c:\nonroad\data\allocate\ma_mnfg.alo
:c:\nonroad\data\allocate\ma_oil.alo
:c:\nonroad\data\allocate\ma_pop.alo
:c:\nonroad\data\allocate\ma_rail.alo
:c:\nonroad\data\allocate\ma_rvprk.alo
:c:\nonroad\data\allocate\ma_sbc.alo
:c:\nonroad\data\allocate\ma_sbr.alo
:c:\nonroad\data\allocate\ma_snowm.alo
:c:\nonroad\data\allocate\ma_wib.alo
:c:\nonroad\data\allocate\ma_wob.alo

*** Growth Indicator Files ***

:data\growth\nation.grw

*** Scenario Specific Parameters ***

First Title line :2005 PEI-TYPICAL OZONE SUMMER DAY
Second Title line :PEI 2005
Fuel RVP (psi) : 6.70
Fuel Oxygen weight %: 2.10
Gasoline Sulfur % : 0.0129
Diesel Sulfur % : 0.3000
Marine Diesel Sulfur: 0.3000
LPG/CNG Sulfur % : 0.0030
Minimum Temperature : 70.40
Maximum Temperature : 93.70
Average Ambient Temp: 85.90
Altitude of region :LOW
Stage II Control % : 0.00

*** Period Parameters ***

Year of Inventory :2005

Inventory for :SEASONAL period
Emissions summed for:TYPICAL DAY
Season :SUMMER
Day of week :WEEKDAY
Year of Growth Calc :2005
Year of Tech Sel :2005

*** Region of Interest ***

Region level : County-level estimates
Counties of Interest

:25001 - Barnstable County, Massachusetts
:25003 - Berkshire County, Massachusetts
:25005 - Bristol County, Massachusetts
:25007 - Dukes County, Massachusetts
:25009 - Essex County, Massachusetts
:25011 - Franklin County, Massachusetts
:25013 - Hampden County, Massachusetts
:25015 - Hampshire County, Massachusetts
:25017 - Middlesex County, Massachusetts
:25019 - Nantucket County, Massachusetts
:25021 - Norfolk County, Massachusetts
:25023 - Plymouth County, Massachusetts
:25025 - Suffolk County, Massachusetts
:25027 - Worcester County, Massachusetts

*** Equipment Types ***

All equipment types.

**** Number of Population Records Found ****

25000 Massachusetts : 1183

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

2005 PEI
PEI 2005 (PEI05CTY)
Typical weekday for Summer Season, 2005
Date of Model Run: Apr 23 16:39:05: 2008 Today's Date: 10/7/2008

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM10	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
25001	Barnstable County	19.06	6.09	193.42	0.83	0.65	864.56	0.08	0.89
25003	Berkshire County	4.89	2.44	47.99	0.30	0.28	287.17	0.07	0.22
25005	Bristol County	8.94	8.15	129.36	0.68	0.85	865.65	0.19	0.44
25007	Dukes County	5.03	1.31	34.85	0.16	0.12	184.99	0.01	0.28
25009	Essex County	14.53	11.95	234.72	1.02	1.16	1,315.23	0.30	0.65
25011	Franklin County	3.34	1.98	29.46	0.19	0.20	213.60	0.05	0.22
25013	Hampden County	6.39	5.86	111.43	0.50	0.57	633.62	0.16	0.27
25015	Hampshire County	3.09	2.12	39.47	0.23	0.26	243.02	0.03	0.13
25017	Middlesex County	21.28	22.57	476.34	2.02	2.41	2,508.21	0.53	0.81
25019	Nantucket County	3.33	1.16	28.20	0.14	0.13	154.13	0.01	0.18
25021	Norfolk County	10.95	9.31	209.61	0.91	1.04	1,075.67	0.20	0.45
25023	Plymouth County	15.32	8.08	185.25	0.93	0.96	995.58	0.13	0.68
25025	Suffolk County	6.97	9.15	119.81	0.83	1.22	970.53	0.12	0.39
25027	Worcester County	15.21	13.97	220.14	1.31	1.63	1,506.65	0.28	0.62
Totals:		**138.31**	**104.11**	**2,060.05**	**10.05**	**11.47**	**11,818.61**	**2.17**	**6.24**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

2005 PEI
PEI 2005 (PEI05CTY)
Typical weekday for Summer Season, 2005
Date of Model Run: Apr 23 16:39:05: 2008 Today's Date: 10/7/2008

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
25001	Barnstable County	0.23	0.62	0.10	0.34	1.65	3.92	26.89
25003	Berkshire County	0.05	0.14	0.05	0.17	0.36	0.84	6.80
25005	Bristol County	0.12	0.35	0.06	0.20	0.74	2.08	13.12
25007	Dukes County	0.05	0.08	0.02	0.05	0.54	1.22	7.28
25009	Essex County	0.21	0.71	0.10	0.36	1.07	2.96	20.90
25011	Franklin County	0.03	0.07	0.02	0.05	0.37	0.83	4.99
25013	Hampden County	0.10	0.34	0.06	0.21	0.42	1.28	9.23
25015	Hampshire County	0.04	0.12	0.02	0.07	0.23	0.63	4.36
25017	Middlesex County	0.39	1.55	0.19	0.78	1.14	3.77	30.43
25019	Nantucket County	0.04	0.08	0.01	0.03	0.34	0.77	4.79
25021	Norfolk County	0.18	0.66	0.09	0.38	0.67	2.03	15.61
25023	Plymouth County	0.20	0.56	0.10	0.34	1.19	3.01	21.53
25025	Suffolk County	0.10	0.35	0.07	0.19	0.61	1.91	10.73
25027	Worcester County	0.20	0.65	0.11	0.37	1.03	2.93	21.40
Totals:		**1.94**	**6.29**	**1.00**	**3.54**	**10.38**	**28.17**	**198.05**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

2005 PEI
PEI 2005 (PEI05CTY)
Typical weekday for Summer Season, 2005
Date of Model Run: Apr 23 16:39:05: 2008 Today's Date: 4/25/2008

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
25001	Barnstable County	19.06	6.09	193.42	0.78	0.65	864.56	0.08	0.89
25003	Berkshire County	4.89	2.44	47.99	0.29	0.28	287.17	0.07	0.22
25005	Bristol County	8.94	8.15	129.36	0.65	0.85	865.65	0.19	0.44
25007	Dukes County	5.03	1.31	34.85	0.15	0.12	184.99	0.01	0.28
25009	Essex County	14.53	11.95	234.72	0.97	1.16	1,315.23	0.30	0.65
25011	Franklin County	3.34	1.98	29.46	0.18	0.20	213.60	0.05	0.22
25013	Hampden County	6.39	5.86	111.43	0.48	0.57	633.62	0.16	0.27
25015	Hampshire County	3.09	2.12	39.47	0.22	0.26	243.02	0.03	0.13
25017	Middlesex County	21.28	22.57	476.34	1.92	2.41	2,508.21	0.53	0.81
25019	Nantucket County	3.33	1.16	28.20	0.13	0.13	154.13	0.01	0.18
25021	Norfolk County	10.95	9.31	209.61	0.87	1.04	1,075.67	0.20	0.45
25023	Plymouth County	15.32	8.08	185.25	0.88	0.96	995.58	0.13	0.68
25025	Suffolk County	6.97	9.15	119.81	0.80	1.22	970.53	0.12	0.39
25027	Worcester County	15.21	13.97	220.14	1.25	1.63	1,506.65	0.28	0.62
Totals:		**138.31**	**104.11**	**2,060.05**	**9.56**	**11.47**	**11,818.61**	**2.17**	**6.24**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

2005 PEI
PEI 2005 (PEI05CTY)
Typical weekday for Summer Season, 2005
Date of Model Run: Apr 23 16:39:05: 2008 Today's Date: 4/25/2008

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
25001	Barnstable County	0.23	0.62	0.10	0.34	1.65	3.92	26.89
25003	Berkshire County	0.05	0.14	0.05	0.17	0.36	0.84	6.80
25005	Bristol County	0.12	0.35	0.06	0.20	0.74	2.08	13.12
25007	Dukes County	0.05	0.08	0.02	0.05	0.54	1.22	7.28
25009	Essex County	0.21	0.71	0.10	0.36	1.07	2.96	20.90
25011	Franklin County	0.03	0.07	0.02	0.05	0.37	0.83	4.99
25013	Hampden County	0.10	0.34	0.06	0.21	0.42	1.28	9.23
25015	Hampshire County	0.04	0.12	0.02	0.07	0.23	0.63	4.36
25017	Middlesex County	0.39	1.55	0.19	0.78	1.14	3.77	30.43
25019	Nantucket County	0.04	0.08	0.01	0.03	0.34	0.77	4.79
25021	Norfolk County	0.18	0.66	0.09	0.38	0.67	2.03	15.61
25023	Plymouth County	0.20	0.56	0.10	0.34	1.19	3.01	21.53
25025	Suffolk County	0.10	0.35	0.07	0.19	0.61	1.91	10.73
25027	Worcester County	0.20	0.65	0.11	0.37	1.03	2.93	21.40
Totals:		**1.94**	**6.29**	**1.00**	**3.54**	**10.38**	**28.17**	**198.05**

APPENDIX C TABLE C.3 TYPICAL WINTER DAY (CO) 2005 -NONROAD INPUT FILE

EPA`s NONROAD Emissions Model, Core Model Ver 2005a, Feb 2006 Apr 23 17:07:01: 2008

*** Output Files ***

Output data file :c:\nonroad\outputs\pei05win.out

*** Input Files *** WINTER WEEKDAY

*** Scenario Specific Parameters ***

First Title line :2005 PEI WINTER DAY
Second Title line :PEI 2005 WINTER DAY
Fuel RVP (psi) : 13.50
Fuel Oxygen weight %: 2.10
Gasoline Sulfur % : 0.0129
Diesel Sulfur % : 0.3000
Marine Diesel Sulfur: 0.3000
LPG/CNG Sulfur % : 0.0030
Minimum Temperature : 22.80
Maximum Temperature : 38.30
Average Ambient Temp: 30.50
Altitude of region :LOW
Stage II Control % : 0.00

*** Period Parameters ***

Year of Inventory :2005
Inventory for :SEASONAL period
Emissions summed for:TYPICAL DAY
Season :WINTER
Day of week :WEEKDAY
Year of Growth Calc :2005
Year of Tech Sel :2005

*** Region of Interest ***

Region level : County-level estimates
Counties of Interest
:25001 - Barnstable County, Massachusetts
:25003 - Berkshire County, Massachusetts
:25005 - Bristol County, Massachusetts
:25007 - Dukes County, Massachusetts
:25009 - Essex County, Massachusetts
:25011 - Franklin County, Massachusetts
:25013 - Hampden County, Massachusetts
:25015 - Hampshire County, Massachusetts
:25017 - Middlesex County, Massachusetts
:25019 - Nantucket County, Massachusetts
:25021 - Norfolk County, Massachusetts
:25023 - Plymouth County, Massachusetts
:25025 - Suffolk County, Massachusetts
:25027 - Worcester County, Massachusetts

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

2005 PEI WINTER DAY
PEI 2005 WINTER DAY (pei05win)
Typical weekday for Winter Season, 2005
Date of Model Run: Apr 23 17:07:03: 2008 Today's Date: 4/23/2008

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM10	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
25001	Barnstable County	3.87	2.20	39.76	0.31	0.28	245.30	0.04	0.00
25003	Berkshire County	8.92	1.51	32.57	0.32	0.17	260.33	0.04	0.00
25005	Bristol County	2.77	5.14	48.90	0.38	0.53	472.77	0.13	0.00
25007	Dukes County	0.41	0.25	4.26	0.04	0.03	27.71	0.00	0.00
25009	Essex County	5.09	7.32	81.51	0.56	0.70	680.15	0.20	0.00
25011	Franklin County	13.43	1.26	38.13	0.39	0.13	308.15	0.03	0.00
25013	Hampden County	2.64	3.81	41.60	0.29	0.36	353.74	0.11	0.00
25015	Hampshire County	0.99	1.21	13.09	0.12	0.15	118.90	0.02	0.00
25017	Middlesex County	10.96	14.92	183.68	1.24	1.55	1,431.62	0.36	0.00
25019	Nantucket County	0.31	0.34	3.60	0.04	0.05	34.84	0.00	0.00
25021	Norfolk County	4.93	6.17	82.98	0.54	0.67	608.26	0.13	0.00
25023	Plymouth County	4.11	4.36	56.06	0.45	0.54	442.97	0.08	0.00
25025	Suffolk County	2.86	6.22	50.14	0.53	0.82	596.05	0.09	0.00
25027	Worcester County	5.13	8.77	79.76	0.73	1.01	825.55	0.18	0.00
Totals:		**66.40**	**63.45**	**756.03**	**5.91**	**7.00**	**6,406.34**	**1.42**	**0.00**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

2005 PEI WINTER DAY
PEI 2005 WINTER DAY (pei05win)
Typical weekday for Winter Season, 2005
Date of Model Run: Apr 23 17:07:03: 2008 Today's Date: 4/23/2008

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
25001	Barnstable County	0.03	0.25	0.02	0.11	0.20	0.46	4.98
25003	Berkshire County	0.07	0.07	0.03	0.10	0.04	0.10	9.37
25005	Bristol County	0.03	0.15	0.02	0.10	0.09	0.25	3.53
25007	Dukes County	0.00	0.03	0.00	0.01	0.06	0.14	0.67
25009	Essex County	0.06	0.31	0.03	0.16	0.13	0.35	6.33
25011	Franklin County	0.11	0.04	0.02	0.09	0.04	0.10	13.87
25013	Hampden County	0.03	0.15	0.02	0.09	0.05	0.15	3.24
25015	Hampshire County	0.01	0.06	0.01	0.03	0.03	0.07	1.21
25017	Middlesex County	0.13	0.69	0.06	0.39	0.13	0.45	13.17
25019	Nantucket County	0.00	0.02	0.00	0.01	0.04	0.09	0.48
25021	Norfolk County	0.06	0.30	0.03	0.19	0.08	0.24	5.96
25023	Plymouth County	0.04	0.24	0.03	0.14	0.14	0.36	5.14
25025	Suffolk County	0.04	0.16	0.02	0.10	0.07	0.23	3.57
25027	Worcester County	0.06	0.28	0.03	0.17	0.12	0.35	6.32
Totals:		**0.68**	**2.76**	**0.33**	**1.70**	**1.23**	**3.34**	**77.86**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

2005 PEI WINTER ~~DAY~~
PEI 2005 WINTER DAY (pei05win)
Typical weekday for Winter Season, 2005
Date of Model Run: Apr 23 17:07:03: 2008 Today's Date: 4/23/2008

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
25001	Barnstable County	3.87	2.20	39.76	0.30	0.28	245.30	0.04	0.00
25003	Berkshire County	8.92	1.51	32.57	0.30	0.17	260.33	0.04	0.00
25005	Bristol County	2.77	5.14	48.90	0.36	0.53	472.77	0.13	0.00
25007	Dukes County	0.41	0.25	4.26	0.03	0.03	27.71	0.00	0.00
25009	Essex County	5.09	7.32	81.51	0.53	0.70	680.15	0.20	0.00
25011	Franklin County	13.43	1.26	38.13	0.36	0.13	308.15	0.03	0.00
25013	Hampden County	2.64	3.81	41.60	0.27	0.36	353.74	0.11	0.00
25015	Hampshire County	0.99	1.21	13.09	0.11	0.15	118.90	0.02	0.00
25017	Middlesex County	10.96	14.92	183.68	1.18	1.55	1,431.62	0.36	0.00
25019	Nantucket County	0.31	0.34	3.60	0.04	0.05	34.84	0.00	0.00
25021	Norfolk County	4.93	6.17	82.98	0.52	0.67	608.26	0.13	0.00
25023	Plymouth County	4.11	4.36	56.06	0.43	0.54	442.97	0.08	0.00
25025	Suffolk County	2.86	6.22	50.14	0.51	0.82	596.05	0.09	0.00
25027	Worcester County	5.13	8.77	79.76	0.70	1.01	825.55	0.18	0.00
Totals:		**66.40**	**63.45**	**756.03**	**5.64**	**7.00**	**6,406.34**	**1.42**	**0.00**

Emission Totals by County and Pollutant

All Fuels **Tons/Day**

2005 PEI WINTER DAY
PEI 2005 WINTER DAY (pei05win)
Typical weekday for Winter Season, 2005
Date of Model Run: Apr 23 17:07:03: 2008 Today's Date: 4/23/2008

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
25001	Barnstable County	0.03	0.25	0.02	0.11	0.20	0.46	4.98
25003	Berkshire County	0.07	0.07	0.03	0.10	0.04	0.10	9.37
25005	Bristol County	0.03	0.15	0.02	0.10	0.09	0.25	3.53
25007	Dukes County	0.00	0.03	0.00	0.01	0.06	0.14	0.67
25009	Essex County	0.06	0.31	0.03	0.16	0.13	0.35	6.33
25011	Franklin County	0.11	0.04	0.02	0.09	0.04	0.10	13.87
25013	Hampden County	0.03	0.15	0.02	0.09	0.05	0.15	3.24
25015	Hampshire County	0.01	0.06	0.01	0.03	0.03	0.07	1.21
25017	Middlesex County	0.13	0.69	0.06	0.39	0.13	0.45	13.17
25019	Nantucket County	0.00	0.02	0.00	0.01	0.04	0.09	0.48
25021	Norfolk County	0.06	0.30	0.03	0.19	0.08	0.24	5.96
25023	Plymouth County	0.04	0.24	0.03	0.14	0.14	0.36	5.14
25025	Suffolk County	0.04	0.16	0.02	0.10	0.07	0.23	3.57
25027	Worcester County	0.06	0.28	0.03	0.17	0.12	0.35	6.32
Totals:		**0.68**	**2.76**	**0.33**	**1.70**	**1.23**	**3.34**	**77.86**

APPENDIX C TABLE C.4 TOTAL SPRING PERIOD 2005 -INPUT FILE

EPA`s NONROAD Emissions Model, Core Model Ver 2005a, Feb 2006 Apr 25 11:05:01: 2008

*** Output Files ***

*** Scenario Specific Parameters ***

First Title line :2005 PEI SPRING PERIOD
Second Title line :PEI 2005 SPRING PERIOD
Fuel RVP (psi) : 13.50
Fuel Oxygen weight %: 2.10
Gasoline Sulfur % : 0.0129
Diesel Sulfur % : 0.3000
Marine Diesel Sulfur: 0.3000
LPG/CNG Sulfur % : 0.0030
Minimum Temperature : 39.10
Maximum Temperature : 57.50
Average Ambient Temp: 48.30
Altitude of region :LOW
Stage II Control % : 0.00

*** Period Parameters ***

Year of Inventory :2005
Inventory for :SEASONAL period
Emissions summed for:PERIOD TOTAL
Season :SPRING
Year of Growth Calc :2005
Year of Tech Sel :2005

*** Region of Interest ***

Region level : County-level estimates
Counties of Interest
:25001 - Barnstable County, Massachusetts
:25003 - Berkshire County, Massachusetts
:25005 - Bristol County, Massachusetts
:25007 - Dukes County, Massachusetts
:25009 - Essex County, Massachusetts
:25011 - Franklin County, Massachusetts
:25013 - Hampden County, Massachusetts
:25015 - Hampshire County, Massachusetts
:25017 - Middlesex County, Massachusetts
:25019 - Nantucket County, Massachusetts
:25021 - Norfolk County, Massachusetts
:25023 - Plymouth County, Massachusetts
:25025 - Suffolk County, Massachusetts
:25027 - Worcester County, Massachusetts

*** Equipment Types ***

All equipment types.

**** Number of Population Records Found ****

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI SPRING PERIOD
PEI 2005 SPRING PERIOD (PEI05SPP)
Total for Spring Season, 2005
Date of Model Run: Apr 25 11:05:03: 2008 Today's Date: 4/25/2008

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM10	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
25001	Barnstable County	955.65	386.91	8,126.26	47.18	41.99	46,815.34	4.47	79.61
25003	Berkshire County	267.10	164.78	2,354.74	18.61	18.88	17,823.95	4.53	19.86
25005	Bristol County	489.37	572.30	6,702.32	45.27	61.08	56,575.95	12.13	39.15
25007	Dukes County	250.08	78.37	1,493.15	8.73	7.06	9,515.39	0.52	25.24
25009	Essex County	774.09	820.22	11,293.25	65.19	80.80	82,061.70	19.32	57.27
25011	Franklin County	174.25	129.35	1,448.98	11.32	12.97	12,971.16	3.21	19.89
25013	Hampden County	353.45	406.57	5,560.94	32.55	40.43	40,491.33	10.55	23.97
25015	Hampshire County	162.78	142.80	1,880.33	14.16	17.78	15,092.60	2.12	11.66
25017	Middlesex County	1,173.60	1,591.54	23,103.46	133.45	173.27	161,140.73	33.58	71.42
25019	Nantucket County	164.46	73.09	1,168.14	7.84	8.13	8,386.58	0.36	15.92
25021	Norfolk County	604.38	664.21	10,389.15	60.22	75.29	69,522.44	12.79	39.49
25023	Plymouth County	799.63	554.58	8,621.73	58.14	66.80	60,883.41	7.93	60.31
25025	Suffolk County	408.92	689.52	6,523.28	60.74	93.00	68,956.82	8.40	34.66
25027	Worcester County	826.34	986.39	10,917.44	87.07	117.60	98,834.60	17.88	55.27
Totals:		**7,404.09**	**7,260.65**	**99,583.17**	**650.47**	**815.09**	**749,072.00**	**137.79**	**553.75**

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI SPRING PERIOD
PEI 2005 SPRING PERIOD (PEI05SPP)
Total for Spring Season, 2005
Date of Model Run: Apr 25 11:05:03: 2008 Today's Date: 4/25/2008

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
25001	Barnstable County	13.85	29.14	5.20	16.64	35.76	84.75	1,225.08
25003	Berkshire County	3.25	7.35	2.65	9.54	7.79	18.25	340.32
25005	Bristol County	7.92	18.80	3.49	11.68	16.06	45.01	643.60
25007	Dukes County	3.47	3.84	0.90	2.20	11.78	26.36	324.40
25009	Essex County	13.22	36.14	5.42	19.86	23.19	64.04	1,012.55
25011	Franklin County	2.10	3.88	0.87	2.69	8.01	17.91	232.80
25013	Hampden County	5.99	18.11	3.33	11.85	9.06	27.66	463.95
25015	Hampshire County	2.39	6.19	1.07	3.61	4.92	13.64	208.38
25017	Middlesex County	23.46	79.13	10.22	43.29	24.62	81.43	1,540.76
25019	Nantucket County	2.39	3.46	0.55	1.48	7.40	16.67	212.71
25021	Norfolk County	11.32	34.20	5.12	21.70	14.44	43.81	787.24
25023	Plymouth County	12.14	28.02	5.08	18.62	25.79	65.07	1,022.60
25025	Suffolk County	7.24	20.21	3.91	11.69	13.26	41.26	549.57
25027	Worcester County	12.68	33.80	5.81	20.48	22.33	63.32	1,057.92
Totals:		**121.41**	**322.29**	**53.62**	**195.32**	**224.41**	**609.19**	**9,621.87**

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI SPRING PERIOD
PEI 2005 SPRING PERIOD (PEI05SPP)
Total for Spring Season, 2005
Date of Model Run: Apr 25 11:05:03: 2008 Today's Date: 4/25/2008

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
25001	Barnstable County	955.65	386.91	8,126.26	44.43	41.99	46,815.34	4.47	79.61
25003	Berkshire County	267.10	164.78	2,354.74	17.65	18.88	17,823.95	4.53	19.86
25005	Bristol County	489.37	572.30	6,702.32	43.37	61.08	56,575.95	12.13	39.15
25007	Dukes County	250.08	78.37	1,493.15	8.17	7.06	9,515.39	0.52	25.24
25009	Essex County	774.09	820.22	11,293.25	62.24	80.80	82,061.70	19.32	57.27
25011	Franklin County	174.25	129.35	1,448.98	10.78	12.97	12,971.16	3.21	19.89
25013	Hampden County	353.45	406.57	5,560.94	31.11	40.43	40,491.33	10.55	23.97
25015	Hampshire County	162.78	142.80	1,880.33	13.53	17.78	15,092.60	2.12	11.66
25017	Middlesex County	1,173.60	1,591.54	23,103.46	127.75	173.27	161,140.73	33.58	71.42
25019	Nantucket County	164.46	73.09	1,168.14	7.40	8.13	8,386.58	0.36	15.92
25021	Norfolk County	604.38	664.21	10,389.15	57.56	75.29	69,522.44	12.79	39.49
25023	Plymouth County	799.63	554.58	8,621.73	55.31	66.80	60,883.41	7.93	60.31
25025	Suffolk County	408.92	689.52	6,523.28	58.45	93.00	68,956.82	8.40	34.66
25027	Worcester County	826.34	986.39	10,917.44	83.42	117.60	98,834.60	17.88	55.27
Totals:		**7,404.09**	**7,260.65**	**99,583.17**	**621.17**	**815.09**	**749,072.00**	**137.79**	**553.75**

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI SPRING PERIOD
PEI 2005 SPRING PERIOD (PEI05SPP)
Total for Spring Season, 2005
Date of Model Run: Apr 25 11:05:03: 2008 Today's Date: 4/25/2008

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
25001	Barnstable County	13.85	29.14	5.20	16.64	35.76	84.75	1,225.08
25003	Berkshire County	3.25	7.35	2.65	9.54	7.79	18.25	340.32
25005	Bristol County	7.92	18.80	3.49	11.68	16.06	45.01	643.60
25007	Dukes County	3.47	3.84	0.90	2.20	11.78	26.36	324.40
25009	Essex County	13.22	36.14	5.42	19.86	23.19	64.04	1,012.55
25011	Franklin County	2.10	3.88	0.87	2.69	8.01	17.91	232.80
25013	Hampden County	5.99	18.11	3.33	11.85	9.06	27.66	463.95
25015	Hampshire County	2.39	6.19	1.07	3.61	4.92	13.64	208.38
25017	Middlesex County	23.46	79.13	10.22	43.29	24.62	81.43	1,540.76
25019	Nantucket County	2.39	3.46	0.55	1.48	7.40	16.67	212.71
25021	Norfolk County	11.32	34.20	5.12	21.70	14.44	43.81	787.24
25023	Plymouth County	12.14	28.02	5.08	18.62	25.79	65.07	1,022.60
25025	Suffolk County	7.24	20.21	3.91	11.69	13.26	41.26	549.57
25027	Worcester County	12.68	33.80	5.81	20.48	22.33	63.32	1,057.92
Totals:		**121.41**	**322.29**	**53.62**	**195.32**	**224.41**	**609.19**	**9,621.87**

APPENDIX C TABLE C.5 SUMMER PERIOD TOTAL 2005 INPUT FILE

EPA`s NONROAD Emissions Model, Core Model Ver 2005a, Feb 2006 Apr 25 11:35:32: 2008

*** Output Files *** SUMMER PERIOD

Output data file :c:\nonroad\outputs\pei05sup.out

*** Input Files ***

*** Scenario Specific Parameters ***

First Title line :2005 PEI SUMMER PERIOD
Second Title line :PEI 2005 SUMMER PERIOD
Fuel RVP (psi) : 6.70
Fuel Oxygen weight %: 2.10
Gasoline Sulfur % : 0.0129
Diesel Sulfur % : 0.3000
Marine Diesel Sulfur: 0.3000
LPG/CNG Sulfur % : 0.0030
Minimum Temperature : 60.90
Maximum Temperature : 79.40
Average Ambient Temp: 70.00
Altitude of region :LOW
Stage II Control % : 0.00

*** Period Parameters ***

Year of Inventory :2005
Inventory for :SEASONAL period
Emissions summed for:PERIOD TOTAL
Season :SUMMER
Year of Growth Calc :2005
Year of Tech Sel :2005

*** Region of Interest ***

Region level : County-level estimates
Counties of Interest

:25001 - Barnstable County, Massachusetts
:25003 - Berkshire County, Massachusetts
:25005 - Bristol County, Massachusetts
:25007 - Dukes County, Massachusetts
:25009 - Essex County, Massachusetts
:25011 - Franklin County, Massachusetts
:25013 - Hampden County, Massachusetts
:25015 - Hampshire County, Massachusetts
:25017 - Middlesex County, Massachusetts
:25019 - Nantucket County, Massachusetts
:25021 - Norfolk County, Massachusetts
:25023 - Plymouth County, Massachusetts
:25025 - Suffolk County, Massachusetts
:25027 - Worcester County, Massachusetts

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI SUMMER PERIOD
PEI 2005 SUMMER PERIOD (PEI05SUP)
Total for Summer Season, 2005
Date of Model Run: Apr 25 11:35:34: 2008 Today's Date: 10/7/2008

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM10	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
25001	Barnstable County	3,180.23	821.06	21,403.17	104.20	73.37	113,371.54	8.08	39.73
25003	Berkshire County	677.43	218.18	4,886.52	31.57	23.04	27,822.51	7.12	9.87
25005	Bristol County	1,368.96	739.07	13,064.48	68.51	72.55	83,474.02	14.96	19.49
25007	Dukes County	970.11	232.01	4,800.52	25.82	18.21	31,052.12	1.02	12.61
25009	Essex County	2,024.71	1,110.01	22,426.14	101.29	101.04	127,038.65	24.59	28.51
25011	Franklin County	578.14	183.75	3,231.57	21.79	16.98	22,101.87	4.18	9.90
25013	Hampden County	793.09	500.05	10,354.70	46.90	46.88	56,522.91	13.68	11.91
25015	Hampshire County	481.93	190.81	4,004.63	23.16	21.66	23,617.28	2.83	5.80
25017	Middlesex County	2,198.05	1,884.09	41,220.39	173.51	194.43	212,917.01	42.63	35.44
25019	Nantucket County	618.03	174.27	3,524.72	18.83	15.53	22,631.19	0.66	7.96
25021	Norfolk County	1,304.49	800.55	18,711.29	82.85	85.09	95,202.12	16.66	19.62
25023	Plymouth County	2,381.63	836.14	18,952.25	100.55	87.60	106,937.96	11.53	30.06
25025	Suffolk County	943.05	791.91	11,690.06	75.63	100.51	87,284.71	10.11	17.23
25027	Worcester County	2,178.45	1,205.99	21,076.83	125.29	133.49	137,546.20	22.82	27.50
Totals:		**19,698.31**	**9,687.89**	**199,347.28**	**999.92**	**990.40**	**1,147,520.09**	**180.86**	**275.62**

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI SUMMER PERIOD
PEI 2005 SUMMER PERIOD (PEI05SUP)
Total for Summer Season, 2005
Date of Model Run: Apr 25 11:35:34: 2008 Today's Date: 10/7/2008

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
25001	Barnstable County	25.79	55.57	13.36	34.35	82.47	195.45	3,635.02
25003	Berkshire County	4.69	13.73	5.73	19.10	17.96	42.09	797.72
25005	Bristol County	11.51	34.24	7.76	20.01	37.04	103.81	1,617.77
25007	Dukes County	7.49	7.45	2.81	4.73	27.16	60.80	1,094.18
25009	Essex County	19.02	66.15	11.98	35.06	53.48	147.70	2,411.20
25011	Franklin County	3.64	7.13	2.13	5.15	18.47	41.30	670.03
25013	Hampden County	7.60	33.18	7.00	21.31	20.90	63.78	972.44
25015	Hampshire County	3.68	11.46	2.45	6.80	11.35	31.47	557.78
25017	Middlesex County	26.99	142.31	20.27	72.23	56.79	187.81	2,782.51
25019	Nantucket County	5.00	6.67	1.73	3.22	17.08	38.45	698.78
25021	Norfolk County	13.65	60.97	10.39	36.14	33.30	101.04	1,596.25
25023	Plymouth County	19.49	51.55	11.81	34.53	59.48	150.07	2,750.15
25025	Suffolk County	9.14	36.54	8.12	18.68	30.59	95.16	1,168.61
25027	Worcester County	17.69	61.61	12.55	36.05	51.49	146.04	2,554.20
Totals:		**175.35**	**588.53**	**118.11**	**347.35**	**517.56**	**1,404.96**	**23,306.65**

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI SUMMER PERIOD
PEI 2005 SUMMER PERIOD (PEI05SUP)
Total for Summer Season, 2005
Date of Model Run: Apr 25 11:35:34: 2008 Today's Date: 4/25/2008

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
25001	Barnstable County	3,180.23	821.06	21,403.17	97.28	73.37	113,371.54	8.08	39.73
25003	Berkshire County	677.43	218.18	4,886.52	29.68	23.04	27,822.51	7.12	9.87
25005	Bristol County	1,368.96	739.07	13,064.48	64.97	72.55	83,474.02	14.96	19.49
25007	Dukes County	970.11	232.01	4,800.52	24.01	18.21	31,052.12	1.02	12.61
25009	Essex County	2,024.71	1,110.01	22,426.14	95.82	101.04	127,038.65	24.59	28.51
25011	Franklin County	578.14	183.75	3,231.57	20.51	16.98	22,101.87	4.18	9.90
25013	Hampden County	793.09	500.05	10,354.70	44.47	46.88	56,522.91	13.68	11.91
25015	Hampshire County	481.93	190.81	4,004.63	21.90	21.66	23,617.28	2.83	5.80
25017	Middlesex County	2,198.05	1,884.09	41,220.39	165.15	194.43	212,917.01	42.63	35.44
25019	Nantucket County	618.03	174.27	3,524.72	17.59	15.53	22,631.19	0.66	7.96
25021	Norfolk County	1,304.49	800.55	18,711.29	78.60	85.09	95,202.12	16.66	19.62
25023	Plymouth County	2,381.63	836.14	18,952.25	94.65	87.60	106,937.96	11.53	30.06
25025	Suffolk County	943.05	791.91	11,690.06	72.29	100.51	87,284.71	10.11	17.23
25027	Worcester County	2,178.45	1,205.99	21,076.83	118.95	133.49	137,546.20	22.82	27.50
Totals:		**19,698.31**	**9,687.89**	**199,347.28**	**945.88**	**990.40**	**1,147,520.09**	**180.86**	**275.62**

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI SUMMER PERIOD
PEI 2005 SUMMER PERIOD (PEI05SUP)
Total for Summer Season, 2005
Date of Model Run: Apr 25 11:35:34: 2008 Today's Date: 4/25/2008

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
25001	Barnstable County	25.79	55.57	13.36	34.35	82.47	195.45	3,635.02
25003	Berkshire County	4.69	13.73	5.73	19.10	17.96	42.09	797.72
25005	Bristol County	11.51	34.24	7.76	20.01	37.04	103.81	1,617.77
25007	Dukes County	7.49	7.45	2.81	4.73	27.16	60.80	1,094.18
25009	Essex County	19.02	66.15	11.98	35.06	53.48	147.70	2,411.20
25011	Franklin County	3.64	7.13	2.13	5.15	18.47	41.30	670.03
25013	Hampden County	7.60	33.18	7.00	21.31	20.90	63.78	972.44
25015	Hampshire County	3.68	11.46	2.45	6.80	11.35	31.47	557.78
25017	Middlesex County	26.99	142.31	20.27	72.23	56.79	187.81	2,782.51
25019	Nantucket County	5.00	6.67	1.73	3.22	17.08	38.45	698.78
25021	Norfolk County	13.65	60.97	10.39	36.14	33.30	101.04	1,596.25
25023	Plymouth County	19.49	51.55	11.81	34.53	59.48	150.07	2,750.15
25025	Suffolk County	9.14	36.54	8.12	18.68	30.59	95.16	1,168.61
25027	Worcester County	17.69	61.61	12.55	36.05	51.49	146.04	2,554.20
Totals:		**175.35**	**588.53**	**118.11**	**347.35**	**517.56**	**1,404.96**	**23,306.65**

APPENDIX C TABLE C.6 FALL PERIOD TOTAL 2005 -INPUT FILE

EPA`s NONROAD Emissions Model, Core Model Ver 2005a, Feb 2006 Apr 25 13:32:30: 2008

*** Scenario Specific Parameters ***

First Title line :2005 PEI FALL PERIOD
Second Title line :PEI 2005 FALL PERIOD
Fuel RVP (psi) : 6.70
Fuel Oxygen weight %: 2.10
Gasoline Sulfur % : 0.0129
Diesel Sulfur % : 0.3000
Marine Diesel Sulfur: 0.3000
LPG/CNG Sulfur % : 0.0030
Minimum Temperature : 44.60
Maximum Temperature : 69.10
Average Ambient Temp: 53.30
Altitude of region :LOW
Stage II Control % : 0.00

*** Period Parameters ***

Year of Inventory :2005
Inventory for :SEASONAL period
Emissions summed for:PERIOD TOTAL
Season :AUTUMN
Year of Growth Calc :2005
Year of Tech Sel :2005

*** Region of Interest ***

Region level : County-level estimates
Counties of Interest
:25001 - Barnstable County, Massachusetts
:25003 - Berkshire County, Massachusetts
:25005 - Bristol County, Massachusetts
:25007 - Dukes County, Massachusetts
:25009 - Essex County, Massachusetts
:25011 - Franklin County, Massachusetts
:25013 - Hampden County, Massachusetts
:25015 - Hampshire County, Massachusetts
:25017 - Middlesex County, Massachusetts
:25019 - Nantucket County, Massachusetts
:25021 - Norfolk County, Massachusetts
:25023 - Plymouth County, Massachusetts
:25025 - Suffolk County, Massachusetts
:25027 - Worcester County, Massachusetts

*** Equipment Types ***

All equipment types.

**** Number of Population Records Found ****

25000 Massachusetts : 1183

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI FALL PERIOD
PEI 2005 FALL PERIOD (PEI5FALP)
Total for Fall Season, 2005
Date of Model Run: Apr 25 13:32:32: 2008 Today's Date: 4/25/2008

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM10	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
25001	Barnstable County	951.72	370.40	8,160.47	46.05	40.01	45,712.73	4.44	31.40
25003	Berkshire County	265.71	158.72	2,361.70	18.11	18.01	17,339.57	4.51	7.86
25005	Bristol County	485.08	552.07	6,718.96	43.60	58.14	54,941.76	12.07	15.47
25007	Dukes County	249.50	75.71	1,499.33	8.60	6.83	9,383.12	0.52	9.95
25009	Essex County	768.12	794.69	11,335.39	63.21	77.33	80,134.33	19.26	22.64
25011	Franklin County	173.49	125.81	1,452.35	11.03	12.46	12,691.77	3.20	7.87
25013	Hampden County	350.51	394.40	5,582.23	31.59	38.74	39,554.03	10.52	9.49
25015	Hampshire County	161.52	136.85	1,884.82	13.66	16.89	14,601.34	2.10	4.61
25017	Middlesex County	1,160.02	1,533.41	23,189.85	128.72	164.99	156,542.95	33.44	28.31
25019	Nantucket County	163.80	69.76	1,171.51	7.60	7.71	8,157.20	0.36	6.27
25021	Norfolk County	598.29	638.35	10,428.98	58.13	71.63	67,486.79	12.72	15.64
25023	Plymouth County	794.25	529.94	8,648.18	56.16	63.32	58,954.20	7.87	23.82
25025	Suffolk County	402.61	657.04	6,524.43	57.87	87.96	66,157.92	8.31	13.72
25027	Worcester County	817.88	944.46	10,932.34	83.43	111.23	95,295.16	17.77	21.86
Totals:		**7,342.50**	**6,981.61**	**99,890.54**	**627.76**	**775.25**	**726,952.88**	**137.11**	**218.90**

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI FALL PERIOD
PEI 2005 FALL PERIOD (PEI5FALP)
Total for Fall Season, 2005
Date of Model Run: Apr 25 13:32:32: 2008 Today's Date: 4/25/2008

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
25001	Barnstable County	6.16	29.14	5.19	16.63	42.88	101.63	1,189.19
25003	Berkshire County	1.45	7.35	2.65	9.54	9.34	21.88	330.30
25005	Bristol County	3.53	18.80	3.47	11.66	19.26	53.97	623.33
25007	Dukes County	1.53	3.84	0.90	2.20	14.12	31.61	314.17
25009	Essex County	5.91	36.14	5.41	19.84	27.80	76.80	981.91
25011	Franklin County	0.93	3.88	0.86	2.69	9.61	21.47	223.99
25013	Hampden County	2.68	18.11	3.32	11.84	10.87	33.16	450.50
25015	Hampshire County	1.07	6.19	1.06	3.60	5.90	16.36	202.41
25017	Middlesex County	10.53	79.12	10.18	43.24	29.53	97.65	1,492.01
25019	Nantucket County	1.06	3.46	0.55	1.48	8.88	19.99	205.85
25021	Norfolk County	5.07	34.19	5.10	21.68	17.31	52.54	762.55
25023	Plymouth County	5.41	28.01	5.07	18.60	30.93	78.03	991.99
25025	Suffolk County	3.23	20.20	3.88	11.66	15.90	49.48	529.02
25027	Worcester County	5.66	33.79	5.78	20.44	26.77	75.93	1,025.89
Totals:		**54.22**	**322.22**	**53.42**	**195.10**	**269.11**	**730.51**	**9,323.09**

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI FALL PERIOD
PEI 2005 FALL PERIOD (PEI5FALP)
Total for Fall Season, 2005
Date of Model Run: Apr 25 13:32:32: 2008 Today's Date: 4/25/2008

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
25001	Barnstable County	951.72	370.40	8,160.47	43.34	40.01	45,712.73	4.44	31.40
25003	Berkshire County	265.71	158.72	2,361.70	17.16	18.01	17,339.57	4.51	7.86
25005	Bristol County	485.08	552.07	6,718.96	41.75	58.14	54,941.76	12.07	15.47
25007	Dukes County	249.50	75.71	1,499.33	8.04	6.83	9,383.12	0.52	9.95
25009	Essex County	768.12	794.69	11,335.39	60.32	77.33	80,134.33	19.26	22.64
25011	Franklin County	173.49	125.81	1,452.35	10.50	12.46	12,691.77	3.20	7.87
25013	Hampden County	350.51	394.40	5,582.23	30.17	38.74	39,554.03	10.52	9.49
25015	Hampshire County	161.52	136.85	1,884.82	13.04	16.89	14,601.34	2.10	4.61
25017	Middlesex County	1,160.02	1,533.41	23,189.85	123.18	164.99	156,542.95	33.44	28.31
25019	Nantucket County	163.80	69.76	1,171.51	7.17	7.71	8,157.20	0.36	6.27
25021	Norfolk County	598.29	638.35	10,428.98	55.54	71.63	67,486.79	12.72	15.64
25023	Plymouth County	794.25	529.94	8,648.18	53.39	63.32	58,954.20	7.87	23.82
25025	Suffolk County	402.61	657.04	6,524.43	55.67	87.96	66,157.92	8.31	13.72
25027	Worcester County	817.88	944.46	10,932.34	79.90	111.23	95,295.16	17.77	21.86
Totals:		**7,342.50**	**6,981.61**	**99,890.54**	**599.17**	**775.25**	**726,952.88**	**137.11**	**218.90**

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI FALL PERIOD
PEI 2005 FALL PERIOD (PEI5FALP)
Total for Fall Season, 2005
Date of Model Run: Apr 25 13:32:32: 2008 Today's Date: 4/25/2008

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
25001	Barnstable County	6.16	29.14	5.19	16.63	42.88	101.63	1,189.19
25003	Berkshire County	1.45	7.35	2.65	9.54	9.34	21.88	330.30
25005	Bristol County	3.53	18.80	3.47	11.66	19.26	53.97	623.33
25007	Dukes County	1.53	3.84	0.90	2.20	14.12	31.61	314.17
25009	Essex County	5.91	36.14	5.41	19.84	27.80	76.80	981.91
25011	Franklin County	0.93	3.88	0.86	2.69	9.61	21.47	223.99
25013	Hampden County	2.68	18.11	3.32	11.84	10.87	33.16	450.50
25015	Hampshire County	1.07	6.19	1.06	3.60	5.90	16.36	202.41
25017	Middlesex County	10.53	79.12	10.18	43.24	29.53	97.65	1,492.01
25019	Nantucket County	1.06	3.46	0.55	1.48	8.88	19.99	205.85
25021	Norfolk County	5.07	34.19	5.10	21.68	17.31	52.54	762.55
25023	Plymouth County	5.41	28.01	5.07	18.60	30.93	78.03	991.99
25025	Suffolk County	3.23	20.20	3.88	11.66	15.90	49.48	529.02
25027	Worcester County	5.66	33.79	5.78	20.44	26.77	75.93	1,025.89
Totals:		**54.22**	**322.22**	**53.42**	**195.10**	**269.11**	**730.51**	**9,323.09**

APPENDIX C TABLE C.7 WINTER PERIOD TOTAL 2005 -INPUT FILE

EPA`s NONROAD Emissions Model, Core Model Ver 2005a, Feb 2006 Apr 23 17:13:39: 2008

*** Scenario Specific Parameters ***

First Title line :2005 PEI WINTER PERIOD
Second Title line :PEI 2005 WINTER PERIOD
Fuel RVP (psi) : 13.50
Fuel Oxygen weight %: 2.10
Gasoline Sulfur % : 0.0129
Diesel Sulfur % : 0.3000
Marine Diesel Sulfur: 0.3000
LPG/CNG Sulfur % : 0.0030
Minimum Temperature : 22.80
Maximum Temperature : 38.30
Average Ambient Temp: 30.50
Altitude of region :LOW
Stage II Control % : 0.00

*** Period Parameters ***

Year of Inventory :2005
Inventory for :SEASONAL period
Emissions summed for:PERIOD TOTAL
Season :WINTER
Year of Growth Calc :2005
Year of Tech Sel :2005

*** Region of Interest ***

Region level : County-level estimates
Counties of Interest
:25001 - Barnstable County, Massachusetts
:25003 - Berkshire County, Massachusetts
:25005 - Bristol County, Massachusetts
:25007 - Dukes County, Massachusetts
:25009 - Essex County, Massachusetts
:25011 - Franklin County, Massachusetts
:25013 - Hampden County, Massachusetts
:25015 - Hampshire County, Massachusetts
:25017 - Middlesex County, Massachusetts
:25019 - Nantucket County, Massachusetts
:25021 - Norfolk County, Massachusetts
:25023 - Plymouth County, Massachusetts
:25025 - Suffolk County, Massachusetts
:25027 - Worcester County, Massachusetts

*** Equipment Types ***

All equipment types.

**** Number of Population Records Found ****

25000 Massachusetts : 1183

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI WINTER
PEI 2005 WINTER (pei05wip)
Total for Winter Season, 2005
Date of Model Run: Apr 23 17:13:41: 2008 Today's Date: 4/23/2008

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM10	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
25001	Barnstable County	367.22	179.41	3,484.74	26.54	22.55	20,491.22	3.51	0.00
25003	Berkshire County	1,004.97	122.24	3,345.33	32.63	13.71	25,300.72	3.53	0.00
25005	Bristol County	247.01	402.71	4,127.02	30.28	41.46	37,544.23	10.00	0.00
25007	Dukes County	45.00	21.62	395.88	3.11	2.66	2,464.74	0.33	0.00
25009	Essex County	446.23	574.38	6,783.99	45.17	54.81	54,046.56	15.92	0.00
25011	Franklin County	1,539.28	103.35	4,125.89	41.82	10.43	31,996.93	2.58	0.00
25013	Hampden County	238.03	299.02	3,508.80	23.52	28.47	28,205.35	8.64	0.00
25015	Hampshire County	88.20	94.95	1,127.59	9.39	11.64	9,516.19	1.81	0.00
25017	Middlesex County	932.27	1,166.33	15,068.49	99.31	121.00	113,085.09	28.00	0.00
25019	Nantucket County	31.45	27.56	324.91	3.39	3.94	2,897.36	0.21	0.00
25021	Norfolk County	427.71	483.25	6,830.30	43.94	52.53	48,233.95	10.69	0.00
25023	Plymouth County	376.14	345.21	4,747.62	36.87	42.39	35,629.82	6.44	0.00
25025	Suffolk County	255.04	494.01	4,212.98	42.91	65.25	47,707.74	7.07	0.00
25027	Worcester County	454.00	685.88	6,663.96	58.27	78.85	65,273.86	14.60	0.00
Totals:		**6,452.56**	**4,999.94**	**64,747.51**	**497.15**	**549.68**	**522,393.76**	**113.33**	**0.00**

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI WINTER ~~DAY~~ Period
PEI 2005 WINTER ~~DAY~~ (pei05wip)
Total for Winter Season, 2005
Date of Model Run: Apr 23 17:13:41: 2008 Today's Date: 4/23/2008

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
25001	Barnstable County	3.17	21.52	2.55	10.66	17.63	41.77	468.03
25003	Berkshire County	8.05	6.53	2.84	11.18	3.84	9.00	1,049.93
25005	Bristol County	2.90	13.87	1.81	8.55	7.92	22.19	314.25
25007	Dukes County	0.42	2.20	0.31	1.22	5.81	12.99	68.28
25009	Essex County	4.88	27.06	2.93	14.30	11.43	31.57	554.33
25011	Franklin County	12.42	3.93	2.57	9.88	3.95	8.83	1,583.43
25013	Hampden County	2.55	13.40	1.89	8.46	4.47	13.63	291.06
25015	Hampshire County	0.86	5.31	0.57	2.64	2.43	6.72	108.54
25017	Middlesex County	10.91	60.14	6.07	32.52	12.14	40.14	1,122.19
25019	Nantucket County	0.31	1.89	0.17	0.73	3.65	8.22	46.63
25021	Norfolk County	5.12	26.10	3.05	16.48	7.12	21.60	517.86
25023	Plymouth County	3.86	21.04	2.74	13.12	12.71	32.07	468.12
25025	Suffolk County	3.07	14.79	2.08	8.82	6.54	20.34	317.75
25027	Worcester County	4.85	25.24	3.18	14.76	11.00	31.21	558.85
Totals:		**63.37**	**243.02**	**32.76**	**153.31**	**110.62**	**300.28**	**7,469.26**

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI WINTER
PEI 2005 WINTER (pei05wip)
Total for Winter Season, 2005
Date of Model Run: Apr 23 17:13:41: 2008 Today's Date: 4/25/2008

FIPS	County	Exhaust VOC	Exhaust NOx	Exhaust CO	Exhaust PM25	Exhaust SO2	Exhaust CO2	Crankcase VOC	Diurnal VOC
25001	Barnstable County	367.22	179.41	3,484.74	25.04	22.55	20,491.22	3.51	0.00
25003	Berkshire County	1,004.97	122.24	3,345.33	30.37	13.71	25,300.72	3.53	0.00
25005	Bristol County	247.01	402.71	4,127.02	29.06	41.46	37,544.23	10.00	0.00
25007	Dukes County	45.00	21.62	395.88	2.93	2.66	2,464.74	0.33	0.00
25009	Essex County	446.23	574.38	6,783.99	43.15	54.81	54,046.56	15.92	0.00
25011	Franklin County	1,539.28	103.35	4,125.89	38.71	10.43	31,996.93	2.58	0.00
25013	Hampden County	238.03	299.02	3,508.80	22.47	28.47	28,205.35	8.64	0.00
25015	Hampshire County	88.20	94.95	1,127.59	8.97	11.64	9,516.19	1.81	0.00
25017	Middlesex County	932.27	1,166.33	15,068.49	94.90	121.00	113,085.09	28.00	0.00
25019	Nantucket County	31.45	27.56	324.91	3.23	3.94	2,897.36	0.21	0.00
25021	Norfolk County	427.71	483.25	6,830.30	41.96	52.53	48,233.95	10.69	0.00
25023	Plymouth County	376.14	345.21	4,747.62	35.13	42.39	35,629.82	6.44	0.00
25025	Suffolk County	255.04	494.01	4,212.98	41.30	65.25	47,707.74	7.07	0.00
25027	Worcester County	454.00	685.88	6,663.96	55.86	78.85	65,273.86	14.60	0.00
Totals:		**6,452.56**	**4,999.94**	**64,747.51**	**473.09**	**549.68**	**522,393.76**	**113.33**	**0.00**

Emission Totals by County and Pollutant

All Fuels **Tons/Season**

2005 PEI WINTER DAY
PEI 2005 WINTER DAY (pei05wip)
Total for Winter Season, 2005
Date of Model Run: Apr 23 17:13:41: 2008 Today's Date: 4/25/2008

FIPS	County	Vapor Displacement VOC	Spillage VOC	Hot Soak VOC	Running Loss VOC	Tank Permeation VOC	Hose Permeation VOC	Total VOC
25001	Barnstable County	3.17	21.52	2.55	10.66	17.63	41.77	468.03
25003	Berkshire County	8.05	6.53	2.84	11.18	3.84	9.00	1,049.93
25005	Bristol County	2.90	13.87	1.81	8.55	7.92	22.19	314.25
25007	Dukes County	0.42	2.20	0.31	1.22	5.81	12.99	68.28
25009	Essex County	4.88	27.06	2.93	14.30	11.43	31.57	554.33
25011	Franklin County	12.42	3.93	2.57	9.88	3.95	8.83	1,583.43
25013	Hampden County	2.55	13.40	1.89	8.46	4.47	13.63	291.06
25015	Hampshire County	0.86	5.31	0.57	2.64	2.43	6.72	108.54
25017	Middlesex County	10.91	60.14	6.07	32.52	12.14	40.14	1,122.19
25019	Nantucket County	0.31	1.89	0.17	0.73	3.65	8.22	46.63
25021	Norfolk County	5.12	26.10	3.05	16.48	7.12	21.60	517.86
25023	Plymouth County	3.86	21.04	2.74	13.12	12.71	32.07	468.12
25025	Suffolk County	3.07	14.79	2.08	8.82	6.54	20.34	317.75
25027	Worcester County	4.85	25.24	3.18	14.76	11.00	31.21	558.85
Totals:		**63.37**	**243.02**	**32.76**	**153.31**	**110.62**	**300.28**	**7,469.26**