

WORK PLAN FOR A SURVEY TO DETERMINE RESIDENTIAL WOOD COMBUSTION AND OPEN BURNING ACTIVITY

Prepared by
E.H. Pechan and Associates, Inc.

and the
Mid-Atlantic Regional Air Management Association

for the
Mid-Atlantic/Northeast Visibility Union

July 31, 2001



M A R A M A



For copies of this report contact:

MARAMA
Mid-Atlantic Regional Air Management Association
711 W 40th Street, Suite 318
Baltimore, MD 21211
TEL: (410) 467-0170
FAX: (410) 467-1737
<http://www.marama.org>

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U.S. EPA Work Assignment Manager

Marcia Spink (U.S. EPA Region III)

U.S. EPA Project Officer

Russ S. Bowen (U.S. EPA Region III)

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CONTENTS

TABLES AND FIGURES	viii
A. INTRODUCTION AND EXECUTIVE SUMMARY	1
B. RESIDENTIAL WOOD COMBUSTION.....	1
1. Review of Previous Surveys and Development of Recommendations for the RPO	1
2. Survey Instrument.....	2
3. Survey Design.....	4
4. Data Analysis and Scale-Up for Inventory Development.....	8
C. OPEN BURNING – HOUSEHOLD WASTE, YARD WASTE, LAND CLEARING DEBRIS, AND CONSTRUCTION/DEMOLITION WASTE.....	9
1. Recommended Survey Approach	9
a. Existing Surveys	11
2. Adjustments to Emissions.....	12
a. Control Efficiency	12
b. Rule Effectiveness	13
c. Rule Penetration	13
3. Survey Instrument.....	13
4. Survey Contacts	13
5. Inventory Development	14
6. Subcounty Allocation	14
REFERENCES	15

TABLES AND FIGURES

Table 1. Recommended Stratification Scheme for the Sample Frame	6
Table 2. State-Level HDD Data.....	8
Table 3. Summary of State and Tribal Open Burning Restrictions and Survey Needs ¹	10
Figure 1. County Designations for Developing the Residential Wood Combustion Sample Frame	7

ACRONYMS AND ABBREVIATIONS

ANOVA	analysis of variance
CARB	California Air Resources Board
CATI	computer-assisted telephone interviewing
CE	control efficiency
EIIP	Emission Inventory Improvement Program
HAP	hazardous air pollutant
HDD	heating-degree day
MARAMA	Mid-Atlantic Regional Air Management Association
MSA	Metropolitan Statistical Area
NCDC	National Climatic Data Center
NEI	National Emissions Inventory
OTC	Ozone Transport Commission
PM	particulate matter
QA	quality assurance
RE	rule effectiveness
RP	rule penetration
RPO	Regional Planning Organization
SCC	source classification code
TTN	Technology Transfer Network
UCB	University of California, Berkeley
USGS	U.S. Geological Service
VOC	volatile organic compound

A. INTRODUCTION AND EXECUTIVE SUMMARY

This report provides a description of the development of a work plan to develop an emission inventory for the residential wood combustion and open burning source categories. The domain of the inventory will be the states of Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, Delaware, and Maryland. Also included are the District of Columbia and participating tribes. These entities make up the Regional Planning Organization (RPO) for the Mid-Atlantic and Northeast regions. The Mid-Atlantic Regional Air Management Association (MARAMA) managed this project that was performed by E.H. Pechan & Associates, Inc. (Pechan).

Section B of this report covers recommendations for the residential wood combustion source category. In summary, Pechan recommends performing a computer-assisted telephone interviewing (CATI) survey to gather information from households within the RPO to characterize wood combustion activity. The survey will employ a stratified sampling scheme which is based on criteria that are felt to influence wood burning activity significantly. These criteria include urban or rural status, household type (single- or multi-family), and geographic area (i.e., latitude). An estimate was made of the minimum sample size needed to complete the survey to yield statistically significant results. A survey questionnaire was developed as part of the work plan. The questionnaire contains the basic scripting and logic that would be used within the CATI system, and the necessary data elements for each wood burning equipment type.

Section C covers the open burning source categories, including household waste, yard waste, land clearing debris and construction/demolition waste burning. For areas where open burning is banned, Pechan recommends developing emission estimates using top-down methods based on EIIP guidance. These estimates can be further refined by collecting data on rule effectiveness and rule penetration. For areas where open burning is allowed, Pechan recommends using available permit data collected from state and regional contacts for developing emission estimates. Before a full-scale survey for the region is performed, Pechan recommends performing a test survey to establish that identified agencies have the information. After the test survey is performed, a determination would be made whether to survey remaining areas, or scale the results for each state using surrogate indicators such as urban and rural designations, and the availability of trash service. Survey questionnaires for rule effectiveness and open burning activity for each category have been developed and are provided as part of the work plan.

Additional details are included in a previous technical memorandum developed for MARAMA by Pechan (see Appendix A). The Phase II Work Plan is provided in Appendix B.

B. RESIDENTIAL WOOD COMBUSTION

1. Review of Previous Surveys and Development of Recommendations for the RPO

Pechan reviewed residential wood combustion surveys previously conducted in the RPO states and an additional survey conducted in the mid-West. Pechan also reviewed work performed by OMNI for the University of California, Berkeley (under a California Air Resources Board contract). The results of this review were summarized in a Technical Memorandum to MARAMA (see Appendix A). Recommendations that followed from this review were that a CATI survey approach should be used. The survey instrument (questionnaire) should be tailored to gather information critical to developing an air pollutant emission inventory (including information to temporally allocate wood burning activity).

Following a review of available surveys, a sample frame was developed. A sample frame is a matrix that includes all of the important strata for the surveyed population. In this case, the different strata might

include urban or rural location, type of household type and forested or non-forested location. Pechan developed several options for construction of the sample frame by assessing the importance of these and other factors that are thought to drive the variability in wood burning activity. These factors included: urban or rural location (affecting both the availability of wood and other heating fuels); housing type (single-family homes were shown in other surveys to have higher wood consumption than multi-family and mobile homes); and geographic location (areas in the northern portion of the RPO have a higher number of heating-degree days than those in the south; forested areas provide a more readily-available supply of wood). The sampling frame options and additional survey recommendations are described in Appendix A.

The recommended survey approach calls for collecting activity data on a large range of equipment types: fireplaces and masonry heaters; wood stoves; pellet stoves; wood furnaces and boilers; and other equipment (e.g., outdoor equipment, such as fire pits). A random sampling scheme of a sample stratified using the criteria mentioned above will be employed. The data elements to be collected include housing type; equipment type(s); annual activity (e.g., cords burned per year); monthly and weekly activity information; and type of wood burned. The survey approach is described in detail in the Phase II Work Plan (see Appendix B).

2. Survey Instrument

Pechan adapted for use in Phase II of this project a questionnaire recently developed by the University of California, Berkeley (UCB) for the California Air Resources Board (CARB) (OMNI, 2000). This questionnaire had a basic structure which fit the needs of this project. For example, initial questions on type of housing are followed by specific sets of questions for each wood burning equipment type. Our review of residential wood combustion surveys and discussions with others who have performed similar work were used to edit the CARB questionnaire to a format with content that better fit the needs of this project. Differences include the addition of several equipment types (e.g., wood furnaces, outdoor wood-burning equipment) and questions to better temporally characterize wood-burning activity. The questionnaire was designed for use in telephone questioning, as performed with a CATI system. The questionnaire is included as part of the Phase II Work Plan in Appendix B.

The questionnaire was designed to gather the key data elements needed to support the development of a high resolution (temporal and spatial) emission inventory for residential wood combustion in the RPO. Hence, any data elements that were considered not to be critical for inventory development were left out (e.g., socioeconomic data, information on other fuels used). For this reason, questions related to whether or not wood burning is the primary source of heat were excluded. Since the data elements from the survey were not designed to be used with household energy statistics, there was no reason to collect this information (i.e., separate activity data were not going to be calculated for households with primary heat coming from wood, secondary heat coming from wood, etc.). Experience has shown that surveys of this type need to be designed to be as short and simple as possible to assure a reasonable response rate and accurate results.

The primary objectives of the survey questionnaire are to:

1. Gather data on the fraction of households with wood burning devices and the annual amount of wood consumed (burned) by equipment type;
2. Gather data on the number and types of appliances used; and
3. Gather temporal activity data (e.g., weekend versus weekday).

UCB found that there were two areas that have proven to be particularly problematic for surveying residential wood combustion. The first of these was in estimating the amount of wood consumed per

season. The second area was properly distinguishing fireplace inserts from standard manufactured fireplaces (i.e., those that are built-in to the wall). Fireplace inserts are essentially wood stoves shaped to fit into an existing fireplace cavity. In addition, similar devices that are designed into a home and built into a wall and exhausting to a typical chimney are included in the wood stove/fireplace insert category (e.g., Fireplace Extraordinaire™).

In regards to the amount of wood consumed per season, values derived from surveys may be an overestimate of the correct amount (OMNI, 2000). This is because the most common unit of measure is a cord. A cord is a large amount of wood (128 cubic feet) and the natural tendency, after the considerable work of cutting to length, splitting and stacking wood is to overestimate the amount. Similarly, firewood sellers tend to overestimate the amount of wood. For example, it is commonly stated that a pick-up truck of wood is one-half a cord. According to OMNI (2000) the average amount of a pick-up truckload is 0.35 cord. Also a unit of wood called a "face cord" or a "fireplace cord" is sometimes confused with a true cord. A face or fireplace cord is one-half the volume of a true cord. Finally, many fireplace owners burn less than a cord. According to OMNI (2000), the national average consumption for fireplaces used for supplemental heat is about 0.7 cords. Hence, a convenient response would tend to be "about a cord" which would again tend to overestimate the actual amount. Wood consumption portions of the RPO has been estimated at 2 to 4 cords per year (see Appendix A).

To address the issue of overstated wood consumption, the questionnaire was designed with multiple options for response. The respondent can provide consumption with a wide range of units from the number of logs, the number of pick-up truckloads, or the number of cords. To address the issue of distinguishing fireplace inserts (wood stoves inserted in the wall) from standard fireplaces, scripting derived from OMNI (2000) is included in the questionnaire for the interviewer (see Appendix B, Part 2 of the questionnaire on equipment types).

As stated above, the survey is designed to be as short and simple as possible, while gathering the key data elements (i.e., annual consumption, type of housing, type of appliance(s), and weekday vs. weekend activity). The questionnaire has seven sections:

1. *Introduction* – includes opening script that covers the following points: survey being conducted to gather information on home heating practices for air quality research; MARAMA or RPO state call (not a sales call); research only; all information confidential; would like to speak with person most familiar with home heating practices; the type of housing is also determined: single-family, detached unit; single-family, attached (up to 3 units); or multi-family unit;
2. *Equipment Types* – these questions identify and classify the types of wood-burning equipment used by the respondent;
3. *Fireplaces* – questions to quantify and temporally characterize wood consumption; masonry heaters are included in this category (see discussion below);
4. *Woodstoves/Fireplace Inserts* - questions to quantify and temporally characterize wood consumption;
5. *Pellet Stoves* - questions to quantify and temporally characterize wood consumption;
6. *Furnaces and Boilers* - questions to quantify and temporally characterize wood consumption; and
7. *Other Equipment* - questions to quantify and temporally characterize wood consumption in other (uncommon) types of indoor equipment, such as wood-burning stoves and for outdoor equipment (see description below).

Since some households have multiple appliances, a separate section is filled out for each unit in the household. One of the differences from the questionnaire developed for CARB is that several additional appliance types have been added. The first of these is wood burning furnaces (both dedicated wood and dual-fuel units), which are not popular in California but are used to a small extent in the RPO. Another type is pellet stoves, which are gaining in popularity. The third is outdoor fire pits. While these should probably not be considered “appliances”, they are generally not accounted for in emission inventories. Given the nature of the survey, activity data for this source can easily be gathered during the survey.

A masonry heater is a site-built or site-assembled, solid-fueled heating device constructed mainly of masonry materials in which the heat from intermittent fires that burn rapidly in its firebox is stored in its massive structure for slow release to the building. It has an interior construction consisting of a firebox and heat exchange channels built from refractory components (MHA, 2001). Specifically, a masonry heater has the following characteristics:

- A mass of at least 800 kg. (1,760 lbs.);
- Tight fitting doors that are closed during the burn cycle;
- An overall average wall thickness not exceeding 250 mm (10 in.);
- Under normal operating conditions, the external surface of the masonry heater, except immediately surrounding the fuel loading door(s), does not exceed 110 C. (230 F.);
- The gas path through the internal heat exchange channels downstream of the firebox includes at least one 180 degree change in flow direction, usually downward, before entering the chimney; and
- The length of the shortest single path from the firebox exit to the chimney entrance is at least twice the largest firebox dimension.

From a combustion standpoint, masonry heaters burn similarly to fireplaces, but are much cleaner (EIIP, 1997). This is due to their design and operation, which involves the use of fires that burn quickly (i.e., stay in the flaming phase of combustion versus the smoldering phase). These are not common equipment types, but the survey should be designed to identify them. The survey is designed not to prompt the respondent to designate his/her fireplace as a masonry heater (to avoid improper designations of fireplaces surrounded by brick or other masonry as a masonry heater). However, if the respondent specifies that the equipment is a masonry heater, then it will be designated as such.

The household characteristic questions were selected based on the data available to scale up the survey results to a regional level (e.g., U.S. Bureau of Census housing characteristics). These characteristics have been shown in previous surveys to correlate with wood-burning appliance usage (OMNI, 2000; Houck, 1997). The survey instrument is included in the work plan in Appendix B.

3. Survey Design

A CATI approach is recommended for the residential wood survey. A telephone interviewing approach is recommended due to the relatively complex nature of the survey. For example, if the objective is only to identify wood consumers and the total annual activity (e.g., cords/year), then a mail-out survey would have been considered. However, since there are additional objectives, such as determining the number and types of equipment and their activity patterns, a more complex instrument is needed. To obtain a reasonable response rate, level of quality in the responses, and meet minimum statistical requirements, a CATI approach is needed (see Appendix A.).

Several options are presented for developing the sampling frame in Appendix A. These options are developed to account for the important drivers in the variability of activity (i.e., annual wood consumption). Among these drivers are the differences in urban, suburban, and rural locations, the type of housing (single-family versus multi-family homes), forested and non-forested areas, and latitude. While it may be desirable to include all potential criteria in the stratification scheme, it is important to keep in mind that the number of required responses is driven by the number of strata and the precision (error) requirements for the survey. In our opinion, the most important objective is to characterize wood consumption patterns of heavily urbanized areas (e.g., multi-family units in New York City, Philadelphia) as compared to consumption in other areas.

Pechan developed a sample frame for the survey based on the scheme shown in Table 1 (see Appendix B for additional details). This sample frame is based on Option A presented in Appendix A. The difference is that only two strata are specified for latitude (dividing the RPO into northern and southern tiers). The other important criteria used were housing type, urban versus rural location, and forested versus non-forested areas in rural areas. Minimum sample requirements were computed for each cell of the sample frame based on a level of precision of +/- 13.3%. This level of precision was selected to achieve a sample size that is sufficiently robust to allow for follow-up statistical analysis, while not so large as to be unrealistic from the standpoint of potential project funding.

To draft a sampling frame for the purposes of estimating the costs of a Phase II survey, Pechan used county-level data on population density to designate each county in the RPO as either urban or rural. For the rural counties, Pechan used land cover data to designate each county as either forested or non-forested (i.e., agricultural or primarily agricultural). With these county designations, each of the census tracts within each county was given the same designation. Figure 1 shows how each county in the RPO was designated. Counties in the New York Metropolitan Statistical Area were separated out from the remaining counties of New York and included in the south Ozone Transport Commission (OTC) region. Finally, census tract data on housing units was used to populate the sample frame.

It is important to note that these county designations will be re-evaluated during development of the actual sample frame in Phase II of this project (see Appendix B). Urban and rural county designations were made based on population density estimates. In developing the sample frame, the selected contractor will prepare census tract-level designations of urban versus rural locations. When this occurs, the political designations (county boundaries) shown in Figure 1 will no longer be used. For example, some counties designated as urban in Figure 1 may end up being primarily rural, after a census tract-level assessment has been made. Emission estimates developed from the survey data will be made at the census tract level (which can later be aggregated to the county and state levels).

As mentioned above, in Phase II of the project, the sample frame will be refined by purchasing census block level data from the Bureau of Census. Each census block (components of census tracts) is designated by the Bureau of Census as either urban or rural. The selected contractor will designate each census tract in the RPO as either urban or rural with these data. A census tract coverage of the RPO will be overlaid with a U.S. Geological Service (USGS) land use coverage. The contractor will assign rural-forested and non-forested designations to rural census tracts based on the USGS coverage. The refinements made to the sample frame in Phase II will not impact the cost estimate, since the minimum sample size is not expected to change dramatically.

The final delineation of the northern and southern tiers of the RPO within the sampling frame will be performed at the county level in Phase II. For the purposes of cost estimating in the Work Plan, Pechan made the delineation at the state level (with the exception of New York Metropolitan Statistical Areas [MSA] counties) using 1999/2000 state annual heating-degree day (HDD) data weighted by population (NCDC, 2000). These data are shown in Table 2 below. The costs of the survey are driven by the size (number of cells) in the sample frame and the desired level of precision (see the Work Plan in Appendix B). At the state level, the data fall within three distinct groups, suggesting the need for 3

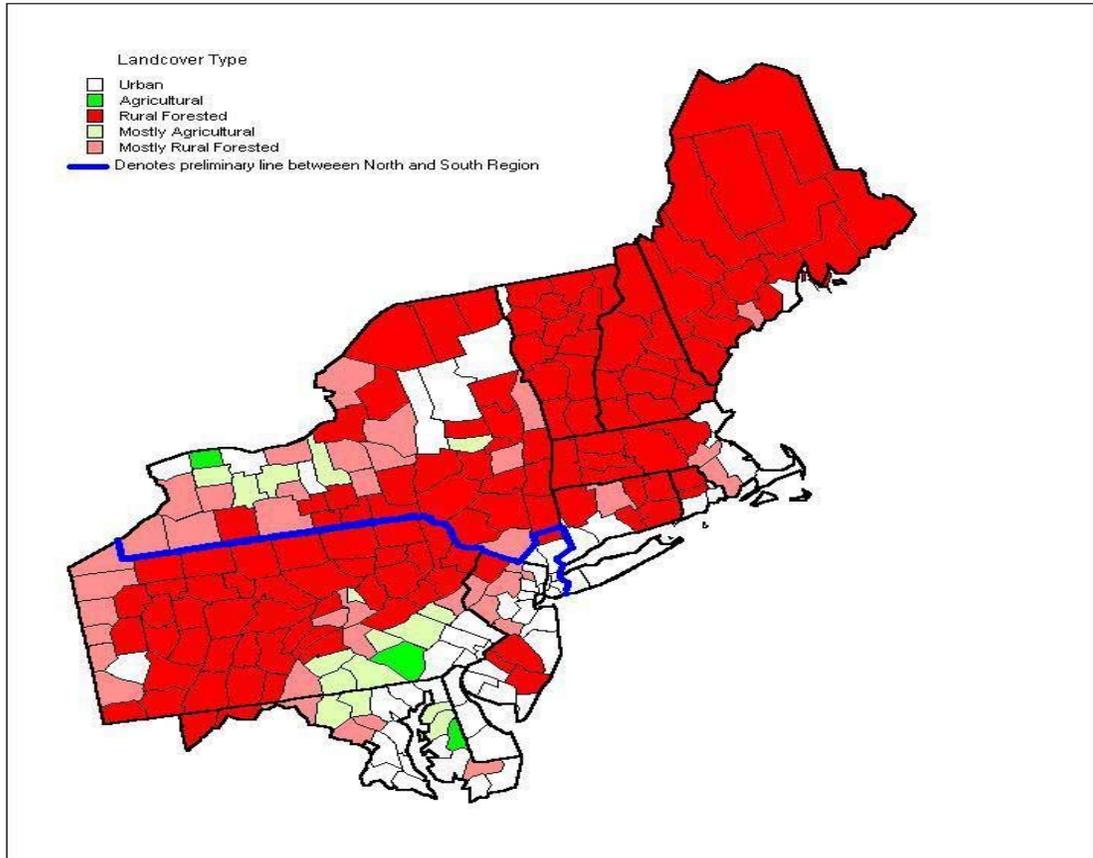
Table 1. Recommended Stratification Scheme for the Sample Frame

Region ¹	General Land Use/Cover					
	Urban		Rural - Forested		Rural - Non-Forested	
	Single-Family ²	Other (Apt./ Multi-family/ Mobile home)	Single-Family ²	Other (Apt./ Multi-family/ Mobile home)	Single-Family ²	Other (Apt./ Multi-family/ Mobile home)
North-OTC	# housing units	# housing units	# housing units	# housing units	# housing units	# housing units
South-OTC	# housing units	# housing units	# housing units	# housing units	# housing units	# housing units

¹ Regions (north and south) to be determined at the county or census tract level via an analysis of heating-degree day data, as specified in recent draft U.S. Environmental Protection Agency (EPA) guidance.

² Single-family detached and attached dwellings up to 2 units (i.e., duplexes).

Figure 1. County Designations for Developing the Residential Wood Combustion Sample Frame



geographic tiers. Pechan anticipates that after a county-level assessment of HDD has been completed (not weighted by population), the distinct groupings shown in Table 2 will change. In developing the sample frame in Phase II, the number of geographic strata will be kept to two in order to keep the minimum sample size at a reasonable level (i.e., the north and south split will occur somewhere around 5400 HDD/year).

Table 2. State-Level HDD Data

State	Population-Weighted Annual HDD	Tier Assignment
DC	Not available	South
MD	4234	South
DE	4252	South
NJ	4913	South
RI	5291	South
PA	5362	South
NY	5452	South (NYC) North (upstate)
CT	5612	North
MA	5754	North
NH	7053	North
ME	7614	North
VT	7627	North

4. Data Analysis and Scale-Up for Inventory Development

Once the survey has been completed, the survey results will be quality assured. Quality assurance (QA) measures include comparison of respondent location based on the purchased sample and the respondent-supplied zip code. The survey data base will also be reviewed for missing data and data outliers (e.g., miscoded data). Following QA, sample weights need to be calculated for each cell to compensate for the stratified sample frame (differing response rates will be achieved in each cell). After sample weights have been applied to the survey responses, the weighted responses are in the same proportion as the original sample.

After weighting, the survey data will be statistically analyzed so that they can be scaled-up for inventory development. The primary data element will be annual wood consumption per household (annual activity). Statistical techniques, such as analysis of variance (ANOVA), will be used to determine whether annual activity is statistically different among different sample frame cells and strata. For example, ANOVA will be used to determine whether annual activity in single-family homes in northern rural areas is statistically different than in urban areas. If so, these cells would remain distinct as activity indicators in the emissions inventory. If not, the data will be merged to form a new cell [i.e., single-family homes in the northern RPO (no distinction of rural or urban status)]. Additional statistical comparisons will be made to determine distinct activity indicators.

Once the statistical analysis described above is performed, descriptive statistics (e.g., mean, median, range, standard deviation) will be computed for each of the distinct activity indicators. The remaining data (e.g., equipment types, temporal allocation) will then be characterized for each of the activity indicators. Source classification codes (SCCs) will be assigned for each equipment type, consistent with Emission Inventory Improvement Program (EIIP) guidance (EIIP, 1997). Temporal allocation will be assigned at the following levels: seasonal, at a minimum (monthly is possible, depending on the quality of the survey responses); days/week; and hours/day.

The activity data will be used to construct an inventory using emission factors in the EIIP document (EIIP, 1997). It should be noted that the U.S. Environmental Protection Agency (EPA) is currently performing a round of tests for residential wood combustion, and new emission factors may be available for use in Phase II of this project (Kinsey, 2001). The new emissions data may be available early in 2002, and may include tests of gaseous ammonia, an important data element for use in regional haze and fine particulate modeling.

Annual emission estimates will be calculated using the EIIP and any subsequent EPA-approved emission factors for each equipment type. One data element needed for inventory development is the type of wood burned. If this information is not available, it will be determined based on a review of local forest cover and previous studies in the RPO (e.g., to break out the relative use of softwood from hardwood species). In addition, seasonal or monthly emission estimates will be calculated from the temporal data gathered during the survey.

C. OPEN BURNING – HOUSEHOLD WASTE, YARD WASTE, LAND CLEARING DEBRIS, AND CONSTRUCTION/DEMOLITION WASTE

1. Recommended Survey Approach

In designing a survey approach for open burning categories, Pechan started by contacting the appropriate state and/or local air quality agencies to obtain information on state open burning restrictions for the categories in question, as well as to understand how open burning activity may already be tracked within a state. The results of this review are presented in Table 3 and were summarized in a Technical Memorandum to MARAMA (see Appendix A). Table 3 generally indicates whether or not a state, tribe, or district allows the open burning for various categories, including household waste, yard waste, land clearing debris, and construction/demolition waste. In discussions with state, local and tribal agencies, construction/demolition debris burning may be a significant source of open burning emissions. However, the majority of the RPO states do not allow construction/demolition debris burning. Details on the nature of the regulations can be found in Table 5 of the Technical Memorandum (see Appendix A).

For the majority of states, open burning (especially residential) is permitted and tracked at the local level. In discussions with RPO contacts, Pechan has found that open burning is not tracked or regulated by comparable agencies in all states. It may not even be tracked by comparable agencies within a state. In contacting the agencies expected to track open burning as identified in the work plan, some agencies may not be able to answer the survey questions. In these cases, the surveyor will ask to be referred to the appropriate agency/contact.

Pechan would like to emphasize that because of the wide variations in how open burning is regulated and permitted among the RPO states and tribes, developing a uniform set of survey questions is challenging. This is especially true for the open burning of household waste and yard waste by residences. For residential open burning, Pechan recommends performing a test survey or case study for select rural municipalities within each state/tribe that allows open burning. This will serve two purposes: 1) to establish that the questions asked are reasonable and can be answered by the identified respondents, before surveying the entire RPO area; and 2) to help refine the list of survey respondents for a given state/tribe. For example, in certain cases the local open burning officials are affiliated with the local fire fighting station. However, in speaking with contacts at Maryland Department of the Environment, the affiliation of the individual or agency that issues permits and tracks open burning within Maryland counties can vary from county to county (e.g., local health department, fire station, or environmental agency). Based on the results of the test survey, it will be determined whether to continue with a comparable survey for the remaining areas, or to simply scale the results using surrogate indicators such as urban and rural designations.

Table 3. Summary of State and Tribal Open Burning Restrictions and Survey Needs¹

State	No. of Counties	Household Waste Burning Allowed?	Survey for	Yard Waste Burning Allowed?	Survey for	Land Clearing Burning Allowed?	Survey for	Construction/ Demolition Debris Burning Allowed?	Survey for
Connecticut	8	No	RE	Yes	Activity	No	RE	No	RE
Delaware	3	No	RE	Yes	Activity	No	RE	No	RE
DC	1	No	RE	No	RE	No	RE	No	RE
Maine	16	Yes	-- ²	Yes	Activity	Yes	Activity	Yes	Activity
Maryland	24	Yes	Activity	Yes	Activity	No	RE	No	RE
Massachusetts	14	No	RE	Yes	Activity	No	RE	No	RE
New Hampshire	10	Yes	Activity	Yes	Activity	Yes	Activity	Yes	Activity
New Jersey	21	No	RE	No	RE	No	RE	No	RE
New York	62	Yes	Activity	Yes	Activity	Yes	Activity	Yes	Activity
Pennsylvania	65	Yes	Activity	Yes	Activity	Yes	Activity	Yes	Activity
PA - Philadelphia	1	No	RE	No	RE	No	RE	No	RE
PA - Allegheny	1	No	RE	No	RE	No	RE	No	RE
Rhode Island	5	Yes	Activity	Yes	Activity	Yes	Activity	No	RE
Vermont	14	No	RE	Yes	Activity	Yes	Activity	Yes	Activity
¹ Specifics on seasonal restrictions are listed in Table 5 of the Technical Memorandum.									
² Recommend using 1997 survey results and scale results to current year.									
Tribes									
St. Regis Mohawk	Tribe in NY	Yes	Activity	Yes	Activity	Yes	Activity	Yes	Activity
Penobscot Indian Nation	Tribe in ME	Yes	Activity	Yes	Activity	Yes	Activity	Yes	Activity
Mashantucket Pequot Tribal Nation	Tribe in CT	Yes	Activity	Yes	Activity	Yes	Activity	Yes	Activity

For land clearing debris and construction/demolition waste burning, since this is generally a commercial activity, the state and regional air quality agencies may be more likely to have records or permits for these practices indicating the date and location of where they occurred. In discussions with officials in Maine and New Hampshire, the amount of fuel consumed is not typically available, but default fuel loadings could be assumed per burn. The survey questions designed for these categories could also be posed to the local officials that are selected to participate in the test survey of residential open burning.

To improve emission estimates for open burning categories, Pechan recommends the following approach:

For states where open burning is prohibited:

1. Develop top-down estimates using EIIP procedures or those used for the 1999 and 2000 NEI for rural areas at the county level. Top-down estimates already developed by states using EIIP procedures should be used as a starting point.
2. Within each state, contact the appropriate inspection/enforcement personnel to conduct a rule effectiveness survey (RE). This may be personnel that are part of a state or regional enforcement program, or local enforcement officials. One would first try to obtain the information from the state contact, and, if they could not provide the data, the regional agency could be contacted.

For states/tribes where open burning is allowed:

1. For categories where the state/tribe, regional air quality agency, or forestry department is identified to maintain and track open burning permits, obtain information on the number of permitted burns, estimates on the amount of waste burned, type of waste burned, the date of the burn, and duration of the burn.
2. Select a sample of rural municipalities or counties (e.g., no more than 5) within each state/tribe, that represent towns with and without municipal trash service. Conduct test surveys of identified open burning officials to obtain information on the open burning regulations and activity within their jurisdiction.
3. Based on the test survey results, determine whether to continue with a comparable survey for the remaining areas, or scale the results using surrogate indicators such as urban and rural designations, and the availability of trash service.

a. Existing Surveys

Maine and Delaware have conducted open burning surveys in recent years. Maine conducted the *State of Maine 1997 Backyard Trash Burning (BYB) Study*, to gain knowledge of household waste burning practices by sending questionnaires to local fire wardens (ME DEP, 1997). The survey only included household waste (yard waste burning activity was not surveyed). This survey collected information on the number of burn barrels per county, and also noted whether the barrels were opened or closed. However, emission factors were not available for the two different types of barrels, so the number of open barrels and closed barrels were summed before applying emission factors for fine particulate matter (PM), volatile organic compounds (VOCs), and some hazardous air pollutant (HAP) species (including dioxin).

Maine's Department of Conservation, Forest Service, Forest Protection Division (the agency that administered the survey), believes it may be suitable to scale the household waste survey results to the current year since open burning regulations have not changed substantially since the survey was

conducted in 1997 (Parent, 2001). Scaling these results to the current year could be done using updated Census 2000 county level population data (i.e., assume the same percentage of households in each county is burning waste), but adjust the number of households to reflect the change in population.

The Maine Forest Protection Division issues and tracks open burning permits for other open burning categories. A copy of their open burning permit showed that it has information on the type of waste (e.g., brush, slash, other), date of burn, duration of burn, and location of burn. Information on the volume or mass of waste burned is not available. Permit data could first be obtained from this agency for the other open burning categories before requesting the information from local agencies.

The State of Delaware conducted a survey, *Recycling in Delaware, Public Attitudes and Perceptions*, that included questions of homeowners concerning leaf and brush waste burning (PRC, 1999). Respondents were asked whether they generated leaf and brush waste, and how households disposed of the tree/brush waste. Although the open burning of brush was practiced by households, the burning of leaves was not reported by respondents to be a specific disposal method. The data collected from this survey could be used to determine the average percent of waste burned per person (i.e., adjusting default per capita yard waste generation rates for the estimated fraction burned). In the most rural county, Sussex County, open burning of yard waste was more prevalent than in the two primarily urban counties.

2. Adjustments to Emissions

a. Control Efficiency

For the majority of the states, open burning restrictions are in place that all municipalities must adhere to, but still allow for more stringent regulations to be enacted if deemed necessary by local officials. County-specific information was available for some states, but Pechan anticipates that confirming open burning regulations at a local level would need to be determined through a survey that includes all towns in the RPO. Information obtained on local restrictions (which are generally open burning bans) allows one to assume 100 percent control efficiency (CE) for an area (or appropriate CE value), either all year or for a specific season. However, as mentioned later, RE may be less than 100 percent.

If the information on local restrictions is not obtained, it is difficult to predict for which areas 100 percent CE should be applied. The occurrence of these restrictions will not necessarily be tied to any measurable demographic surrogate such as population or land cover, but may depend on other factors such as cultural practices and political climate. Some states have indicated that local officials may run on the platform that they will not ban open burning if elected.

In certain cases, the existence of controls may be established without surveying every municipality. For example, in Maine and New Hampshire, backyard burning of household waste is not allowed in jurisdictions where trash service is available. So, data on the availability of trash service for counties in these states (or, if possible, for specific municipalities within a county) will assist in assigning controls to counties. Pechan already has these data for Maine for 1997, and could contact state waste management officials in New Hampshire to develop a comparable list. New York does not allow residential open burning in townships with a population over 20,000 (although land clearing debris burning is allowed in these areas). Using this control information for these states will improve the activity and emission estimates that are assigned to various county and subcounty areas within these states. Under Phase II, Pechan will also try to obtain any additional information from state/tribe and regional contacts as to the existence of local burning regulations.

b. Rule Effectiveness

Because open burning is conducted on private residences, and state or local enforcement efforts may be focusing on industrial activities, noncompliance with open burning restrictions is likely occurring in some areas. Based on feedback from RPO states, violations of land clearing debris and construction/demolition waste burning rules may also be common. For areas where a certain category of open burning is not allowed, the extent of noncompliance could be estimated by surveying inspection and enforcement personnel (either state or regional). The survey could be a slightly modified version of the survey recommended by EPA guidance on determining RE (EPA, 1992). A proposed survey form is included in the Phase II Work Plan in Appendix B.

c. Rule Penetration

If surveys of activity are known to include estimates of burning that are not technically covered by the regulation, then some adjustment for this should be made in the rule penetration (RP) value applied to the emission estimates. Through the survey, it will be established whether a jurisdiction has a regulation prohibiting open burning and whether the regulation contains exemptions. For example, some areas may allow for brush waste burning as a disposal option after a damaging storm. For a given time period, the amount of brush waste that falls under this exemption relative to the total should be estimated (e.g., as a percentage) to develop an RP value. As another example, Delaware applies a 99 percent RP value to their residential waste open burning emissions, because campfires are not subject to their open burning regulations.

3. Survey Instrument

The survey forms for each open burning category were developed largely based on the emission inventory data needs and have not been tested to the extent that the survey questions for residential wood combustion have been tested. Because open burning is not tracked consistently among the various states, the questions may need to be less prescriptive and be tailored depending on what agency or individual is established to be the open burning contact. As suggested above, a test survey on a smaller sample of respondents should be considered to establish whether the identified survey respondents were able to provide information as requested by the survey. This will also help to determine if the questions are ambiguous as phrased.

One suggestion by an RPO state is to include questions concerning yard waste burning at the end of the residential wood burning survey. In most states, yard waste burning is allowed, so survey respondents may answer truthfully. However, if seasonal summer bans are in effect, residents may not respond accurately about their summer burning practices. Upon further discussions with members of the technical oversight group, it was established not to pursue this suggestion.

4. Survey Contacts

The survey contacts are listed in the Phase II Work Plan in Appendix B. The contacts were identified based on initial discussions with state air quality personnel. These contacts consist of both state enforcement and inspection personnel, state and local burning officials, and fire stations. Because open burning is tracked and regulated so differently among states, a consistent set of survey respondents representing comparable agencies could not be developed.

Pechan was not able to obtain local open burning official contacts for all RPO states. Contacts for some states are provided in the Phase II Work Plan. If a comprehensive, region-wide survey is performed after the recommended test survey, Pechan would propose to obtain a listing of local fire stations for the remaining states from the National Public Safety Information Bureau. This bureau publishes a “National

Directory of Fire Chiefs and Emergency Medical Service Administrators.” This directory contains information for 36,000 fire departments in the U.S. including: 1) Chief or Director’s name; 2) Title; 3) Department Name; 4) Mailing Address or Street Address; 4) County; 5) Administrative Phone Number; 6) Fax Number; 7) Financial Structure (Municipal, County, District, Independent); 8) Department Type (Volunteer, Paid, Combination); 9) Department Specializations; 10) Demographic Data (Populations, Number of Emergency Personnel and Number of Firefighters). The 2002 Directory will be available in December 2001 for a fee of \$99.

5. Inventory Development

For open burning in areas where it is banned, top-down emission estimates will be adjusted based on RE values obtained from the RE questionnaire. After a case study survey is performed for collecting activity at a local level, the feasibility for a comparable survey for the entire RPO region will be established. Permit data from state/tribe and regional contacts can be used to improve top-down estimates for areas where burning is allowed.

Source classification codes will be assigned for each open burning category based on the most current EPA SCC list. SCCs for yard waste burning and land clearing debris burning have recently been added to EPA’s official SCC list. An SCC for construction/demolition waste burning has not been established, but a new SCC corresponding to this category could be developed for EPA’s official list.

Based on temporal data gathered from open burning contacts, seasonal emission estimates will be calculated from annual estimates. Default profiles could be developed for some categories including leaf burning (primarily a fall activity) and brush waste burning (may be more common in the non-summer months due to ice storms, other winter storms, and spring “cleanup”).

Annual emission estimates will be calculated using the EIIP and any subsequent EPA-approved emission factors for each type of open burning. Emission factors are not available specifically for construction/demolition waste burning. In some states (e.g., New Hampshire and Vermont) only untreated wood is allowed to be burned, so emission factors for land clearing debris burning could be used. Alternatively, emission factors for structure fires may be reasonable if structures are being demolished before being burned. The suitable emission factor would depend on the composition of construction/demolition waste.

In discussions with the RPO contacts and local permitting authorities, obtaining specific information on the amount of waste or wood per permitted burn, or the type of wood does not look favorable. As such, loading factors recommended by the EIIP would be used as a default. In addition, Pechan could adjust land clearing debris loading factors using a procedure used for 1999 county-level open burning emissions in the NEI. For the NEI, loading factors were weighted by the percentage of land covered with hardwoods, softwoods, and grasses, as obtained from EPA’s Biogenic Emissions Inventory System (Thesing, 2001).

6. Subcounty Allocation

Open burning of household waste by residences is expected to occur more frequently in rural areas than urban areas, presumably because many densely populated towns have prohibitions against open burning that are likely to be enforced. Therefore, the urban and rural spatial coverages from the Bureau of Census that will be obtained for the residential wood combustion analysis for 2000 can also be used to allocate county-level emissions to the subcounty or census tract area based on whether the majority of census blocks within a track are classified as urban or rural. Unless there is information available to indicate otherwise, zero open burning emissions can be assumed for urban areas.

Activity for yard waste burning and land clearing debris burning may also be further allocated based on whether a rural area is forested or non-forested. However, in discussions with New York Forest Ranger contacts, permits can be issued for land clearing debris burning in urbanized areas of New York where residential waste burning is prohibited, so urban forest coverages may be needed as well. A spatial coverage is available from the USGS, the USGS North American Land Cover Database, Version 2, that contains land cover data at a 1 km grid cell that could be used for these categories.

The occurrence of construction/demolition waste burning may not correlate with any available spatial coverages. Any survey activity and emissions for this category may need to be assigned uniformly throughout the county (if subcounty data is not obtained from the survey).

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APPENDIX A

Summary of Tasks 1 and 2; Recommendations for Phase II Survey

Technical Memorandum

Summary of Tasks 1 and 2; Recommendations for Phase II Survey

Technical Memorandum

Prepared for:

**Mid-Atlantic Regional Air Management Association (MARAMA)
711 W. 40th Street, Suite 318
Baltimore, MD 21211**

Prepared by:

**E.H. Pechan & Associates, Inc.
3622 Lyckan Parkway, Suite 2002
Durham, NC 27707**

May 18, 2001

CONTENTS

A.	SUMMARY OF RESIDENTIAL WOOD SURVEYS	7
	Table 1. Summary of Previous Residential Wood Surveys	8
1.	Recommendations for Phase II Survey Work	11
	Table 2a. Recommended Sampling Scheme	14
	Table 2b. Optional Sampling Scheme A	14
	Table 2c. Optional Sampling Scheme B	15
	Table 2d. Optional Sampling Scheme C	15
B.	AVAILABILITY OF CENSUS DATA	16
	Table 3. Availability and Release Dates for Census Data	17
C.	SUMMARY OF OPEN BURNING RESTRICTIONS	17
1.	State/Local Agency Restrictions	17
	Table 4. Summary of Open Burning Restrictions	18
	Table 5. Regional Planning Organization (RPO) Agency Open Burning Regulations	21
2.	Tribal Agency Contacts	27
3.	Recommendations for Phase II Survey Work	27
	Table 6. Potential GIS Spatial Coverages	28
D.	REFERENCES	30

Table 1.	Summary of Previous Residential Wood Surveys	8
Table 2a.	Recommended Sampling Scheme	14
Table 2b.	Optional Sampling Scheme A	14
Table 2c.	Optional Sampling Scheme B	15
Table 2d.	Optional Sampling Scheme C	15
Table 3.	Availability and Release Dates for Census Data	17
Table 4.	Summary of Open Burning Restrictions	10
Table 5.	Regional Planning Organization (RPO) Agency Open Burning Regulations	21
Table 6.	Potential GIS Spatial Coverages	28

A. SUMMARY OF RESIDENTIAL WOOD SURVEYS

A summary of methods used in previous surveys of residential wood combustion is provided in Table 1 below. The table denotes information about the survey universe, design (e.g., stratified random sampling), sampling method (mail-out or telephone), and analysis methods. Pechan obtained reports for several survey studies, including some that had taken place within OTC states. Most of these surveys were also included in the summary of reports compiled by U.C. Berkeley for the California Air Resources Board (CARB).

Pechan also attempted to contact personnel at key state agencies [e.g., Oregon Department of Environmental Quality (ODEQ), Colorado Department of Public Health and Environment] to discuss previous efforts in residential wood combustion surveys. Staff at ODEQ related that most of the surveys that they had conducted had been mail-out surveys conducted in-house (due to lack of available funding; Collier, 2001). One telephone survey had been conducted by an outside firm and had gone well. The surveys conducted by ODEQ have been in more rural/small town areas (e.g., Medford, OR) as compared to the universe of wide urban and rural differences in the RPO states. Hence, these surveys were not designed on a statistical basis (e.g., stratified, designed to meet specific precision levels). Surveys were generally mailed out to 3,000-4,000 residents (response rates have been around 25%). Data gathered include type of equipment (fireplace, OR-certified/non-certified wood stove, pellet stove; or other), types of wood burned, and sometimes temporal information (e.g., length of season).

Pechan spoke with staff at the Colorado Department of Public Health and the Environment (CDPHE; Silverstein, 2001). According to CDPHE, the last residential wood survey was conducted in 1991. This survey targeted the Denver metropolitan area. A telephone interviewing approach was used to collect approximately 500 responses. The survey was designed to collect a statistically significant number of responses. No distinction was made as to urban or rural usage, since the universe only covered the urban Denver area. The results of this survey have been used in subsequent emission inventories for at least the Denver area. It was not clear whether the data were also used to estimate emissions in other parts of Colorado.

The information summarized in Table 1 is broken out into several criteria:

survey universe - this is both the spatial (geographic) extent as well as the coverage of the various types of wood burning appliances (i.e., fireplaces, woodstoves and fireplace inserts, wood furnaces, and pellet stoves). In one study, outdoor fire pits were also covered (May, 1996);

sample design - refers to whether a random sampling scheme was employed; whether sample stratification was employed and how the sample was stratified;

sample size - the size of the sample drawn (e.g., number of surveys sent out, number of telephone numbers collected for the survey);

sampling method - mail-out versus telephone interview;

Table 1. Summary of Previous Residential Wood Surveys

Reference	NYFDC, 1996	Tanjuakio and Mackenzie, 1995	ACHD, 1992	VDPS, 2000	MSPO, 1999	May, 1996
Survey Universe	NY state wood stoves, fire places, furnaces (pellet fuel use not covered).	DE state fireplaces, wood stoves, furnaces, and pellet stoves.	All wood burning equipment in Clairton non-attainment area in Allegheny Co., PA.	All wood burning equipment in VT.	All wood burning equipment in ME.	All wood burning equipment in KS, NE, SD, and ND.
Sampling Design	random sampling of residential phone numbers; sample divided among counties based on population; sample size in NY City reduced to increase sample numbers in other areas.	random sampling of households stratified by zip code; sample drawn in proportion to number of households in each zip code.	random sampling of households in select zip codes.	random sampling of households in VT; stratified by total number of households in a county.	random sampling of households in ME; a sample of 400 was designed to yield an error of +/- 5% at a 95% confidence level.	random sampling of households in each state with urban and rural strata in KS and NE; sample size determined based on +/- 20% error at the state level.
Sample Size	3,000	961	1,000	1,176 (estimated)	n/a (407 responses)	3600 (900/state)
Sampling Method	telephone	mail-out (2 follow-ups)	mail-out	telephone	telephone	telephone
Data Elements	annual wood consumption, type of use, residence type, community type, method of obtaining wood.	equipment type, current use/non-use (reason); annual amount; wood source.	primary and supplemental heat sources; annual wood consumed; wood source, purchase price; wood type; housing type.	annual wood consumed; equipment type; primary, supplemental, or pleasure purpose; housing type; other sources of heat.	annual wood consumed; equipment type; primary or supplemental heat purpose; form of wood purchased; wood price; other heating fuels.	annual wood consumed; wood consumed during last 5 years; consumption at primary residence, secondary residence, other residence; equipment type; primary, supplemental, or pleasure purpose; wood type
Analysis Methods	Details lacking (e.g., unclear if sample weights were applied, or if any statistical analysis was performed between counties/regions).	Details lacking; response averages and percent distributions presented for each data element.	Details lacking; number of responses to each question and totals presented.	Sample weights were assigned to achieve equal proportion to the number of county households estimated by VT and BOC; no statistical analysis was performed between	Results reported as percentages of responses; no statistical analysis was performed between counties or regions.	No details; results reported as averages or percentages of responses.

Table 1 (continued)

Reference	NYFDC, 1996	Tanjuakio and Mackenzie, 1995	ACHD, 1992	VDPS, 2000	MSPO, 1999	May, 1996
				counties.		
Survey Results	1,925 respondents, 607 had wood burning equipment, 371 had used wood during the previous season. Higher usage (factor of 4 to 10) shown in rural versus urban areas. Single-family homes consumed 95% of wood fuel.	879 respondents; 399 had wood burning equipment (82% fireplaces, 11% wood furnaces); 59% had burned wood that season (another 12% planned to burn in the future); average wood consumption in urban New Castel Co. = 0.75 cords/yr compared to 1.65 and 2.18 cords/yr in the other 2 more rural counties.	330 respondents; 90% of respondents use natural gas for primary heat; 31% had electricity for supplemental heat, 18% used wood; 82% responded that they did not use a fireplace, and of the 18% that did, 60% used it only occasionally. 91% of respondents lived in a house.	482 respondents with a reported response rate of 40% (used to estimate sample size above); 16% of respondents used wood as primary heat source, another 15% as secondary source, and 2.4% as fireplace (pleasure); rest of respondents (66%) did not burn wood; 4.8 cords/yr burned for primary heat, 2.1 for supplemental, and 0.3 for pleasure purposes; 52% of wood burners were in detached single-family homes or duplexes, 37% were in single-family attached homes (more than 2), 14% were in apartments/condos, and 19% were in mobile homes.	407 responses; 75% of respondents used fuel oil, 26% wood, 10% electricity, 8% kerosene; 8% propane; 7% natural gas; small amounts of coal and solar (total does not add to 100% since both primary and secondary heating fuels were included in the responses); equipment was categorized as woodstoves, fireplace inserts, central wood-only furnace or boiler, and Δ other Δ (e.g., pellet stove); 82% of wood burning respondents used woodstoves, 6% inserts, 13% furnaces, and 3% other.	total number of responses not given, however error of +/- 12 to 14% was achieved at the state level (+/- 9% at the level of the entire 4-state region); average consumption of 1.35 cords/yr; 34% of households estimated to have wood-burning equipment; 68% of equipment owners had used the equipment in the previous year.
Comments	For reporting purposes (not sampling purposes), the state was divided into geographic units based on Forest Service inventory. A re-sampling of households previously sampled in 1989-90 was also performed to gather information on trends.	Confusing use of the term Δ furnace. Δ Possibly this was meant to be stoves (either wood or pellet). By drawing the sample based on proportion of households by zip, rural areas with higher activity were probably under-represented (55% burned wood in	Survey form not included in report. Not possible to assess the potential for negative bias based on the design of the survey instrument.	During the 1997 survey, 3.3% of respondents reported they would be installing a wood burning appliance in the next year.	Other information requested included whether the respondent rented or owned the home; income level; respondent age; education level; gender.	16% of wood burning respondents used wood for primary heat, 39% as secondary, and 45% for pleasure; 53% used fireplaces, 38% used wood stoves/inserts, 2.2% furnaces, and 7% "other" appliance; Δ Other Δ equipment types also included

Table 1 (continued)

Reference	NYFDC, 1996	Tanjukio and Mackenzie, 1995	ACHD, 1992	VDPS, 2000	MSPO, 1999	May, 1996
		New Castle county compared to 63-74% in the other two counties); New Castle Co. had only 2% citing wood as primary heat source compared to 16-20% in the other 2 counties.				A fire pits; survey of wood producers was also conducted.

data elements - information requested on the survey or interview forms. Not all of the data elements are listed for each study (for example, some studies requested information on other sources of energy, wood source, wood price, etc.);

analysis methods - refers to analytical methods used to scale-up survey results to represent regional (e.g., county) totals or averages. In particular, if a stratified sampling procedure was employed, procedures for weighting the sample results should have been employed. Also noted are whether statistical methods, such as analysis of variance (ANOVA), were used to assess the survey results (e.g., to identify statistically-significant differences between cells in the sample frame);

survey results - the number of completed surveys; also summary data from the surveys; and

comments - additional comments regarding the survey approach or results.

Pechan also reviewed a study for the plains states (May, 1996). This study covered all wood burning equipment in the states of Kansas, Nebraska, South Dakota, and North Dakota. Random sampling of households in each state was performed with counties in KS and NE stratified into urban and rural strata based on population density (SD and ND counties were considered to be all rural). A telephone interviewing approach was used to survey 900 households in each state (the number of completed surveys was not listed). Data elements included: annual wood consumed; wood consumed during last 5 years; consumption at primary residence, secondary residence, other residence; equipment type; primary, supplemental, or pleasure purpose; wood type. As with most of the other studies reviewed, details were lacking on methods of analysis (e.g., sample weighting applied to the stratified portion of the sample frame, statistical analysis methods used on the survey data). Results included: 16% of wood burning respondents used wood for primary heat, 39% as secondary, and 45% for pleasure; 53% used fireplaces, 38% used wood stoves/inserts, 2.2% furnaces, and 7% Aother@ appliance. Included in the Aother@ appliance category were outdoor fire pits. This was the only study where this equipment was included in the survey.

Important criteria gathered during the review of previous studies include the significantly higher activity of rural versus urban households and single-family versus multi-family housing units. In addition where wood was the primary heating fuel, the reported average consumption was on the order of 4 cords of wood per year in the northern portion of the RPO compared to around 2 cords in the southern portion. Since most of these surveys were not conducted to support air quality studies, some important information was generally lacking (e.g., temporal allocation, such as weekday versus weekend usage). Also, for wood stove usage, information on whether the stove was EPA-certified was not gathered (age of the unit is often used as a surrogate to determine whether or not the stove is certified). Finally, all of the different types of equipment were not always covered (e.g., wood-fired furnaces or boilers). One study gathered information on the use of outdoor fire pits.

1. Recommendations for Phase II Survey Work

The following list of recommendations is provided in order to develop an emissions inventory that is statistically-sound and highly-resolved both temporally and spatially:

survey universe - the universe will cover the entire Regional Planning Organization (RPO). All equipment types should be covered (i.e., fireplaces, wood-stoves and fireplace inserts, wood furnaces, and pellet stoves). MARAMA may also want to consider including outdoor fire pits in the survey. Pechan is not aware of any previous efforts in quantifying these emissions, however they are probably most suited to quantification as another type of equipment under the residential wood burning category;

sample design - employ a random sampling scheme of a stratified sample. Sample stratification should be based on criteria that are known or assumed to significantly contribute to the variability in wood burning activity. From the studies reviewed, urban versus rural residence appears to be an important criterion. This is probably due both to the availability of other primary fuels in urban areas (e.g., heating oil, natural gas), as well as the price and availability of wood. BOC data at the census tract level can be used to distinguish urban versus rural areas.

Another important criterion appears to be latitude. The northerly latitudes seem to report a higher per household consumption of wood. Hence, we should consider stratifying the survey by latitude based on heating-degree days.

Another criterion relative to wood burning activity is the type of housing (e.g., single-family detached homes, attached homes, mobile homes). Attached homes, including apartments and condos, seem less likely to rely on wood as a primary source of heat. BOC data at the census tract level could also be used to perform this type of stratification.

Finally, wood availability is another driver in wood consumption. Land cover data (e.g., forested, non-forested) could also be used to stratify the sample. In some ways this stratification scheme duplicates the rural/urban stratification mentioned above. However, the land cover data could allow us to distinguish between rural forested and non-forested areas. The land cover data can also be used to determine the type of wood consumed or to quality assure survey responses.

Optional sampling schemes are provided in Tables 2a through 2d.

sampling method - a computer-assisted telephone interviewing (CATI) method is recommended. In a CATI method, the survey questionnaire is programmed into the computer and data entry is handled directly during the interview process. The survey sample is also programmed into the CATI system, so that random sampling can be automatically performed and the completed responses can be tracked. Among other things, the CATI system also tracks the need for call-backs to various respondents (usually 3 calls are attempted per respondent);

data elements - Pechan will develop a survey instrument with the minimum number of data elements needed to support development of the inventory needed by MARAMA. This instrument will be based on the questionnaire being used by UCB in their work for CARB. The primary data elements will be annual wood consumption by equipment type, type of housing unit, monthly allocation of wood consumption. Additional elements include specific information for some equipment (e.g., EPA-certified stove), wood type, and week-end versus weekday activity;

analysis methods - apply sample weighting to account for the stratified sampling scheme; perform statistical analysis of the survey data to determine whether there are significant differences between the cells of the sample frame (i.e., to identify significant differences in activity among regions, housing types, or rural/urban areas).

Optional sampling schemes are provided in Tables 2a through 2d. In developing a random stratified sampling scheme, it is important to identify the criteria that contribute to the variability in the primary variable being surveyed (i.e., annual wood consumption). From the review of previous studies, it is important to differentiate rural versus urban consumption, single-family versus multi-family units, and geographic region (i.e., north versus south). There may also be other factors that influence the variability in wood consumption. These could include socio-economic factors (e.g., income) and the availability of wood (e.g., forested versus non-forested areas).

In addition to identifying the sources of variation, one must also consider the ramifications of a highly-stratified sampling scheme. The minimum number of samples needed for a survey is dependent on the number of cells the sample frame, as well as the desired level of precision (error). Hence, the level of stratification must be weighed against the available resources.

Table 2a provides a sampling scheme that incorporates the most significant sources of variation known for residential wood combustion. Although this might represent the most ideal structure for a sample frame, there are a total of 18 cells. In order to get a sense of the minimum sample sizes required, approximately 35-40 samples (completed surveys) would be needed in order to achieve a +/- 15% level of precision within each cell. Hence, the total minimum sample size is on the order of 720. To achieve a within cell level of precision of +/- 5%, approximately 400 samples would be required per cell (minimum sample size of 7200). Resources generally available to perform environmental surveys, such as wood combustion surveys, support survey efforts on the order of 1,000 samples. It should be noted that with an in-cell level of precision of +/- 15%, the precision at the level of each strata or for the sample as a whole will be higher (probably on the order of +/- 6 or 8%).

Given the information above, there will likely be the need to accept a lower level of precision or reduce the level of stratification of the sample frame. Therefore, Tables 2b through 2d provide additional sampling options with reduced stratification in Tables 2c and 2d. Tables 2b and 2c incorporate a stratification for suburban household units. This could be an important distinction given the differences shown between urban and rural consumption (BOC data at the census tract level would allow us to define census tracts as urban versus suburban).

Table 2a. Recommended Sampling Scheme

Region ¹	General Land Use/Cover					
	Urban		Rural - Forested		Rural - Non-Forested	
	Single-Family ²	Other (Apt./ Multi-family/ mobile home)	Single-Family ²	Other (Apt./ Multi-family/ mobile home)	Single-Family ²	Other (Apt./ Multi-family/ mobile home)
North	# housing units	# housing units	# housing units	# housing units	# housing units	# housing units
Mid-OTC	# housing units	# housing units	# housing units	# housing units	# housing units	# housing units
South-OTC	# housing units	# housing units	# housing units	# housing units	# housing units	# housing units

¹ Regions (north, mid-, and south) to be determined at the county or census tract level via an analysis of heating-degree day data, as specified in recent draft EPA guidance.

² Single family detached and attached dwellings up to 2 units (i.e., duplexes).

Table 2b. Optional Sampling Scheme A

Region ¹	General Land Use					
	Urban		Suburban		Rural	
	Single-Family ²	Other (Apt./ Multi-family/ mobile home)	Single-Family ²	Other (Apt./ Multi-family/ mobile home)	Single-Family ²	Other (Apt./ Multi-family/ mobile home)
North	# housing units	# housing units	# housing units	# housing units	# housing units	# housing units
Mid-OTC	# housing units	# housing units	# housing units	# housing units	# housing units	# housing units
South-OTC	# housing units	# housing units	# housing units	# housing units	# housing units	# housing units

¹ Regions (north, mid-, and south) to be determined at the county or census tract level via an analysis of heating-degree day data, as specified in recent draft EPA guidance.

² Single family detached and attached dwellings up to 2 units (i.e., duplexes).

Table 2c. Optional Sampling Scheme B

Region ¹	General Land Use					
	Urban		Suburban		Rural	
	Single-Family ²	Other (Apt./ Multi-family/ mobile home)	Single-Family ²	Other (Apt./ Multi-family/ mobile home)	Single-Family ²	Other (Apt./ Multi-family/ mobile home)
North	# housing units	# housing units	# housing units	# housing units	# housing units	# housing units
South-OTC	# housing units	# housing units	# housing units	# housing units	# housing units	# housing units

¹ Regions (north and south) to be determined at the county or census tract level via an analysis of heating-degree day data, as specified in recent draft EPA guidance.

² Single family detached and attached dwellings up to 2 units (i.e., duplexes).

Table 2d. Optional Sampling Scheme C

Region ¹	General Land Use			
	Urban		Rural	
	Single-Family ²	Other (Apt./ Multi-family/ mobile home)	Single-Family ²	Other (Apt./ Multi-family/ mobile home)
North	# housing units	# housing units	# housing units	# housing units
South-OTC	# housing units	# housing units	# housing units	# housing units

¹ Regions (north and south) to be determined at the county or census tract level via an analysis of heating-degree day data, as specified in recent draft EPA guidance.

² Single family detached and attached dwellings up to 2 units (i.e., duplexes).

One drawback in reducing the level of stratification is the reduced ability to analyze differences amongst the various strata. While it is possible to combine strata to increase the number of samples during data analysis, it is usually not possible to subdivide strata after the survey to assess differences within sample frame cells. Therefore, in weighing decisions regarding the sample frame, MARAMA should consider lowering within cell precision requirements (in the +/- 10-15% range) in order to achieve a reasonable level of stratification. Sampling option B in Table 2c may provide the best balance of stratification versus required resources.

After receiving comments from MARAMA on the recommended sampling scheme (Table 2a through 2d), Pechan will develop optional sample frames by incorporating housing unit data from the Bureau of Census. Optional sample frames incorporating differing levels of precision, will be presented in order to show the changes in minimum sample size required. Pechan's recommendations will be included. These options will be submitted via e-mail to the MARAMA Project Manager for review. After receiving MARAMA's selection for the sample frame, Pechan will incorporate it into the Phase II Work Plan in the Draft Final Report.

B. AVAILABILITY OF CENSUS DATA

Emission estimation methods for open burning and residential wood have typically relied on population and housing data compiled by the U.S. Bureau of the Census. The Emission Inventory Improvement Program (EIIP) presents alternative methods that rely on these Census data. For example, household waste and yard waste burning emissions may rely on the percentage of population within a county that is considered rural or urban. In addition, emissions for residential wood may be developed using data on the heating characteristics for households, including the fraction of households using wood as a primary fuel. These data are available from the 1990 Census. In addition, the recommended method for residential wood as proposed in the draft report, *Recommended Procedure for Compiling Emission Inventory National and County Level Activity Data for the Residential Wood Combustion Source Category*, (EPA, 2000) relies on regional data from the American Housing Survey.

The Census Bureau is in the process of compiling and publishing updated data for the year 2000. Pechan reviewed the release schedule for Census 2000 Products posted on their web site, and made follow-up phone calls as needed. Table 3 describes the availability of the Census data that are generally needed for top-down methods for the open burning and residential wood categories. This includes data from the most recent 2000 Census, as well as from periodic American Housing Surveys conducted by the Census Bureau.

Table 3. Availability and Release Dates for Census Data

Data Source	Geographic Level	Availability
2000 Population Data	County	Data has been released; available for download from the Census Bureau web site
2000 Urban and Rural Population	County, Census tract	Data expected to be released May 2002
2000 Housing Characteristics	County , Census tract	Data expected to be released May-Sept. 2001
American Housing Survey for the United States, 1999	Census Region	Data is currently available at the Census Bureau web site

If MARAMA decides not to conduct a survey for the entire RPO region, these data may be used as scaling surrogates to estimate emissions from the survey data to the remaining non-surveyed areas. For example, activity data obtained from the survey (or emissions as calculated from survey data) could be scaled accordingly to the remaining areas based on the amount of rural population within a county. If the Phase II survey results represent areas below the county level, these results can be scaled up to the county level, or scaled to other non-surveyed counties using 2000 BOC data on urban and rural classification, or housing characteristics data by Census tract within a county.

As an alternative, independent top-down methods can be used for the remaining areas, which could be based on EIIP methods, or based on current top-down emissions used for open burning in Version 4 of the NEI, and for residential wood as described in EPA, 2000 reference. Pechan will discuss these options with MARAMA.

C. SUMMARY OF OPEN BURNING RESTRICTIONS

1. State/Local Agency Restrictions

Information was compiled on open burning restrictions in the RPO States. We reviewed open burning regulations available on State and local air quality agency web pages and compiled the regulations into a table. The table was then distributed to the RPO contacts for their review and comment. From this information, we prepared a summary in Table 4 for each open burning category to indicate whether a State allows open burning for a specific type of waste, whether the burns require a permit, and who issues and tracks the permits. Any exceptions to the regulations are noted as well. Note that there are still some gaps in the summary. We will be following up with these States to obtain the needed information. Table 5 presents a more detailed description of the regulations by State or local area, and by open burning category. Temporal restrictions on burning are also indicated.

Table 4. Summary of Open Burning Restrictions

HOUSEHOLD WASTE BURNING RESTRICTIONS				
<i>Geographic Area</i>	<i>Household waste burning allowed?</i>	<i>If yes, is permit required?</i>	<i>Issued by</i>	<i>Exceptions</i>
Connecticut	No			
Delaware	No			
District of Columbia	No			
Maine	Yes	Yes	Local fire warden	For paper products only; cannot burn if public removal service available
Maryland	Yes	Yes	Local open burning official	
Massachusetts	No			
New Hampshire ²	Yes	Yes	Municipality	Cannot burn if public removal service available
New Jersey	No			
New York	Yes	Yes	Regional Permit Office	For paper products only; cannot burn in cities with population greater than 20,000
Pennsylvania	Yes	No		Must be in a burn barrel
Allegheny Co	No			
Philadelphia	No			
Rhode Island	Yes	Yes	Municipality	
Vermont	No			
¹ New Hampshire anticipates enacting a Statewide regulation by January 2002 that will ban all household waste burning.				

Table 4 (continued)

YARD WASTE BURNING RESTRICTIONS				
<i>Geographic Area</i>	<i>Yard waste burning allowed?</i>	<i>If yes, is permit required?</i>	<i>Issued by</i>	<i>Exceptions</i>
Connecticut	Yes, small brush only	Yes	Local open burning official	
Delaware	Yes	Notification required	Fire Call Board	Not allowed during peak ozone season in Kent and New Castle counties
District of Columbia	No			
Maryland	Yes	Yes	Local open burning official	
Maine	Yes	Yes	Local fire warden	
Massachusetts	Yes	Yes		Cannot burn in several municipalities
New Hampshire	Yes	No		
New Jersey	No			
New York	Yes	Yes	Regional Permit Office	Only allowed in certain rural areas
Pennsylvania	Yes	No		
Allegheny Co	No			
Philadelphia	No			
Rhode Island	Yes	Yes	Municipality	
Vermont	Yes	Yes	Municipality	

Table 4 (continued)

LAND CLEARING DEBRIS BURNING RESTRICTIONS				
<i>Geographic Area</i>	<i>Land clearing burning allowed?</i>	<i>If yes, is permit required?</i>	<i>Issued by</i>	<i>Exceptions</i>
Connecticut	No			
Delaware	No			Allowed if land used for subsequent agricultural purposes
District of Columbia	No			
Maryland	No			
Maine	Yes	Yes	Local fire warden	
Massachusetts	No			
New Hampshire	Yes	No		
New Jersey	No			Allowed if land used for subsequent agricultural purposes
New York	Yes	Yes	Regional Permit Office	
Pennsylvania	Yes	No		In NAAs, use air curtain destructor
Allegheny Co	No			
Philadelphia	No			
Rhode Island	Yes	Yes	Municipality	
Vermont	Yes			

Table 5. Regional Planning Organization (RPO) Agency Open Burning Regulations

State	Spatial Coverage	Provisions of Regulation	Temporal Restrictions
Connecticut	All counties in Connecticut *	<p>Municipal Solid Waste (MSW): Open burning of garbage, paper, metals, plastics, rubber, painted materials, and demolition waste is prohibited.</p> <p>Yard Waste: A permit is required by any resident who wishes to burn and dispose of brush on the property where he resides. The burning of leaves and grass is prohibited. Only wood 3 inches in diameter or less can be burned. Residents are required to obtain open burning permits through their local fire marshal. Municipalities that wish to burn brush must obtain a permit from the CTDEP.</p>	<p>The commissioner may specify on a permit the hours and days during which open burning is allowed.</p> <p>Open burning is only permitted on sunny or partly sunny days when the wind speed is 5 to 15 mph.</p>
Delaware	All counties in Delaware *	<p>No person shall cause or allow the disposal of refuse by open burning, except for the purposes of yard waste burning (see below), clearing of land in agricultural or silvicultural operations, prescribed burning for conservation practices, and for fire fighting instruction of wooden buildings. No person shall conduct any open burning allowed by the regulation without giving prior notice to the Fire Call Board for the county in which the fire will occur. All fires shall remain under supervision until completely extinguished.</p> <p>Yard Waste: No person shall cause or allow the open burning of fallen leaves. Domestic burning of branches and limbs that have been cut by trees or shrubbery originating on the premises and conducted by the owner of the premise is permitted.</p>	<p>Open burning may be conducted only between the hours of 8:00 am and 4:00 pm. Burning outside of these hours may be conducted provided that the applicant documents that burning outside of the permissible hours will lead to smoke reduction, or a more efficient, complete, or safer burn, and permission must be granted before burning takes place.</p>
	Kent and New Castle Counties		<p>No person shall cause or allow open burning from June 1 through August 31. Permissions may be granted to conduct open burning between June 1 and August 31 for circumstances that threaten the health, safety or welfare of any person or persons.</p>
District of Columbia	All of the District of Columbia	<p>Open fires are prohibited except for:</p> <ul style="list-style-type: none"> - the performance of an official duty by any public health or public safety officer, after notification to the Mayor; - prevention of a fire hazard which cannot be abated by other means; - instruction of public fire fighters under the supervision of a designated fire marshal; - recreational purposes, including the cooking of food for human consumption on other than commercial premises; or - providing warmth for construction workers by use of Salamander heaters or other heating devices approved by the Mayor. 	

Table 5 (continued)

State	Spatial Coverage	Provisions of Regulation	Temporal Restrictions
Maine	All ambient air quality regions in the State of Maine *	<p>MSW: Residential open burning of rubbish, refuse, garbage, human and animal remains, and by-product wastes such as tar, paints, solvents, and sludge is prohibited. The residential open burning of highly combustible household trash such as paper, cardboard cartons, wood boxes, etc. is prohibited where a municipal property tax supported trash collection service is available and will accept those material.</p> <p>Yard Waste: With a permit, residential open burning of leaves, brush, deadwood, and tree cuttings accrued from normal property maintenance by the individual land owner or homeowner is permitted.</p> <p>Land Clearing: With a permit, burning for the disposal of materials, other than tires, rubber products, asphalt shingles, industrial leather scraps, and wire insulation, generated from the clearing of any land, or erection, modification, maintenance, demolition, or construction of any highway, railroad, power line, communication line, pipeline, building, or development either on site or at any municipal solid waste disposal facility where open burning of such material is not expressly prohibited is permitted.</p>	
Maryland	Allegany, Caroline, Dorchester, Garrett, Kent, Queen Anne=s, Somerset, St. Mary=s, Talbot, Washington, Wicomico, and Worcester counties	<p>A permit may be issued for open burning if certain conditions are met, including; there is no practical alternative method to dispose of the material; a hazardous condition or nuisance will not be created; fire control laws or regulations will not be violated, materials which produce dense smoke will not be burned; and, the material to be burned shall have originated on the premises on which it is to be burned.</p> <p>MSW: In those areas where no provision is made for public collection of refuse, burning of ordinary household trash originating on the premises, excluding commercial establishments, by householders is permitted without authorization. Refuse may not be burned at locations closer to 200 feet from any neighboring habitable dwelling or place where people work or congregate.</p> <p>Yard Waste: In those areas where no provision is made for public collection of leaves, burning of leaves originating on the premises, by householders, is permitted provided that leaves are not burned at locations closer than 200 feet from any neighboring habitable dwelling or place where people work or congregate. Burning can take place without authorization.</p>	

Table 5 (continued)

State	Spatial Coverage	Provisions of Regulation	Temporal Restrictions
Maryland (cont=d)	Anne Arundel, Baltimore, Calvert, Carroll, Cecil, Charles, Frederick, Harford, Howard, Montgomery, and Prince George=s counties, and Baltimore city	<p>A permit may be issued allowing an open fire. Open burning may not be done within 500 yards of one or more occupied building or heavily traveled public roadway.</p> <p>Without Authorization:</p> <p>MSW: In those areas where no provision is made for public collection of refuse, burning of ordinary household trash originating on the premises, excluding commercial establishments, by householders is permitted. Refuse may not be burned at locations closer to 300 feet from any neighboring habitable dwelling or place where people work or congregate.</p> <p>Yard Waste: In those areas where no provision is made for public collection of leaves, burning of leaves originating on the premises, by householders, is permitted provided that leaves are not burned at locations closer than 300 feet from any neighboring habitable dwelling or place where people work or congregate.</p>	Open burning is permitted during the period September 1 through May 31. Open burning is prohibited during the period from June 1 through August 31 of each year, beginning June 1, 1995.
Massachusetts	Cities and Towns of Arlington, Belmont, Boston, Cambridge, Chelsea, Chicopee, Everett, Fall River, Holyoke, Lawrence, Lowell, Malden, Medford, New Bedford, Newton, Somerville, Springfield, Waltham, Watertown, West Springfield, and Worcester	<p>Open Burning is not allowed in these cities and towns, or where the DEP has notified a city or town that:</p> <ul style="list-style-type: none"> - open burning may cause or contribute to non-attainment of federal or state ambient air quality standards for particulates; - open burning may cause or contribute to a condition of air pollution; - open burning is not permitted due to continued violations of the open burning regulations. 	
	Remaining areas of Massachusetts:	<p>Yard Waste: The burning of brush, cane, driftwood, and forestry debris excluding grass, hay, leaves, and stumps is permitted. Burning must be on land that is proximate to the place of generation, and the location must be greater than 75 feet from any dwelling.</p> <p>No such open burning shall apply to commercial or institutional land clearing for non-agricultural purposes.</p> <p>Before any open burning can take place, a properly executed permit must be issued, which may not be granted for more than two days from the date of issue.</p>	<p>Open burning that is permitted will not be allowed during periods of adverse meteorological conditions that are determined by the DEP or local fire department.</p> <p>Yard Waste: Open burning of yard waste is permitted from January 15 to April 30 each year. Burning is allowed between the hours of 10:00am and 4:00pm.</p>
New Hampshire	All counties in New Hampshire *	<p>In an area which has been classified as <u>Attainment</u> of the ambient air quality standards for particulates, the following types of burning are permitted without authorization:</p> <p>MSW: Burning of combustible domestic rubbish from residences is allowed where there is no public removal service; the burning shall occur on-premises in a waste burner having a capacity of 7 cubic feet or less; and the waste is generated from a residential building containing 4 or less dwelling units.</p>	When written authorization is needed, the date, time, and place where the open burning shall be permitted will be included.

Table 5 (continued)

State	Spatial Coverage	Provisions of Regulation	Temporal Restrictions
		<p>Yard Waste: Periodic on-site burning by the landowner of brush and leaves which originate on-site is allowed.</p> <p>Land Clearing: Commercial burning of brush, provided that no other disposal method, such as chipping, can be utilized, is permitted. Burning of untreated wood from the construction or demolition of a building, provided that such burning shall be done in an area which shall be specified and approved by officials having jurisdiction over open burning is allowed.</p> <p>Written authorization is required prior to burning taking place for the burning of materials described above, in an area of the state that has been classified as a non-attainment of the ambient air quality standards for particulates.</p> <p>No tires or tubes shall be burned at any place in the state for any reason.</p>	
New Jersey	All of New Jersey	<p>MSW: Disposal of rubbish, garbage, trade waste, buildings, or structures by open burning is prohibited.</p> <p>Yard Waste: Disposal of fallen leaves or any type of plant by open burning is prohibited.</p> <p>Land Clearing: Open burning is only allowed when the land cleared will be used exclusively for commercial agricultural purposes for a period of at least five years after such open burning.</p>	
New York	Open burning is not permitted for the onsite disposal of rubbish generated by residential activities in any city or village; or in any town with a total town population, including incorporated or unincorporated areas, of greater than 20,000.	<p>Open burning, provided it is not contrary to other law, will be permitted as follows:</p> <p>MSW: Burning onsite, in areas of the State to be designated by the commissioner, of paper, paper products, and cartons. Open burning of garbage is not permitted.</p> <p>Yard Waste: Burning at an appropriate designated burning area, serving a county, city, town, or village, of yard wastes consisting of trees, tree trimmings, leaves, and brush; provided that such burning is done in accordance with a permit issued by the commissioner after written application.</p>	Open burning permits will be for a specified period.

Table 5 (continued)

State	Spatial Coverage	Provisions of Regulation	Temporal Restrictions
New York (cont=d)		Land Clearing: Burning of land clearing and/or demolition material consisting of wood, trees, tree trimmings, leaves, brush, generated by land clearing or demolition for the erection of any structure; for the construction or modification of a highway, railroad, pipeline, or power or communication line; or for the development or modification of a recreational area or park; provided that such burning is done onsite or at an appropriate designated burning area and in accordance with a permit issued by the commissioner after written application. Burning of rubbish generated by industrial or commercial activities other than agricultural is not permitted.	
Pennsylvania	Model ordinance (developed by PADEP) for any areas in Pennsylvania *	<p>MSW: Open burning is permitted for the purpose of burning domestic refuse generated from one dwelling, when the burning is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the said structure.</p> <p>Yard Waste: Open burning is allowed for the purpose of burning yard waste that is generated on the premises of a structure occupied solely as a dwelling by two families or less (except where composting is mandatory), when the fire is on the premises of the said structure.</p> <p>Land Clearing: Open burning is permitted for the purpose of burning clearing and grubbing waste. If the burning is within an air basin, an air curtain destructor must be used and must be approved by the PADEP Regional Air Quality Program office.</p>	
	Allegheny County (including Pittsburgh)	<p>No person shall conduct open burning of any material, except where the Health Dept. has issued an open burning permit. The regulation shall not allow or permit any open burning which would not otherwise be allowed or permitted under applicable municipal or local ordinance, or County or local fire code.</p> <p>The Health department issues permits for the control of fires, fire training, fostering of agriculture, ceremonial fires, but will suspend a permit during times of poor dispersion. Permits are issued for land clearing debris burning if a proper air curtain destructor is used. Permits are not issued for household waste burning or yard waste burning.</p>	The Health Department may issue a permit for open burning during a period specified by the Dept.
	Philadelphia County (including Philadelphia)	Open burning of garbage, refuse, or other waste material, demolition materials, leaves, grass, weeds, trees, batteries, wire, tires, cars, vehicles or part, or any other combustible material is prohibited.	
Rhode Island	All counties in Rhode Island *	Persons wishing to burn must receive written approval and demonstrate that approval has been granted by the municipality in which burning is to take place.	

Table 5 (continued)

State	Spatial Coverage	Provisions of Regulation	Temporal Restrictions
Vermont	All counties in Vermont *	<p>MSW: Open burning of garbage, tires, rubber, plastic, waste oil, asphalt materials, materials containing asbestos, or pressure treated wood is prohibited. Open burning of trash using a "burn barrel" or "home-made incinerator" is not allowed in Vermont.</p> <p>Yard Waste: On-premise burning of leaves, brush, deadwood, or tree cuttings accrued from normal property maintenance by the owner is permitted.</p> <p>Land Clearing: Burning in forest land areas of brush, tree cuttings and slash when the cuttings accrue from logging or site clearing operations.</p> <p>The open burning of some materials, including demolition materials and waste wood from a business or industry, requires a burn permit from the APCD. Generally, permits may be issued for the burning of <i>natural wood only</i>, and only in locations where the smoke will not cause a potential nuisance or health concern.</p>	

* Municipalities have the authority to enact an ordinance with requirements that are more stringent than the State regulation.

2. Tribal Agency Contacts

MARAMA asked us to contact three tribal agencies to get them involved in the project. The following summarizes information obtained about the agencies.

St. Regis Mohawk Tribe, Hogansburg, New York – Spoke with Joyce Barkley. The St. Regis Mohawk Tribe is a tribal nation of 12,000 people, covering 14,000 acres, located in northern-most New York State along the St. Lawrence River, and is bisected by the United States-Canada Border. Joyce mentioned that open burning of residential household and yard waste is allowed, but the tribe is considering implementing regulations to control these. The burning of land clearing waste is not significant, although C/D waste burning is. She referred me to Laura Weber, the Solid Waste Coordinator, who in turn referred me to Adrian MacDonald, a member of the Tribal fire fighting unit. Called and left message with Adrian, but did not hear back.

Penobscot Indian Nation, Maine - Spoke with John Banks. The Penobscot Indian Nation of Maine includes 130,000 total acres, with parcels of land averaging 18,000 to 20,000 acres. The majority of the land is located within the Penobscot River Drainage Valley, in the Western part of the State. John Banks indicated that wood stove combustion for heating purposes is probably minimal; he believed heating with oil is more prevalent. He did not believe that household and yard waste burning were conducted that frequently. Regional trash pickup and recycling services are available for the tribal lands. Called and left message with Eric Nicolar to obtain any additional information, did not hear back.

Mashantucket Pequot Tribal Nation, Connecticut - Tribal nation encompassing 1,250 acres in Southeastern Connecticut. Contacted Mike Boylan, who was unsure of any open restrictions for the tribal nation. Provided Michael Kelley, Tribal Fire Marshall as contact.

3. Recommendations for Phase II Survey Work

For the majority of the States, open burning restrictions are in place that all municipalities must adhere to, but still allow for more stringent regulations to be enacted if deemed necessary by local officials. County-specific information was available for some States, but Pechan anticipates that the actual occurrence of open burning at a local level will need to be determined via survey (e.g., to determine whether 100 percent control effectiveness should be applied). The control information obtained to date can be used to target survey efforts. States such as Connecticut, Delaware and New Jersey, that do not allow household waste burning may not be the primary target for performing surveys of activity for this category.

However, at least one State has suggested that in areas where a certain category of open burning is not allowed, a survey to determine rule effectiveness should be performed. For example, for land clearing debris, some States (Delaware, New Jersey) specify that the land cleared can only be burned if the land will be used for agricultural purposes. From talking to the RPO contacts, however, this restriction is not always being followed. Land that is cleared, then burned, may not be subsequently used for agricultural purposes (e.g., a subdivision is built on the land).

Of the RPO contacts that have responded to date, three States (New Hampshire, New York and Vermont) indicated that the burning of construction and demolition debris was not prohibited. In the case of New Hampshire and Vermont, only untreated wood is allowed to be burned. Vermont DEC Air Quality Control Division Enforcement Staff do issue permits for demolition debris burning, but the wood must be untreated. Pechan is not aware of emission factors being developed specifically for this category, but may recommend using emission factors for land clearing debris if it is decided to survey the States for this category.

Two States have conducted open burning surveys in recent years. Maine conducted the *State of Maine 1997 Backyard Trash Burning (BYB) Study* to gain knowledge of household waste burning practices by sending questionnaires to local fire wardens. The survey only included household waste (yard waste burning activity was not surveyed).

In speaking with a contact with Maine=s Department of Conservation, Forest Service, Forest Protection Division (the agency that administered the survey), they believe it may be suitable to scale the survey results to the current year since open burning regulations have not changed substantially since the survey was conducted in 1996. The Forest Protection Division issues and tracks open burning permits, and believed that the data they compile may be useful to update survey results to 2000 or 2001. A copy of their open burning permit showed that it has information on the type of waste (e.g., brush, slash, other), date of burn, duration of burn, location of burn. Information on the volume or mass of waste burned is not available, though.

The State of Delaware conducted a survey, *Recycling in Delaware, Public Attitudes and Perceptions*, that included questions of homeowners concerning leaf and brush waste burning. However, we do not recommend a survey of residences concerning their yard waste burning practices, but instead will recommend a survey of local officials.

According to the RPO contacts, some State air quality agencies track open burning, and may issue authorizations to municipalities that allows them to collect yard waste, for example, and burn it in a centralized location. The permits or authorizations for residents to burn waste on their property typically are issued and tracked by a municipality=s local fire marshal or other designated fire official. In speaking with several RPO States, the permits or authorizations issued by a State=s air quality agency typically do not contain information related to the amount of waste burned per permit, or the date of the burn. This information is more likely to be obtained from surveys of local fire officials. Local officials are also more likely to track incidences of non-compliance with State regulations (e.g., the burning of land clearing debris for construction in cases where it is only allowed for agriculture).

Where contact information can be obtained at the local level, a telephone survey of local fire wardens or other designated open burning officials is the approach that Pechan recommends taking in surveying the RPO States. Pechan has started to identify the local officials through contact with State air quality inspection/enforcement divisions, State fire marshals, or other appropriate agencies. For example, the State of Connecticut provided us with a telephone listing of open burning survey officials for each town in the State.

In discussions with RPO contacts, Pechan has found that open burning is not tracked or regulated by comparable agencies in all States. Open burning may not even be tracked by comparable agencies within a State. For example, the State of Maryland has indicated that depending on the specific county, either the local health department, fire station, or environmental agency issues and tracks open burning permits. Maryland provided us with a telephone list of the county-level contacts from which they have obtained information on open burning in the past, but the affiliation of each contact was not indicated and could not be easily determined without contacting the person.

In States where surveys have not been performed, it is possible that the agencies expected to track open burning as identified in the Phase II work plan will not be able to answer the survey questions, and will refer the surveyor to another agency, or alternatively, will not know who the appropriate contact is. Due to these potential gaps that may result from the survey approach, Pechan believes it may be appropriate to supplement this approach with other methods (e.g., scaling, other top-down methods) to estimate potential open burning activity. For household waste burning, municipal solid waste sanitation companies or agencies could also potentially be surveyed to determine if there are areas (populations) that are not served by a household waste pick-up service, and that may be more likely to engage in household waste burning practices.

The survey respondents, survey instrument and questions will be identified in the Phase II Work Plan in the Draft Final Report.

Finally, Pechan has examined potential GIS spatial coverages for open burning as listed in Table 6. Pechan will continue to look into the feasibility of allocating emissions to the sub-county level and will provide specific recommendations in the Phase II work plan.

Table 6. Potential GIS Spatial Coverages

GIS coverage	Data Description	Comments
EPA=s Biogenic Emissions Land Database, Version 3 (BELD3)	Contains data on the number of acres per county according to vegetation type (broken out by rural and urban forest and agriculture)	Part of EPA=s Biogenic Emissions Inventory System (BEIS); was recently updated to include data at a 1 km grid cell resolution.
USGS North America Land Cover Data Base, Version 2	Land coverage according to urban, agriculture, and forest land	1 km grid cell resolution.
U.S. Census Bureau, Census Tract Data	Urban or rural classifications; housing unit characteristics by Census Tract	Available for 1990, expected to be available for 2000 by May 2002

D. REFERENCES

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APPENDIX B
DRAFT PHASE II WORK PLAN

SECTION I - DRAFT RESIDENTIAL WOOD

A. INTRODUCTION

This Work Plan includes a recommended Technical Approach to develop a residential wood combustion emission inventory for the RPO states, the contractor's staffing plan to accomplish the work, project schedule, and project budget.

B. TECHNICAL APPROACH

Task 1. Project Management

Under this task, the contractor will take part in teleconferences with MARAMA, monitor the project schedule and budget, and prepare monthly progress reports.

Task 2. Develop Sample Frame

The recommended sampling scheme shown in Table I-1 was selected based on recommendations provided to MARAMA in a previous Technical Memorandum (Pechan, 2001). For the purposes of developing a budget for this Work Plan, a sample frame was developed from readily available data (see Table I-2). The draft sample frame was constructed from a county coverage of the RPO states and by making assignments for each county as to urban or rural status based on population density. Rural forested and non-forested designations were made based on land cover data.

In order to finalize the sample frame, the contractor will procure two databases from the Bureau of Census (BOC) covering the Northeastern and Mid-Atlantic states and tribes. These databases have the BOC designation of urban/rural status at the census block level (census blocks make up census tracts). The contractor will use these block-level assignments to create tract-level assignments. For example, if all blocks are designated as rural then the tract will be rural. If the blocks in a tract are primarily urban (e.g., more than half designated as urban), then the tract will be designated as urban. After all of the urban/rural designations of census tracts have been made, the rural tract designation as either forested or non-forested will be refined by overlaying a census tract coverage of the RPO states with a USGS land use coverage. Assignments of forested or non-forested will be made at the census tract (not county) level.

To refine the division of northern and southern tiers of the sample frame, the contractor will procure a database from the National Climatic Data Center (NCDC) with meteorological station data on heating-degree days (HDD) within the RPO states. From these data, the contractor will assign a northern or southern designation to each census tract.

Task 3. Perform Survey

A survey questionnaire has been developed for the survey and is provided as Attachment A. This survey will be performed by a computer-assisted telephone interviewing (CATI) approach. The questionnaire provides the data elements needed for the survey, as well as some scripting that shows the logic behind the survey approach. The contractor will provide any additional CATI scripting needed to illicit the appropriate responses. The additional scripting must be reviewed and approved by MARAMA prior to conducting the survey.

From the preliminary sample frame shown in Table I-2, a minimum sample size of 61 responses was determined based on an in-cell precision level of +/- 13.3%. Since sufficient data were not identified on the variance of wood consumption under Phase I of this project, the calculation of minimum sample size was done with a method used for proportional sampling (e.g., response of either yes or no). This method generally computes sample sizes larger than a method incorporating a known variance, unless the variance is very large. The formula assumes a variance of 0.25 and uses a 95% confidence level with a given level of precision:

$$n = (\sigma z^2) / \varepsilon^2$$

where:

variance = $\sigma = p(1-p)$;

probability = $p = 0.5$ (50% probability of yes or no answer);

confidence level = $z = 1.96$; and

level of precision = $\varepsilon = 0.133$.

Table I-3 shows the minimum sample sizes calculated for the survey, including totals for each stratum. The total sample size is 732.

The contractor will perform the CATI survey as shown in the attached questionnaire (with additional scripting as specified by the contractor and approved by MARAMA). Information will be collected on each piece of wood burning equipment. The survey work will continue until the minimum sample size per cell is achieved.

After completing all surveys, the contractor will perform quality assurance (QA) on the survey results (e.g., to identify possible data entry problems, data outliers, missing data elements). After rectifying any QA issues, the contractor will calculate sample-weighting factors for each cell in the sample frame. Cell weighting factors act as frequencies that force each survey response to be in the same proportion as in the sample frame.

Task 4. Data Reduction and Analysis

Prior to using the survey data to construct an emissions inventory, the contractor will perform several statistical analyses to better develop the activity data. Statistical tests, such as analysis of variance (ANOVA), will be used to determine whether distinct activity is occurring in various cells. For instance, ANOVA can be used to determine whether the wood-burning activity between single-family homes in rural – forested versus rural – non-forested areas is statistically different. If activity between such cells

is not statistically different, the cells may be merged. Other factors will also play into decisions regarding whether data from different cells are combined. This includes the fraction of wood users, temporal information (e.g., length of season), and the type of equipment commonly used.

After the contractor has characterized wood consumption patterns from the survey data, a wood consumption activity model will be the result. Such a model could resemble the one shown in Table I-4. For each cell in the model, descriptive statistics (e.g., mean, median, range, standard deviation, skewness, etc.) will be calculated for activity by equipment type. A user fraction (fraction of households that use wood for heat) will also be calculated for each cell. The equipment activity selected for use in the model will depend on the associated descriptive statistics. For example, if the distribution of data approaches a normal distribution, then the mean will be selected for use in the model. However, if the distribution is not normal (highly skewed), then the median will be selected.

Task 5. Emission Inventory Development and Final Report

The contractor will use the wood consumption activity model developed under Task 4 to develop an emissions inventory for the RPO states. Emission factors will be taken from the latest EPA guidance. This guidance includes any updates to AP-42, the EIIP document for residential wood combustion, and recently completed testing. For example, MARAMA is aware that EPA is currently conducting testing of residential wood combustion, primarily to gather new data on toxic air pollutants. This testing program may also include ammonia, which is an important contributor to fine particulate matter and regional haze. The inventory will include emissions of all criteria pollutants, their precursors, and toxic air pollutants.

The inventory will include annual and seasonal emission estimates. In addition, from the data analysis conducted under Task 4, temporal allocation factors will be developed. Using these factors, hourly emission estimates can be developed for modeling purposes.

The contractor will submit draft inventory files in a format prescribed by MARAMA. A draft final report will be prepared in Microsoft Word[®] format describing the results and all work performed under Tasks 2-5. After receiving comments from MARAMA, the contractor will prepare final inventory databases and will revise the final report, submitting it in Microsoft Word[®] and pdf file formats, as well as a camera-ready hard copy, along with 50 hard copies. The contractor will also post the results of the survey on the contractor's web site, and make the format available to MARAMA for posting on their website. The contractor will also provide links for both web sites relative to what the public can do to reduce air pollution. Links of interest will be provided by the contractor, as well as MARAMA and RPO state/tribal staff.

Table I-1. Recommended Sampling Scheme

Region ¹	General Land Use/Cover					
	Urban		Rural - Forested		Rural - Non-Forested	
	Single-Family ²	Other (Apt./ Multi-family/ mobile home)	Single-Family ²	Other (Apt./ Multi-family/ mobile home)	Single-Family ²	Other (Apt./ Multi-family/ mobile home)
North	# housing units	# housing units	# housing units	# housing units	# housing units	# housing units
South-OTC	# housing units	# housing units	# housing units	# housing units	# housing units	# housing units

¹ Regions (north and south) to be determined at the county or census tract level via an analysis of heating-degree day data, as specified in recent draft EPA guidance.

² Single family detached and attached dwellings up to 2 units (i.e., duplexes).

Table I-2. Draft Sample Frame

Region ¹	General Land Use/Cover					
	Urban		Rural - Forested		Rural - Non-Forested	
	Single-Family ²	Other (Apt./ Multi-family/ mobile home)	Single-Family ²	Other (Apt./ Multi-family/ mobile home)	Single-Family ²	Other (Apt./ Multi-family/ mobile home)
North-OTC (ME, NH, VT, MA, CT)	2,177,225	721,736	4,196,565	1,561,262	117,972	36,063
South-OTC (NY ³ , NJ, PA, DE, MD, DC, RI)	5,397,648	3,978,480	3,043,369	904,341	660,817	164,893

¹ Regions (north and south) to be determined at the county or census tract level via an analysis of heating-degree day data, as specified in recent draft EPA guidance.

² Single family detached and attached dwellings up to 2 units (i.e., duplexes).

³ Only counties comprising the New York MSA were included in the South-OTC region; all remaining upstate counties are included in the North-OTC region.

Table I-3. Minimum Sample Size

Region ¹	General Land Use/Cover						Totals
	Urban		Rural - Forested		Rural - Non-Forested		
	Single-Family	Other (Apt./ Multi-family/ mobile home)	Single-Family	Other (Apt./ Multi-family/ mobile home)	Single-Family	Other (Apt./ Multi-family/ mobile home)	
North-OTC (ME, NH, VT, MA, CT)	61	61	61	61	61	61	366
South-OTC (NY ¹ , NJ, PA, DE, MD, DC, RI)	61	61	61	61	61	61	366
Totals	122	122	122	122	122	122	732

¹Only counties comprising the New York MSA were included in the South-OTC region; all remaining upstate counties are included in the North-OTC region.

Table I-4. Example Wood Consumption Model for the RPO

Region ¹	General Land Use/Cover					
	Urban ¹		Rural – Forested ¹		Rural - Non-Forested ¹	
	Single-Family	Other (Apt./ Multi-family/ mobile home)	Single-Family	Other (Apt./ Multi-family/ mobile home)	Single-Family	Other (Apt./ Multi-family/ mobile home)
North	User Fraction = 0.3 Fireplaces = 0.3 Wood stoves = 0.5 Equipment C = 0.4 Equipment D = 0.2	User Fraction = 0.1 Fireplaces = 0.2 Wood stoves = 0.1 Equipment C = 0.1 Equipment D = 0.0	User Fraction = 0.9 Fireplaces = 0.8 Wood stoves = 3.7 Equipment C = 1.6 Equipment D = 0.8	User Fraction = 0.5 Fireplaces = 1.2 Wood stoves = 1.7 Equipment C = 0.9 Equipment D = 0.3	User Fraction = 0.7 Fireplaces = 0.8 Wood stoves = 3.7 Equipment C = 1.6 Equipment D = 0.8	User Fraction = 0.4 Fireplaces = 0.5 Wood stoves = 1.2 Equipment C = 1.0 Equipment D = 0.3
South-OTC	User Fraction = 0.2 Fireplaces = 0.2 Wood stoves = 0.4 Equipment C = 0.0 Equipment D = 0.0		User Fraction = 0.8 Fireplaces = 0.3 Wood stoves = 1.7 Equipment C = 1.1 Equipment D = 0.9	User Fraction = 0.4 Fireplaces = 0.9 Wood stoves = 1.2 Equipment C = 0.5 Equipment D = 0.1	User Fraction = 0.5 Fireplaces = 0.1 Wood stoves = 1.2 Equipment C = 0.8 Equipment D = 0.2	

¹Units are: User Fraction = fraction of wood users; all equipment activity is in cords per year.

C. STAFFING PLAN

A staffing plan needs to be provided in the work plan by the contractor. An example summary table is shown in Table I-5.

Table I-5. Staffing Plan

Staff	Assignment
Staff Person 1	Managing Director
Staff Person 2	Project Manager; Survey Management; Data Analysis
Staff Person 3	Database and Geographic Information System Support
Staff Person 4	Database Support
Staff Person 5	Contract Management

D. TIME-LINE

The contractor will propose a time-line for this project. An example table is given below as Table I-6. Brief descriptions of each step and the amount of calendar time needed for completion should be provided. One month should be allocated for MARAMA to review and provide comments on the Final Report.

Table I-6. Time-Line for Necessary Steps

Steps	Date
Task 2. Develop Sample Frame	
Task 3. Conduct Survey	
Task 4. Data Reduction and Analysis	
Task 5. Emission Inventory Development and Final Report Preparation	

E. BUDGET

Table I-7 provides an example format for presenting the proposed budget for the work detailed in this work plan.

F. REFERENCES

Pechan, 2001. Summary of Tasks 1 and 2; Recommendations for Phase II Survey, Technical Memorandum, prepared for the Mid-Atlantic Regional Air Management Association (MARAMA), prepared by E.H. Pechan & Associates, Inc., May 2001.

Table I-7. Costs for Residential Wood Combustion Inventory Development

	Loaded Hourly Labor	Task 1 Project Mgmt		Task 2 Dev Sample Frame		Task 3 Conduct Survey		Task 4 Data Reduct & Analysis		Task 5 Emission Inv Devel		TOTAL	
Staff/Title	Rate	Hrs	Dollars	Hrs	Dollars	Hrs	Dollars	Hrs	Dollars	Hrs	Dollars	Hrs	Dollars
Total Professional Clerical													
Total Labor Costs													
Other Direct Costs*													
Subcontractor Costs													
ODCs Subtotal													
G&A on ODCs @ 4.02%													
Total ODC Cost													
GRAND TOTAL													

Notes:

SECTION II - DRAFT OPEN BURNING

A. INTRODUCTION

This Work Plan includes a recommended Technical Approach to develop an open burning emission inventory for the RPO states. This work plan will be amended to include the contractor's staffing plan to accomplish the work, project schedule, and project budget.

B. TECHNICAL APPROACH

Task 1. Project Management

Under this task, the contractor will participate in conference calls with MARAMA, monitor the project schedule and budget, and prepare monthly progress reports.

Task 2. Survey of Open Burning Activity

For states that do not prohibit open burning, the contractor will:

1. Select a sample of municipalities or counties (e.g., no more than 5) within each state, that represent towns both with and without municipal trash service. Conduct test surveys of identified open burning officials to obtain information on the open burning regulations and activity within their jurisdiction.
2. Based on the test survey, and after examination of the results under Task 3 , below, if warranted, continue with a comparable or improved survey for some or all of the remaining areas. If survey is not performed for all areas, scale the results using surrogate indicators such as urban and rural designations, and the availability of trash service.

A survey questionnaire has been drafted and is provided in Attachment B. For categories where the state or regional air quality agency or forestry department is identified to maintain and track open burning permits, the contractor will obtain information on the number of permitted burns, any available estimates on the amount and type of waste burned, and the date and duration of the burn. The contractor will also obtain any additional information from state and regional contacts as to the existence of local burning regulations. Information obtained on local restrictions, which are generally open burning bans, allows one to apply 100 percent control efficiency (CE) for an area, either throughout the year or for a specific season. The contractor will perform a telephone survey for a test sample of the entire RPO region. The intent of the test survey will be to establish whether the questions are reasonable and whether the identified survey respondents have this information. Open burning is tracked very differently among states, and the agency officials expected to be familiar with open burning practices may not be. Under this task, the contractor will also improve the list of survey respondents.

For household waste and yard waste burning, the test sample will be selected to represent rural municipalities both with and without municipal trash service. The contractor will first contact the state solid waste management offices to confirm which areas in a state do not receive trash service. The solid waste management contact(s) for each state are listed in Table II-1.

Table II-1. Initial State Solid Waste Contacts

State	Contact	Affiliation	Address	Phone Number
Connecticut	Charles Atkins	Solid Waste Program Bureau of Waste Management CT Department of Environmental Protection	79 Elm St. Hartford, CT 06106	(860) 424-3314
Connecticut	John England	Solid Waste Program Bureau of Waste Management CT Department of Environmental Protection	79 Elm St. Hartford, CT 06106-5127	(860) 424-3311
Delaware	Robert Hartman	Solid Waste Branch Air and Waste Management Division DE Department of Natural Resources and Environmental Control	89 Kings Hwy. Dover, DE 19903	(302) 739-3820
Maine	Carol Cifrino	Division of Solid Waste Facilities Regulations Bureau of Remediation and Waste Management ME Department of Environmental Protection	State House, Station #17 Augusta, ME 04333	(207) 287-7720
Maryland	A. Hussain Alhija Edward M. Dexter	Solid Waste Program Design and Certification & Field Operations and Compliance Division MD Department of the Environment	2500 Broening Hwy. Baltimore, MD 21224	(410) 631-3364/ (410) 631-3424
Maryland	Barry Schmidt	Solid Waste Program MD Department of the Environment	2500 Broening Hwy. Baltimore, MD 21224	(410) 631-3318
Massachusetts	Jim Roberts	Division of Business Compliance MA Department of Environmental Protection	One Winter St., 9th Floor Boston, MA 02108	(617) 292-5983
New Hampshire	Richard Reed	Solid Waste Compliance Section Waste Management Division NH Department of Environmental Services	6 Hazen Dr. Concord, NH 03301-6509	(603) 271-2925
New Jersey	Gil Mueller	Bureau of Recycling and Planning Division of Solid and Hazardous Waste NJ Department of Environmental Protection	401 E. State St., PO Box 414 Trenton, NJ 08625	(609) 984-3438
New York	Glen Milstrey	Technology Outreach and Compliance Section Bureau of Solid Waste and Land Management NY Department of Environmental Conservation	50 Wolfe Rd., Room 206 Albany, NY 12233-7258	(518) 457-5695
Pennsylvania	William Pounds	Municipal and Residual Waste Division Bureau of Land Recycling and Waste Management PA Department of Environmental Protection	Rachel Carson State Office Building, PO Box 8471 Harrisburg, PA 17105-6239	(717) 787-7381
Rhode Island	Carol Gentron	Office of Waste Management RI Department of Environmental Management	235 Promenade St. Providence, RI 02908	(401) 222-4700, ext. 7131
Vermont	Switchboard	Waste Management Division Solid Waste Management Program VT Department of Environmental Conservation	103 S. Main St. Waterbury, VT 05671-0404	(802) 241-3444

Note: For states and tribes not listed, the contractor should attempt to fill in the gaps by contacting the state environmental departments for guidance on whom to contact for this information.

Table II-2 presents the initial list of contacts for residential open burning by specific jurisdictions. Potential open burning activity survey contacts for the States of Connecticut, Delaware, Maryland, New Hampshire, New Jersey, Rhode Island, and Vermont have been obtained and are presented in Attachment C. For the remaining states, the contractor must purchase the list, so the fee was noted. A test sample of residential burning contacts for the remaining states not presented in Attachment C could be obtained from the Fire and EMS Information Network online department directory at <http://www.fire-ems.net/firedept/>. If a region-wide survey is performed after the recommended test survey, a comprehensive listing of local fire stations for the remaining states could be obtained from the National Public Safety Information Bureau. This bureau publishes a "National Directory of Fire Chiefs and Emergency Medical Service Administrators." This directory contains information for 36,000 fire departments in the U.S. including: 1) Chief or Director's name; 2) Title; 3) Department Name; 4) Mailing Address or Street Address; 4) County; 5) Administrative Phone Number; 6) Fax Number; 7) Financial Structure (Municipal, County, District, Independent); 8) Department Type (Volunteer, Paid, Combination); 9) Department Specializations; 10) Demographic Data (Populations, Number of Emergency Personnel and Number of Firefighters). The 2002 Directory will be available in December 2001 for a fee of \$99.

The contacts for residential burning may also have data for the land clearing debris burning and construction/demolition debris burning. The contractor will start with the list of contacts presented in Table II-3 to obtain information on the commercial open burning categories. As indicated in the table, at least one of these contacts was established to track residential open burning, but the majority of states indicated that these data would need to be obtained from local officials.

For those states that prohibit open burning, a rule effectiveness survey of state enforcement and inspection officials will be performed. A survey questionnaire for rule effectiveness has been developed for the survey and is provided as Part 7 of Attachment B. The survey is largely based on an RE survey recommended by EPA guidance, with some modifications to account for the fact that open burning regulations affect residential and commercial sectors, as opposed to industrial sources. The identified list of enforcement and inspection staff is listed in Table II-4.

A rule effectiveness survey would not be applicable in those states where statewide rules do not prohibit open burning. In addition, when the test survey is performed for obtaining open burning activity, the rule effectiveness survey could be conducted if regulations are established to be in place. Therefore, a comprehensive RE survey of local officials is not recommended at this time.

Task 3. Evaluation of Preliminary Survey and Revision of Work Plan

After completing the test survey for municipalities under Task 2, the contractor will prepare a technical memorandum recommending changes in the survey instrument and whether to survey remaining or additional areas and summarizing the results of the test survey.

In Task 2, the contractor will attempt to obtain data on the fuel loading for permitted burns, and should recommend in the technical memorandum whether to use EIIP-recommended loading factors as default if the data are not available. The contractor will evaluate whether it is reasonable to estimate emissions for permitted burns for areas where data were not available. Land clearing debris burning could be estimated based on road and building construction activity data (e.g., similar to EPA's NEI). Construction/demolition burning may not correlate as well to any other readily available activity data, therefore the contractor may propose to only develop estimates where actual construction/demolition burning activity could be obtained. Some land clearing debris burning may require the use of an air

curtain destructor. The contractor will research the appropriate control efficiency or controlled emission factor to assume for the use of these devices.

Source classification codes will be assigned for each open burning category based on the most current EPA SCC list. SCCs for yard waste burning and land clearing debris burning have recently been added to EPA's official SCC list. An SCC for construction/demolition debris burning has not been established, but states could potentially report it under the commercial/institutional open burning SCC.

Once the test survey of local officials has been conducted, the contractor will summarize the survey results in Technical Memorandum #1. The memorandum will include an analysis of the survey (including confidence levels in the results), recommendations for modifying the survey questionnaire based on the information obtained (or not obtained) from survey respondents, and will also address whether a more comprehensive survey should be performed or whether the preliminary survey results can be scaled to other areas. Also, it must include a proposal format for submitting activity data and initial draft calculations based on the test survey. This memorandum will be submitted in both hard copy and electronic versions, and will also include a draft revised work plan.

The contractor will prepare Technical Memorandum #2 to summarize the results of the follow-up survey, including confidence levels.

Table II-2. Potential Contacts for Residential Open Burning Activity Questionnaire

State/Tribe	Activity Survey Contact	List Available?	List Obtained?	Comments
Connecticut	Local open burning officials	Yes	Yes ¹	
Delaware	Local fire officials	Yes	Yes ¹	
DC	NA	NA		
Maine	Local fire officials	Yes	No	Approximately \$40 fee
Maryland	County open burning officials	Yes	Yes ¹	Affiliation of contacts not known
Massachusetts	Local fire officials	Yes	No	\$130 fee to obtain list of local fire stations from State Fire Chief's Association
New Hampshire	Local fire officials	Yes	Yes ¹	Area code for entire state is 603
New Jersey	NA	Yes	Yes ¹	Addresses only, phone numbers not provided. Phone numbers for select fire stations can be obtained from the Fire and EMS Information Network's website http://db.fire-ems.net/firedept/deptlist/us/nj
New York	Local fire officials	Yes	No	\$25 fee to obtain list from State Fire Marshall, not known if phone numbers included
Pennsylvania	Local fire officials	No	No	PA does not keep a listing of fire officials since they change so frequently
Philadelphia	NA	NA		
Pittsburgh	NA	NA		
Rhode Island	Local fire officials	Yes	Yes ¹	Addresses only, phone numbers not provided. Phone numbers for select fire stations can be obtained from the Fire and EMS Information Network's website http://db.fire-ems.net/firedept/deptlist/us/ri
Vermont	Local fire officials	Yes	Yes ¹	Area code for entire state is 802
St. Regis Mohawk	Local fire officials	Unknown		Adrian MacDonald contacted for list
Penobscot Indian Nation	Local fire officials	Unknown		
Mashantucket Pequot Tribal Nation	Local fire officials	Unknown		Tribal Fire Marshall, Mike Kelley, may have list

NA = Not applicable since open burning for all categories is banned

¹ See Attachment C to Work Plan for specific lists of local open burning and fire protection officials.

Table II-3. Contacts for Land Clearing and Construction/Debris Burning Activity Questionnaire[†]

State	Contact	Affiliation	Phone Number
Delaware	Thomas G. Barthelmeh	Delaware DNREC Soil & Water Division	(302) 739-4411
Maine	Tom Parent	Maine Dept of Conservation, Forest Service, Forest Protection Division	(207) 287-4991
Massachusetts ¹	James McQuade	Massachusetts DEP, Construction/Demolition Solid Waste Contact	(617) 348-4095
New Hampshire	Chief Robert Nelson	Department of Resources and Economic Development, Division of Forests and Lands	(603) 271-2217, ext. 306
New York ²	Captain Daniel Walsh	Division of Forest Protection and Fire Management	(518) 457-5740
Pennsylvania	Francine Carlini, Air Quality Program Manager	Pennsylvania DEP Southeast Regional Office	(610) 832-6242
	Thomas DiLazaro, Air Quality Program Manager	Pennsylvania DEP Northeast Regional Office	(570) 826-2511
	Leif Ericson, Air Quality Program Manager	Pennsylvania DEP Southcentral Regional Office	(717) 705-4868
	Andrea Chiaramonte, Air Quality Specialist/Inspector	Pennsylvania DEP Northcentral Regional Office	(570) 321-6580
	Jayne Graham, Emission Inventory Contact	Allegheny County Health Department, Air Quality Program	(412) 578-8129
	Larry Wonders, Air Quality Program Manager	Pennsylvania DEP Northwest Regional Office	(814) 332-6940
	Mike Mendicino, Air Quality Program Manager	Pennsylvania DEP Southwest Regional Office	(412) 442-4162
Rhode Island	Leo Hellested, PE	Chief, Rhode Island Dept of Environmental Management, Office of Waste Management	(401) 222-2797
Vermont	Phil Etter	Vermont DEC, Inspection and Enforcement	(802) 241-3847
Tribes			
New York	Adrian MacDonald	St. Regis Mohawk Tribe, Local Fire Fighting Unit	(518) 358-6259
Maine	Eric Nicolar	Penobscot Indian Nation	(207) 827-7776
Connecticut	Michael Boland	Mashantucket Pequot Tribal Nation	(860) 396-6740

¹Massachusetts does not allow land clearing debris burning, but this contact may have information on any incidences of construction/demolition burning.

²New York's Division of Forest Protection and Fire Management also permits and tracks residential burning, so permit data on household waste and yard waste burning should be requested as well.

[†]Contacts in this table are for areas where this activity is allowed. Information for areas not listed in this table will be gathered through the rule effectiveness survey.

Table II-4. State/Regional Contacts for Open Burning Rule Effectiveness Questionnaire

State	RE Survey Contact	Affiliation	Address	Phone Number
Connecticut	Katie Rankin	CT DEP, Bureau of Air Management, Inspection		(860) 424-3028
Delaware	Kent Ruther	Division of Air and Waste Management, Enforcement Section		(302) 739-5071
DC	Compliance/Enforcement Division Staff	Department of Health, Environmental Health Administration		(202) 535-2250
Maine	Tom Parent	Dept of Conservation, MN Forest Service, Forest Protection Division		(207) 287-4991
Maryland	Laurie K. Bucher Manager	Western Air & Radiation Management Main Field Office	160 South Water Street, Frostburg, MD 21532	(301) 689-5756, Fax: (301) 689-6544
Maryland	John Steinfort	Central Field Operations Office	416 Chinquapin Round Road, Annapolis, MD 21401	(410) 974-3238
Maryland	Jay Bozman	Eastern Air & Radiation Management Field Office	210 Baptist Street, Suite 15, Salisbury, MD 21801	salisb@shore.intercom.net
Massachusetts	Tom Orszak, Open Burning	Western Regional Office, Department of Environmental Protection	436 Dwight Street, Springfield, MA 01103	(413) 755-2252
Massachusetts	Bureau of Waste Prevention	Central Regional Office, Department of Environmental Protection	627 Main Street, Worcester, MA 01608	(508) 792-7650
Massachusetts	Bill Gaughan, Director	Northeast Regional Office, Department of Environmental Protection	205 Lowell Street, Wilmington, Massachusetts 01887	(978) 661-7600
Massachusetts	Rich Gioiosa, Enforcement	Southeast Regional Office, Department of Environmental Protection	20 Riverside Drive, Lakeville, MA 02347	(508) 946-2877
New Hampshire	Chief Robert Nelson	Department of Resources and Economic Development, Division of Forests and Lands		(603) 271-2217, ext. 306
New Jersey	Field Inspectors	NJ DEP, Northern Field Office	1259 Route 46 - Bldg #2, Parsippany, NJ 07054	(973) 299-7700
New Jersey	Field Inspectors	NJ DEP, Central Field Office	PO Box 407, Trenton, NJ 08625-0407	(609) 584-4100
New Jersey	Field Inspectors	NJ DEP, Southern Field Office	2 Riverside Dr., Camden, NJ 08103	(856) 614-3601
New York	NA			
Pennsylvania	NA			
Philadelphia	Thomas Weir	Philadelphia Air Management Services		(215) 685-9436
Allegheny County	Field Inspectors	Southwest Regional Office		(412) 442-4161
Rhode Island	NA			
Vermont	Phil Etter	VT DEC, Inspection and Enforcement		(802) 241-3847

NA – Not applicable since there are no open burning regulations enacted in these states.

Task 4. Activity Data and Emission Inventory Development

The contractor will develop activity estimates for each SCC, and provide activity data to MARAMA in Technical Memorandum #3. For inventory development, emission factors will be taken from the EIIP document for open burning. The contractor will establish whether any new HAP or ammonia emission testing for open burning has been performed and will evaluate the data if available. The contractor will report recommended emission factors in Technical Memorandum #3 as well.

The contractor will collect data on rule effectiveness (as obtained from the Task 2 survey) and rule penetration. Through the activity survey, it will be established whether a jurisdiction has a regulation prohibiting open burning and whether the regulation contains exemptions. In addition, any state estimate of per capita waste generation obtained from Task 2 will be used in place of the national average per capita value. The contractor will use available permit data collected from state and regional contacts for developing emission estimates for residential burning, land clearing debris, and construction/demolition waste burning.

If a survey is not performed for all areas, the contractor may scale the results for each state using surrogate indicators such as urban and rural designations, or the availability of trash service. This will depend on a determination of the completeness and representativeness of the test sample survey results.

The inventory will include annual and seasonal emission estimates for criteria pollutants and for HAPS where emission factors are available. Seasonal estimates for each category will be estimated based on available temporal information obtained from Task 2. Default profiles may be developed for some categories including leaf burning (primarily a fall activity) and brush waste burning (may be more common in the non-summer months due to ice storms, other winter storms, and spring “cleanup”). The inventory will be provided to MARAMA in spreadsheets. After a 3 week review period and approval by MARAMA, the contractor will prepare the inventory in the current NEI input format.

In May 2001, the EPA’s Emission Factor Improvement Group revised the procedures to estimate open burning emissions. These revised methods are the result of updated activity data, updated emission factors, and adjustments based on expected open burning practices. As a result, 1999 data sets are available on the Technology Transfer Network (TTN Web) for download and review. However, since many states have not historically tracked much of the information needed to compare state emissions with EPA estimates in these categories, further work should be completed in this area to aid them in deciding whether or not the estimates are representative of their jurisdictions. The open burning survey provides an opportunity to collect this data. The EPA data sets are presented in Attachment D. As a final step after compiling and analyzing results of the open burning survey, the contractor will compare the county-level results with the county-level emissions listed by EPA and incorporate this information into the final report.

The contractor will submit draft inventory files in a Microsoft Excel® or Access® format, consistent with EPA requirements. After a 3 week review period and receiving comments from MARAMA, the contractor will prepare final inventory databases in the current NEI format.

Task 5. Reporting—Draft and Final and Reports

The contractor will prepare a draft report in Microsoft Word® format to describe how the emission estimates were ultimately developed for each state and for each category. After a review period, the contractor will revise the draft report and submit a draft final report. Following a final MARAMA

review, the contractor will make recommended revisions and submit the report in Microsoft Word® and pdf file formats, as well as a camera-ready hard copy, along with 50 hard copies.

To facilitate communication with survey respondents, the contractor will post the results of the survey on the contractor's web site, and make the file available to MARAMA for posting on their website. The contractor will also provide links for both web sites relative to what the public can do to reduce air pollution. Links of interest will be provided by the contractor, as well as MARAMA and state staff.

C. STAFFING PLAN

The contractor will provide a staffing plan needs to be provided in the work plan by the contractor. An example summary table is shown in Table I-5.

Table I-5. Example Staffing Plan

Staff	Assignment
Staff Person 1	Managing Director
Staff Person 2	Project Manager; Survey Management; Data Analysis
Staff Person 3	Database and Geographic Information System Support
Staff Person 4	Database Support
Staff Person 5	Contract Management

D. TIME-LINE

The contractor will propose a time-line for this project. A preliminary project schedule is given below as Table II-6. Brief descriptions of each step and the amount of calendar time needed for completion should be provided.

Table II-6. Preliminary Project Schedule

Date	Deliverable/Project Status
9/14/01	Sign contract
9/17-28	Conduct test survey
10/1-12	Development of Technical Memorandum #1. Memo due 10/12.
10/15-11/9	Comment period on Technical Memorandum #1
11/12-30	Additional survey (if warranted)
12/3-14	Draft activity data calculated, emission factors collected, preparation of Technical Memorandum #2. Memo due 12/14.
12/17-28	Development of Technical Memorandum #3. Memo due 12/28.
12/31/01-1/24/02	Comment period on Technical Memorandum #3.
1/28-3/1	Preparation of final activity data. Preparation of draft emissions inventory. Draft inventory due 3/1.
3/04-29	Comment period on draft inventory.
4/1-30	Preparation of final and electronic inventories
4/30	Draft report due
5/1-28	Comment period on draft report
6/14	Final draft report due
6/21	Final comment period
6/28	Final report due

E. BUDGET

The contractor will submit a proposed budget for this project in response to the RFP. The final budget will be included in the contract.

ATTACHMENT A
RESIDENTIAL WOOD COMBUSTION QUESTIONNAIRE

PART 1. INTRODUCTION

Surveyor's Name _____ Date _____ Respondent Phone Number _____

No answer: _____, (return to queue for up to 7 call-backs)

Household or Business?: _____, (if business, terminate and remove from sample)

Intro1. Hello. My name is _____ and I'm calling <insert name of contractor>. We are calling on behalf of the state of <CATI inserts name of state>. The purpose of our call is to ask you some questions about your use of wood for heating or other purposes. Your responses will be kept confidential.

The interview will take about 15 minutes. Is this a convenient time for you?

1. Yes (Go to Question #1)
2. No (Go to CB)
3. **DON'T KNOW** (Go to CB)
4. **REFUSED** (Terminate, remove from sample)

CB. When would be a good time to call back?

(Schedule Callback)

1. Before we begin the interview, I need to ask whether you are aged 18 or above.

1. Yes, over 18 (Go to Question #4)
2. No, under 18 (Go to Question #2)
3. **DON'T KNOW** (Terminate)
4. **REFUSED** (Terminate)

2. Thank you very much for being willing to participate in the interview. Unfortunately because you are under the age of 18, you are not eligible to participate. Is there someone else within your home aged 18 or above who I could speak with?

1. Yes (coming to the phone) (Go to Intro2)
2. Yes (not home now) (Schedule Callback)
3. No (Terminate)
4. **DON'T KNOW** (Terminate)
5. **REFUSED** (Terminate)

Intro2. Hello. My name is _____ and I'm calling from <insert name of company>. We are calling on behalf of the state of <CATI inserts name of state>. The purpose of our call is to ask you some questions about your use of wood for heating or other purposes. Your responses will be kept confidential.

3. The interview will take about 15 minutes. Is this a convenient time for you?

1. Yes (Go to Question #4)
2. No (Go to CB)
3. **DON'T KNOW** (Go to CB)
4. **REFUSED** (Terminate, remove from sample)

If the respondent is willing to participate, assign a Home Code ID number _____

4. I just want to verify before we begin, that you live in <CATI inserts name of state> state in <CATI inserts name of county> county. Is that correct?

1. Yes (Go to Question #6)
2. No
3. **DON'T KNOW** (Go to CB, schedule callback)
4. **REFUSED** (Terminate)

5. What is your zip code?: _____ (to quality assure the sample designation of urban/rural status).

6. What type of household do you live in?

Single-Family, detached: _____, (i.e., house, no walls shared with another dwelling);

Single-Family, attached (up to 3 units): _____, (duplex or triplex townhouse);

Other: _____, (multi-family of 4 or more units, mobile homes).

7. Are you the household member who is most familiar with wood-burning devices in your home?

1. Yes (Go to Part 2)
2. No (Go to CB, schedule callback)
3. **DON'T KNOW** (Go to CB, schedule callback)
4. **REFUSED** (Terminate)

PART 2. EQUIPMENT TYPES

1. *Do you have any of the following wood-burning devices in your home? A wood burning fireplace, a woodstove, a wood burning furnace, a pellet stove, or outdoor wood burning equipment, such as a fire pit)?* Y/N

It is important to ask this question and record the answer even if the home occupant reports that they don't have any wood-burning devices since the determination of the fraction of homes having a wood-burning device is one of the key objectives of the survey.

2. *Do you have a wood-burning fireplace?* Y/N,
How many? ____ (Fill out Part 3 of the questionnaire for each fireplace).
3. *Do you have a woodstove or a wood-burning fireplace insert?* Y/N,
How many? ____ (Fill out Part 4 of the questionnaire for each device).

Explanatory text: A fireplace insert is a type of woodstove designed to fit into an existing fireplace cavity. Often these have tight-fitting glass doors (possibly gasketed) and fans to circulate heat. Be careful not to double-count a fireplace insert as both a fireplace and a fireplace insert (i.e., a home needs a fireplace to install a fireplace insert but don't count it as a fireplace if it is counted as a fireplace insert.) This equipment category also includes built-in wood stoves designed into a wall of a home (e.g., Fireplace Extraordinaire™).

4. *Do you have a pellet stove?* Y/N,
How many? ____ (Fill out Part 5 of the questionnaire for each pellet stove).
5. *Do you have a wood-fired furnace or boiler?* Y/N,
How many? ____ (Fill out Part 6 of the questionnaire for each device).
6. *Do you have any other indoor wood-burning appliances in your home?* Y/N,
If so, what kinds and number of each? _____ (Fill out Part 7 of the questionnaire for each device, except for "masonry heaters", see explanatory text below).

Explanatory text: Responses may include cook stoves and masonry heaters. If the home occupant volunteers the term "masonry heater" without prompting, and it is not already listed as a fireplace, record it as one (fill out Part 3 for the device).

7. *Do you have any outdoor wood-burning devices?* Y/N,
If so, what kinds and how many of each? _____ (Fill out Part 7 of the questionnaire for each device).

Explanatory text: Responses may include wood-burning barbecues, fireplaces, fire pits. Verify that any such response is indeed for wood-burning devices and not gas or other fuel (e.g., charcoal). Responses for burn piles or other wood-waste burning activities are excluded from the survey.

PART 3. WOOD-BURNING FIREPLACES AND MASONRY HEATERS

Home Code ID _____ Fireplace/Masonry Heater Number _____

Fireplace ___ or Masonry Heater ___

1. *How much wood did you burn during the last year?* (Review the wood use options listed below and allow the respondent to use the units that they choose. Note that this is the amount of wood burned, not necessarily the amount purchased; there could be a total of 2 responses – one for real wood and another for artificial logs).

_____ number of full cords (stack of wood 4ft x 4ft x 8ft = 128 cubic feet);

_____ number of face cords or "fireplace" cords (stack of wood 2ft x 4ft x 8ft = 64 cubic feet = 1/2 of a full cord);

_____ number of pick-up truck loads (average pick-up truck load = 0.35 full cords);

_____ number of bundles of wood (usually bought at a grocery store, typically 1 ft X 1 ft X 2 ft or 1/64 of a full cord);

_____ number of artificial logs [provide some common manufacturing names (e.g., Duraflame, Pine Mountain, and Hearthlogg) to the respondent to help them understand the term "artificial logs"];

_____ number of tons of artificial logs [a pallet of logs is typically 1 ton; provide some common manufacturing names (e.g., Duraflame, Pine Mountain, and Hearthlogg) to the respondent to help them understand the term "artificial logs". Respondents may purchase artificial logs by the ton. Artificial logs range in weight from 2.5 lbs. to 6 lbs. The weighted average value based on national sales estimates is 4.95 lbs.];

2. *During which months was this device used? For each month during which the equipment was used, please provide an estimate of the number of days that the device was used.*

- ___ January;
- ___ February;
- ___ March;
- ___ April;
- ___ May;
- ___ June;
- ___ July;
- ___ August;
- ___ September;
- ___ October;
- ___ November;
- ___ December.

3. Please provide a selection from the following list as to the closest description of how this device is used during a typical week.

- 24 hours/day, 7 days/week;
- daylight hours, 7 days/week;
- evening hours, weekdays; daylight hours weekends;
- daylight hours, weekends; none on weekdays;
- evening hours, weekends; none on weekdays;
- other (provide text description).

4. Please provide information on the type of wood combusted during the previous year. If more than one type of wood is selected, please estimate the fraction of each wood type (e.g., 50% oak/50% pine). <if same as previous equipment, CATI inserts the response>. NOTE: this question is skipped by CATI if only artificial logs were used.

- oak or hickory;
- pine;
- hemlock or spruce;
- maple, beech or birch;
- other or unknown hardwood;
- other or unknown softwood;
- unknown.

PART 4. WOODSTOVE/FIREPLACE INSERTS

Home Code ID _____ Woodstove/Fireplace Insert Number _____

1. *How much wood fuel did you use during the last year?* (Review the wood use options listed below and allow the respondent to use the units that they choose. Note that this is the amount of wood burned, not necessarily the amount purchased; there could be a total of 2 responses – one for real wood and another for artificial logs).

_____ number of full cords (stack of wood 4ft x 4ft x 8ft = 128 cubic feet);

_____ number of face cords or "fireplace" cords (stack of wood 2ft x 4ft x 8ft = 64 cubic feet = 1/2 of a full cord);

_____ number of pick-up truck loads (average pick-up truck load = 0.35 full cords);

_____ number of bundles of wood (usually bought at a grocery store, typically 1 ft X 1 ft X 2 ft or 1/64 of a full cord);

_____ number of artificial logs [provide some common manufacturing names (e.g., Duraflame, Pine Mountain, and Hearthlogg) to the respondent to help them understand the term "artificial logs"];

_____ number of tons of artificial logs [a pallet of logs is typically 1 ton; provide some common manufacturing names (e.g., Duraflame, Pine Mountain, and Hearthlogg) to the respondent to help them understand the term "artificial logs". Respondents may purchase artificial logs by the ton. Artificial logs range in weight from 2.5 lbs. to 6 lbs. The weighted average value based on national sales estimates is 4.95 lbs.];

2. *During which months was this device used? For each month that the equipment was used, please provide an estimate of the number of days that the device was used.*

- ___ January;
- ___ February;
- ___ March;
- ___ April;
- ___ May;
- ___ June;
- ___ July;
- ___ August;
- ___ September;
- ___ October;
- ___ November;
- ___ December.

3. Please provide a selection from the following list as to the closest description of how this device is used during a typical week.

- 24 hours/day, 7 days/week;
- daylight hours, 7 days/week;
- evening hours, weekdays; daylight hours weekends;
- daylight hours, weekends; none on weekdays;
- evening hours, weekends; none on weekdays;
- other (provide text description).

4. Was the device purchased after July 1990? Y/N (Ask the respondent to make their best guess if they don't know for sure. If it was purchased after July 1990, it is probably an EPA-certified stove.)

5. Is it a catalytic stove? Y/N (If the respondent doesn't know whether it is a catalytic stove, it probably isn't, so record it as no.)

6. What is the brand and model of the stove? _____ (If the respondent doesn't know ask them to take a minute to look.)

7. Please provide information on the type of wood combusted during the previous year. If more than one type of wood is selected, please estimate the fraction of each wood type (e.g., 50% oak/50% pine). <if same as previous equipment, CATI inserts the response>. NOTE: this question is skipped by CATI if only artificial logs were used.

- oak or hickory;
- pine;
- hemlock or spruce;
- maple, beech or birch;
- other or unknown hardwood;
- other or unknown softwood;
- unknown.

PART 5. PELLETT STOVES

Home Code ID _____ Pellet Stove Number _____

1. *How much pellet fuel did you use during the last year? (Review the pellet use options listed below and allow the home occupant to use the units that they choose).*

_____ number of tons;
_____ number of 20 lb. bags;
_____ number of 40 lb. bags;
_____ number of 50 lb. bags.

2. *During which months was this device used? For each month that the equipment was used, please provide an estimate of the number of days that the device was used.*

___ January;
___ February;
___ March;
___ April;
___ May;
___ June;
___ July;
___ August;
___ September;
___ October;
___ November;
___ December.

3. *Please provide a selection from the following list as to the closest description of how this device is used during a typical week.*

___ 24 hours/day, 7 days/week;
___ daylight hours, 7 days/week;
___ evening hours, weekdays; daylight hours weekends;
___ daylight hours, weekends; none on weekdays;
___ evening hours, weekends; none on weekdays;
___ other (provide text description).

PART 6. WOOD FURNACES/BOILERS

Home Code ID _____ Furnace/Boiler Number _____

1. *How much wood fuel did you use during the last year?* (Review the wood use options listed below and allow the respondent to use the units that they choose. Note that this is the amount of wood burned, not necessarily the amount purchased; there could be a total of 2 responses – one for real wood and another for artificial logs).

_____ number of full cords (stack of wood 4ft x 4ft x 8ft = 128 cubic feet);

_____ number of face cords or "fireplace" cords (stack of wood 2ft x 4ft x 8ft = 64 cubic feet = 1/2 of a full cord);

_____ number of pick-up truck loads (average pick-up truck load = 0.35 full cords);

_____ number of bundles of wood (usually bought at a grocery store, typically 1 ft X 1 ft X 2 ft or 1/64 of a full cord);

_____ number of artificial logs [provide some common manufacturing names (e.g., Duraflame, Pine Mountain, and Hearthlogg) to the respondent to help them understand the term "artificial logs"];

_____ number of tons of artificial logs [a pallet of logs is typically 1 ton; provide some common manufacturing names (e.g., Duraflame, Pine Mountain, and Hearthlogg) to the respondent to help them understand the term "artificial logs". Respondents may purchase artificial logs by the ton. Artificial logs range in weight from 2.5 lbs. to 6 lbs. The weighted average value based on national sales estimates is 4.95 lbs.];

2. *During which months was this device used? For each month that the equipment is used, please provide an estimate of the number of days that the device was used.*

___ January;

___ February;

___ March;

___ April;

___ May;

___ June;

___ July;

___ August;

___ September;

___ October;

___ November;

___ December.

3. Please provide a selection from the following list as to the closest description of how this device is used during a typical week.

- 24 hours/day, 7 days/week;
- daylight hours, 7 days/week;
- evening hours, weekdays; daylight hours weekends;
- daylight hours, weekends; none on weekdays;
- evening hours, weekends; none on weekdays;
- other (provide text description).

4. Please provide information on the type of wood combusted during the previous year. If more than one type of wood is selected, please estimate the fraction of each wood type (e.g., 50% oak/50% pine). <if same as previous equipment, CATI inserts the response>. NOTE: this question is skipped by CATI, if only artificial logs are used.

- oak or hickory;
- pine;
- hemlock or spruce;
- maple, beech or birch;
- other or unknown hardwood;
- other or unknown softwood;
- unknown.

PART 7. OTHER WOOD BURNING EQUIPMENT

Home Code ID _____ Other Equipment Number _____ Other Equipment Description _____

1. *How much wood fuel did you use during the last year?* (Review the wood use options listed below and allow the respondent to use the units that they choose. Note that this is the amount of wood burned, not necessarily the amount purchased; there could be a total of 2 responses – one for real wood and another for artificial logs).

_____ number of full cords (stack of wood 4ft x 4ft x 8ft = 128 cubic feet);

_____ number of face cords or "fireplace" cords (stack of wood 2ft x 4ft x 8ft = 64 cubic feet = 1/2 of a full cord);

_____ number of pick-up truck loads (average pick-up truck load = 0.35 full cords);

_____ number of bundles of wood (usually bought at a grocery store, typically 1 ft X 1 ft X 2 ft or 1/64 of a full cord);

_____ number of artificial logs [provide some common manufacturing names (e.g., Duraflame, Pine Mountain, and Hearthlogg) to the respondent to help them understand the term "artificial logs"];

_____ number of tons of artificial logs [a pallet of logs is typically 1 ton; provide some common manufacturing names (e.g., Duraflame, Pine Mountain, and Hearthlogg) to the respondent to help them understand the term "artificial logs". Respondents may purchase artificial logs by the ton. Artificial logs range in weight from 2.5 lbs. to 6 lbs. The weighted average value based on national sales estimates is 4.95 lbs.];

2. *During which months was this device used? For each month during which the equipment was used, please provide an estimate of the number of days that the device was used.*

- ___ January;
- ___ February;
- ___ March;
- ___ April;
- ___ May;
- ___ June;
- ___ July;
- ___ August;
- ___ September;
- ___ October;
- ___ November;
- ___ December.

3. Please provide a selection from the following list as to the closest description of how this device is used during a typical week.

- 24 hours/day, 7 days/week;
- daylight hours, 7 days/week;
- evening hours, weekdays; daylight hours weekends;
- daylight hours, weekends; none on weekdays;
- evening hours, weekends; none on weekdays;
- other (provide text description).

4. Please provide information on the type of wood combusted during the previous year. If more than one type of wood is selected, please estimate the fraction of each wood type (e.g., 50% oak/50% pine). <if same as previous equipment, CATI inserts the response>. NOTE: this question is skipped by CATI if only artificial logs are used.

- oak or hickory;
- pine;
- hemlock or spruce;
- maple, beech or birch;
- other or unknown hardwood;
- other or unknown softwood;
- unknown.

**ATTACHMENT B
OPEN BURNING QUESTIONNAIRE**

PART 1. INTRODUCTION

We are calling on behalf of the state of <name of state> and MARAMA. The purpose of our call is to ask you some questions concerning open burning activity in your jurisdiction for the year 2000.

1. *Are you associated with the local service or agency that can best answer questions concerning residential and commercial open burning regulations and open burning violations, or, if open burning is not prohibited, general open burning practices? Y/N*

If Y, go to Question #2.

If N, do you know what local agency tracks open burning regulations and open burning violations? Y/N

If Y, request contact information.

2. *Please indicate whether you can provide information on the following categories of open burning:*

Household waste burning Y/N

Yard waste burning Y/N

Land clearing debris burning Y/N

Construction/demolition debris burning Y/N

NOTE: It may be that there are multiple contacts for obtaining information on the various open burning categories. For example, a contact that can provide information on household waste burning may not be familiar with land clearing debris burning. If the respondent answers N to any of the above categories, request the appropriate contact/agency. If Y to any of the above categories, go to Question 3.

3. *What county are you located in? _____*
4. *What specific jurisdiction(s) do you serve? _____*

Depending on what categories the respondent is familiar with, as indicated by Question 2, proceed to the appropriate category and ask the respondent all survey questions related to an individual category. Once all questions are asked for one category, return to the introduction to ask the respondent questions concerning the remaining categories.

5. *Does your jurisdiction have a rule or ordinance other than a statewide rule prohibiting open burning of household waste? Y/N If Y, go to Question 5a. If N, go to Part 2 of questionnaire.*

5a. *Does your rule apply to specific seasons or months of the year? Y/N If Y, please describe.*

5b. *Does your rule contain exemptions for certain types of household waste burning? Y/N If Y, please describe.*

Go to Part 7 of questionnaire, Rule Effectiveness Evaluation Form.

6. *Does your jurisdiction have a rule or ordinance other than a statewide rule prohibiting open burning of brush waste? Y/N If Y, go to Question 6a. If N, go to Part 3 of questionnaire.*

6a. *Does your rule apply to specific seasons or months of the year? Y/N If Y, please describe.*

6b. *Does your rule contain exemptions for certain types of brush burning? Y/N
If Y, please describe.*

Go to Part 7 of questionnaire, Rule Effectiveness Evaluation Form.

7. *Does your jurisdiction have a rule or ordinance other than a statewide rule prohibiting open burning of leaf waste? Y/N If Y, go to Question 7a. If N, go to Part 4 of questionnaire.*

7a. *Does your rule apply to specific seasons or months of the year? Y/N If Y, please describe.*

7b. *Does your rule contain exemptions for certain types of leaf burning? Y/N
If Y, please describe.*

Go to Part 7 of questionnaire, Rule Effectiveness Evaluation Form.

8. *Does your jurisdiction have a rule or ordinance other than a statewide rule prohibiting open burning of land clearing debris? Y/N If Y, go to Question 8a. If N, go to Part 5 of questionnaire.*

8a. *Does your rule apply to specific seasons or months of the year? Y/N If Y, please describe.*

8b. *Does your rule contain exemptions for certain types of land clearing debris burning? Y/N
If Y, please describe.*

Go to Part 7 of questionnaire, Rule Effectiveness Evaluation Form.

9. *Does your jurisdiction have a rule or ordinance other than a statewide rule prohibiting open burning of construction/demolition debris? Y/N If Y, go to Question 9a. If N, go to Part 6 of questionnaire.*

9a. *Does your rule apply to specific seasons or months of the year? Y/N If Y, please describe.*

9b. *Does your rule contain exemptions for certain types of open burning? Y/N
If Y, please describe.*

Go to Part 7 of questionnaire, Rule Effectiveness Evaluation Form.

PART 2. HOUSEHOLD WASTE BURNING ACTIVITY

1. *What is your estimate of the number of burn barrels being used in your jurisdiction?*
____ number ____ don't know
2. *What is your estimate of the number of households that burn waste?* ____ number ____ don't know
3. *Does your jurisdiction issue permits for household waste burning?* Y/N
If Y, go to Questions 4 and 5. If N, go to Question 6.
4. *What is your estimate of the total number of burn barrels for both permitted and unpermitted burns?*
____ number ____ don't know
5. *What is your estimate of the total number of households burning waste for both permitted and unpermitted burns?* ____ number ____ don't know
6. *Please estimate how frequently households burn household waste.*
____ number of times per ____ (fill in time period) ____ don't know
7. *What would you estimate is the average amount of waste per burn?* ____ amount ____ don't know
8. *What percentage of burning is conducted in:*

Winter (December, January, February)? ____
Spring (March, April, May)? ____
Summer (June, July, August)? ____
Autumn (September, October, November)? ____
Don't know ____
9. *Does the jurisdiction have a municipal trash collection service?* Y/N
10. *Does the jurisdiction have a transfer station?* Y/N
11. *Does the jurisdiction provide any other waste disposal options (e.g., recycling)?* Y/N
If Y, what are they?

PART 3. BRUSH WASTE BURNING ACTIVITY

1. *Does your jurisdiction collect brush waste from households for transfer to a central location for burning?* Y/N If Y, go to Question 2. If N, go to Question 7.

NOTE: A jurisdiction may collect brush waste, but may not burn the brush to dispose of the waste. The question's intent is to establish whether the municipality conducts centralized burns.

2. *Does your agency issue permits for each municipal burn?* Y/N If N, go to Question 5.

3. *Please indicate whether your permits include the following:*

Amount of waste burned Y/N ____ don't know

Composition of waste burned Y/N ____ don't know

Date of burn Y/N ____ don't know

Duration of burn Y/N ____ don't know

4. *May we obtain copies of the permits or any summaries of the permit data that you maintain?* Y/N

NOTE: Depending on what information is established to be included in the permit, the surveyor may or may not need to ask Questions 5 and 6.

5. *What is your estimate of the number of municipal brush waste burns?*
____ number ____ don't know

6. *What is your estimate of the average fuel loading for all burns?*
____ amount per burn ____ don't know

7. *For brush waste burning at residential properties, what is your estimate of the number of households that burn brush waste?*
____ number ____ don't know

8. *Does your jurisdiction issue permits for household brush waste burning at residential properties?*
Y/N If Y, go to Question 9. If N, go to Question 10.

9. *What is your estimate of the total number of households burning brush waste for both permitted and unpermitted burns?*
____ amount ____ don't know

10. *Please estimate how frequently residences burn brush waste.*
____ number of times per ____ (fill in time period) ____ don't know

11. *What would you estimate is the average amount of waste per burn?* ____ amount ____ don't know

12. *What percentage of brush burning is conducted in:*

Winter (December, January, February)? _____

Spring (March, April, May)? _____

Summer (June, July, August)? _____

Autumn (September, October, November)? _____

Don't know _____

13. *Does your jurisdiction provide any other waste disposal options for brush waste? Y/N*

If Y, what are they?

PART 4. LEAF WASTE BURNING ACTIVITY

1. *Does your jurisdiction collect leaf waste from households for transfer to a central location for burning?* Y/N If Y, go to Question 2. If N, go to Question 7.

NOTE: A jurisdiction may collect leaf waste, but may not dispose of the leaf waste by burning. The question's intent is to establish whether the municipality conducts centralized burns.

2. *Does your agency issue permits for each municipal burn?* Y/N If N, go to Question 5.
3. *Please indicate whether your permits include the following:*

Amount of waste burned Y/N ____ don't know
Composition of waste burned Y/N ____ don't know
Date of burn Y/N ____ don't know
Duration of burn Y/N ____ don't know

4. *May we obtain copies of the permits or any summaries of the permit data that you maintain?* Y/N

NOTE: Depending on what information is established to be included in the permit, the surveyor may or may not need to ask Questions 5 and 6.

5. *What is your estimate of the number of municipal leaf waste burns?*
____ number ____ don't know
6. *What is your estimate of the average fuel loading for all burns?*
____ amount per burn ____ don't know
7. *For leaf waste burning at residential properties, what is your estimate of the number of households that burn leaf waste?*
____ number ____ don't know
8. *Does your jurisdiction issue permits for household leaf waste burning at residential properties?*
Y/N If Y, go to Question 9. If N, go to Question 10.
9. *What is your estimate of the total number of households burning leaf waste for both permitted and unpermitted burns?*
____ amount ____ don't know
10. *Please estimate how frequently residences burn leaf waste.*
____ number of times per ____ (fill in time period) ____ don't know
11. *What would you estimate is the average amount of waste per burn?* ____ amount ____ don't know

12. *What percentage of leaf burning is conducted in:*

Winter (December, January, February)? _____

Spring (March, April, May)? _____

Summer (June, July, August)? _____

Autumn (September, October, November)? _____

Don't know _____

13. *Does your jurisdiction provide any other waste disposal options for leaf waste? Y/N*

If Y, what are they?

PART 5. LAND CLEARING DEBRIS BURNING ACTIVITY

1. *Do you issue permits for land clearing debris burning?* Y/N If N, go to question 4.

2. *Please indicate whether your permits include the following:*

Amount of waste burned Y/N ____ don't know
Composition of waste burned Y/N ____ don't know
Date of burn Y/N ____ don't know
Duration of burn Y/N ____ don't know

3. *May we obtain copies of the permits or any summaries of the permit data that you maintain?* Y/N

NOTE: Depending on what information is established to be included in the permit, the surveyor may or may not need to ask Questions 4, 5, and 6.

4. *What is your estimate of the number of land clearing burns?* ____ number ____ don't know

NOTE: The following question only needs to be asked if permits are issued.

5. *What is your estimate of the number of total burns, including permitted and non-permitted burns?*
____ number ____ don't know

6. *What would you estimate is the average amount of waste per burn?* ____ amount ____ don't know

NOTE: If respondent cannot provide information to Questions 2 through 6, proceed with Question 7, otherwise go to Question 9.

7. *Do you have estimates of the number of acres cleared due to the following types of construction?*

Residential construction ____ acres ____ don't know
Nonresidential construction ____ acres ____ don't know
Road construction ____ acres ____ don't know
Total construction ____ acres ____ don't know

8. *For what percentage of acres cleared in your jurisdiction was open burning used to dispose of the waste (i.e., percentage burned out of percentage generated for each category):*

Residential construction ____% ____ don't know
Nonresidential construction ____% ____ don't know
Road construction ____% ____ don't know
Total construction ____ acres ____ don't know

9. *What percentage of land clearing burning is conducted in:*

Winter (December, January, February)? ____
Spring (March, April, May)? ____
Summer (June, July, August)? ____
Autumn (September, October, November)? ____
Don't know ____

10. *Does your jurisdiction have restrictions on placing land clearing debris in a landfill?* Y/N
If Y, what are they?

11. *Do you require the use of an air curtain destructor for burning land clearing debris?* Y/N

PART 6. CONSTRUCTION/DEMOLITION WASTE BURNING ACTIVITY

1. *Do you issue permits for construction/demolition waste burning?* Y/N If N, go to question 4.

2. *Please indicate whether your permits include the following:*

Amount of waste burned Y/N ____ don't know

Composition of waste burned Y/N ____ don't know

Requirement that the wood be untreated Y/N ____ don't know

Date of burn Y/N ____ don't know

Duration of burn Y/N ____ don't know

3. *May we obtain copies of the permits or any summaries of the permit data that you maintain?* Y/N

NOTE: Depending on what information is established to be included in the permit, the surveyor may or may not need to ask Questions 4, 5, and 6.

4. *What is your estimate of the number of construction/demolition burns?*

____ number ____ don't know

NOTE: The following question only needs to be asked if permits are issued.

5. *What is your estimate of the number of total burns, including permitted and non-permitted burns?*

____ number ____ don't know

6. *What would you estimate is the average amount of waste per burn?* ____ amount ____ don't know

7. *What percentage of construction/demolition burning is conducted in:*

Winter (December, January, February)? ____

Spring (March, April, May)? ____

Summer (June, July, August)? ____

Autumn (September, October, November)? ____

Don't know ____

8. *Does your jurisdiction have restrictions on placing construction/demolition waste in a landfill?* Y/N

If Y, what are they?

PART 7. RULE EFFECTIVENESS EVALUATION FORM

Open Burning Category _____

Jurisdiction

The following questions are multiple choice questions, in which scores are assigned depending on the response. If the respondent cannot answer the questions readily over the phone without checking in their agency files, you may want to provide the respondent the option of answering the survey electronically, and send it to them via email.

1. *What has been the nature and extent of source education on requirements of the regulation? (Please indicate all that apply.)*

- _____ Individual mailings on compliance requirements (7)
- _____ Educational opportunities for general public or municipalities (7)
- _____ General notices in newspapers (3)
- _____ Inform public on state/regional agency website (3)
- _____ None (0)

Score _____

For the following questions, please indicate the most appropriate response from the choices provided after each question.

2a. *For residential municipal solid waste, what percentage of households in your jurisdiction area typically are spot checked annually?*

- _____ >30 percent (20)
- _____ 10-30 percent (15)
- _____ 5-9 percent (10)
- _____ 1-4 percent (5)
- _____ <1 percent or don't know (0)

Score _____

2b. *For residential yard waste burning, what percentage of households in your jurisdiction area typically are spot checked annually?*

- _____ >30 percent (20)
- _____ 10-30 percent (15)
- _____ 5-9 percent (10)
- _____ 1-4 percent (5)
- _____ <1 percent or don't know (0)

Score _____

2c. *For land clearing debris burning, what percentage of sources in your jurisdiction typically are spot checked annually?*

- _____ >30 percent (20)
 - _____ 10-30 percent (15)
 - _____ 5-9 percent (10)
 - _____ 1-4 percent (5)
 - _____ <1 percent or don't know (0)
- Score _____

2d. *For construction/demolition debris burning, what percentage of sources in your jurisdiction typically are spot checked annually?*

- _____ >30 percent (20)
 - _____ 10-30 percent (15)
 - _____ 5-9 percent (10)
 - _____ 1-4 percent (5)
 - _____ <1 percent or don't know (0)
- Score _____

3. *What percentage of the past year's spot checks indicated compliance?*

- _____ 100 percent (30)
 - _____ 90-99 percent (25)
 - _____ 50-89 percent (20)
 - _____ 25-49 percent (10)
 - _____ 1-24 percent (5)
 - _____ <1 percent or don't know (0)
 - _____ Not applicable since no spot checks were done (0)
- Score _____

4. *Has formal documented enforcement action been taken against sources found to be out of compliance?*

- _____ Not applicable since no inspected sources have been found to be out of compliance (10)
 - _____ Yes, for all noncomplying sources (10)
 - _____ Yes, in 50 to 99 percent of the cases (5)
 - _____ Yes, in <50 percent of the cases (2)
 - _____ Never, or don't know (0)
- Score _____

5. *Have enforcement actions for sources in this source category been publicized in the media (newspaper, TV, radio, trade journals), either through news stories or paid advertisements?*

- Not applicable since no inspected sources have been found to be out of compliance (5)
 - Yes, in every case (5)
 - Yes, in 50 to 99 percent of the cases (3)
 - Yes, in <50 percent of the cases (1)
 - Never, or don't know (0)
- Score _____

6. *Have follow-up inspections been made on sources which were found to be out of compliance?*

- Not applicable since no inspected sources have been found to be out of compliance (10)
 - Yes, in 100 percent of the cases (10)
 - Yes, in 50 to 99 percent of the cases (5)
 - Yes, in <50 percent of the cases (2)
 - Never, or don't know (0)
- Score _____

7. *Does your regulation contain uncorrected deficiencies as specified in the SIP-call follow-up letter from the EPA Regional Air Division Director to the State Air Program Director?*

- Yes (0)
 - No (5)
 - Don't know (5)
- Score _____

After the questionnaire has been completed, total the scores to determine RE for each category.

TOTAL SCORE: _____ = RE
(100 points maximum)

**ATTACHMENT C
STATE CONTACTS LIST**

CONNECTICUT

Open Burning Official List

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Atty. Date Rcv.</u>	<u>Cert. Approved Date</u>	<u>Cert. Exp. Date</u>	<u>Highest Town Official</u>	<u>Highest Town Official Address</u>	<u>Insp. No.</u>
Andover	Edward F. Turn		(860) 742-7305	P.O. Box 328	8/5/99					179
Andover	Howard Bidwell			103 Long Hill Road	8/5/99					179
Andover	Jay Linddy			125 Lake Road	8/5/99					179
Ashford	John M. Zulick			25 Pompey Hollow Road	1/16/98			John M. Zulick		215
Avon	James R. Sansone		(860) 409-4316	60 West Main Street				Phillip K. Schenck Jr.	60 West Main Street	
Avon	James DiPace		(860) 678-1348	55 Wheeler Road				Phillip K. Schenck Jr.	60 West Main Street	
Avon	John Deckers		(860) 409-4371	60 West Main Street	4/11/00					179
Barkhamsted	Michael D. Fox		(860) 378-8285	558 Pleasant Valley	8/25/00			Michael D. Fox	Route 318	193
Beacon Falls	Daniel Lee, Jr.		(203) 729-4340	10 Maple Avenue	4/1/99			Susan A. Cable	10 Maple Avenue	188
Beacon Falls	Sean P. Lennon		(203) 729-5323	10 Maple Avenue	4/1/97	6/23/98	6/23/01	Susan A. Cable	10 Maple Avenue	188
Berlin	James P. Hortal		(86) 828-7068	240 Kensington Road	2/20/99	3/1/99	3/1/00	Bonnie L. Tharfen	240 Kensington Road	193
Berlin	Anthony Ferraro		(860) 828-7015	240 Kensington Road	10/8/99	10/14/99	10/9/01	Bonnie L. Tharfen	240 Kensington Road	193

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Attdy. Date Rcv.</u>	<u>Cert. Approved Date</u>	<u>Cert. Exp. Date</u>	<u>Highest Town Official</u>	<u>Highest Town Official Address</u>	<u>Insp. No.</u>
Bethany	Frederick Cunningham	(203) 393-2100		Fairwood Road				John E. Ford III	40 Peck Road	188
Bethel	Peter S. Valenti Jr.		(203) 794-8505	1 School Street				Judy Novacek	Library Place, P.O. Box 3	188
Bethel	May Finger			1 School Street				Judy Novacek	Library Place, P.O. Box 3	188
Bethel	Edward Robinson		(203) 794-8518	1 School Street				Judy Novacek	Library Place, P.O. Box 3	188
Bethlehem	John L. Rudzavice	(860) 266-5703	(203) 597-2231	P.O. Box 150	7/21/98	7/23/98	7/23/00	Jeffrey Nicholas	36 Main Street	188
Bloomfield	Frank Regier	(860) 243-8971		18 Wintonbury				Carl G. Booker, Sr.	800 Bloomfield Avenue	193
Bolton	Joyce Stile	(860) 849-8066		222 Bolton Center Road					222 Bolton Center Road	
Bolton	Elna Dimock	(860) 849-9823		103 Natch Road				Carl A. Preuss	158 Brandy Street	215
Bozrah	Raymond C. Barber	(860) 889-2889		1 River Road	6/24/99	7/23/99	7/23/01	Kath Robbins	Bozrah Town Hall	179
Branford	Robert D. Andrew	(203) 488-7266		45 North Main Street	6/29/98	7/7/98	7/7/01	Anthony DaRos	1019 Main Street	179
Branford	John Ahern	(203) 488-7266		45 North Main Street	2/4/99	2/4/99	2/4/00	Anthony DaRos	1019 Main Street	179
Branford	Peter Bucione	(203) 488-7266		45 North Main Street	6/29/98	7/7/98	7/7/00	Anthony DaRos	1019 Main Street	179
Branford	Michael Klarman	(203) 488-7266		45 North Main Street	6/29/98	7/7/98	7/7/00	Anthony DaRos	1019 Main Street	179

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Affdy. Date</u> RCV.	<u>Cert. Approved</u> Date	<u>Cert. Exp.</u> Date	<u>Highest Town</u> Official	<u>Highest Town</u> Official Address	<u>Insp. No.</u>
Branford	William Hackett	(203) 488-7266	(203) 488-7266	45 North Main Street	6/29/98	7/7/98	7/7/00	Anthony DaRos	1019 Main Street	179
Branford	Ronald Mullen	(203) 488-7266	(203) 488-7266	45 North Main Street	6/29/98	7/7/98	7/7/00	Anthony DaRos	1019 Main Street	179
Branford	Carrille Linke	(203) 488-7266	(203) 488-7266	45 North Main Street	2/4/99	2/4/99	2/4/00	Anthony DaRos	1019 Main Street	179
Branford	Linda Gammalel	(203) 488-7266	(203) 488-7266	45 North Main Street	2/4/99	2/4/99	2/4/00	Anthony DaRos	1019 Main Street	179
Branford	William Pope, Sr.	(203) 488-7266	(203) 488-7266	45 North Main Street	6/29/98	7/7/98	7/7/01	Anthony DaRos	1019 Main Street	179
Bridgewater	Bill Stuart	(860) 354-5250	(860) 354-5250	Main Street				William T. Stuart	Main Street	188
Bristol	Phyllis A. Amodio	(860) 589-4271	(860) 584-7682	240 Stafford Avenue	5/1/96			Denis J. Pieri	111 North Main Street	193
Bristol	Francis Battuca	(860) 584-7604	(860) 584-7604	240 Stafford Avenue				Denis J. Pieri	111 North Main Street	193
Brookfield	Wayne Graves	(203) 775-7306	(203) 740-9008	100 Pocono Road				Melvin Foncekko, Jr.	P.O. Box 5106	188
Brooklyn	Paul Kisby	(860) 774-3082	(860) 779-0472	P.O. Box 356	6/1/98	6/12/98	6/12/00	Maurice Bowen	P.O. Box 356	215
Brooklyn	Douglas P. Kramer Sr.	(860) 779-0472	(860) 779-0472	P.O. Box 356	8/24/99	8/24/99	8/24/01	Maurice Bowen	P.O. Box 356	215
Burlington	Thompson H. Merriman	(860) 875-3092	(860) 875-3092	51 Black Walnut Lane	2/4/99	2/4/99	2/4/00	Theodore C. Schafel Jr.	200 Spielman Hwy	193
Canaan	Edward McGuire			107 Main Street				Charles Lewis	107 Main Street	193

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Acq. Date</u>	<u>Recy.</u>	<u>Cart. Approved Date</u>	<u>Cart. Exp. Date</u>	<u>Highest Town Official</u>	<u>Highest Town Official Address</u>	<u>Insp. No.</u>
Canaan	Stanley MacMillan		(860) 824-0707	107 Main Street					Charles Lewis	107 Main Street	193
Canterbury	Robert J. Drosch	(860) 548-6301		111 Cemetery Road	2/8/99		2/19/99	2/19/00	Nell A. Dupont Sr.	P.O. Box 26	179
Canterbury	Darlene Gannon		(860) 546-6857	200 Westminster Road, Unit #2	6/1/99		6/4/99	6/4/01	Nell A. Dupont Sr.	P.O. Box 27	179
Canton	Bruce A. Lockwood			P.O. Box 168	1/16/98				Kathleen C. Corkum	4 Market Street	193
Canton	Scott M. Goeben			P.O. Box 168	6/8/99		6/9/99	6/9/01	Kathleen C. Corkum	4 Market Street	193
Canton	Henry W. Przybyz	(860) 693-8233	(860) 693-4093	P.O. Box 168	1/16/98				Kathleen C. Corkum	4 Market Street	193
Canton	John P. Yacovino			P.O. Box 168	1/16/98				Kathleen C. Corkum	4 Market Street	193
Chaplin	Christopher W. Knight	(860) 455-0658	(860) 423-9111	P.O. Box 286, Chaplin	2/1/99		2/1/98	9/20/00	Eugene V. Boomer, Jr.	P.O. Box 286, Chaplin	215
Chaplin	EUGENE V										
Chaplin	Steven									Chaplin	
Cheshire	Steve Casner	(203) 272-1828		250 Maple Avenue	2/4/99		2/4/99	2/4/00	John Salomone	84 South Main Street	188
Cheshire	J.F. Boland	(203) 272-1828		250 Maple Avenue	2/4/99		2/4/99	2/4/00	James E. Doherty	84 South Main Street	188
Cheshire	Jack Casner	(203) 272-1828		250 Maple Avenue	4/6/98		4/8/98	4/8/00	John Salomone	84 South Main Street	188

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Chester	Mark Kasnakas	(203) 272-1828		250 Maple Avenue	4/6/98	4/8/98	4/8/00	John Salomone	84 South Main Street	188
Chester	Jedd D. Sparo	(203) 272-1828		250 Maple Avenue	4/6/98	4/8/98	4/8/00	John Salomone	84 South Main Street	188
Chester	Patricia Gode	(203) 272-1828		250 Maple Avenue	4/6/98	4/8/98	4/8/00	John Salomone	84 South Main Street	188
Cheshire	Christopher M. Bowman	(203) 272-1828		250 Maple Avenue	4/6/98	4/8/98	4/8/00	John Salomone	84 South Main Street	188
Chester	Bernard F. Negrelli	(860) 526-3112	(860) 526-0013	39 Wtg Hill Road	6/17/97	5/1/97	5/1/00	Martin L. Herr	65 Main Street	179
Clinton	Hugh D. Allen	(860) 669-7385	(860) 609-1094	18 East Main Street	1/28/99	2/4/99	2/4/00	James M. McCusker	54 East Main Street	179
Colechester	N. Reed Gustafson		(860) 537-7285	127 Norwich Avenue	12/5/97			Jerry Corliss	127 Norwich Avenue	179
Colebrook	John Boutin			RFD #4 Winstead				George M. Wilber	558 Colebrook Rd	193
Colebrook	Richard Wilber	(860) 379-0441	(860) 379-1651	RFD #1 Winstead				George M. Wilber	558 Colebrook Rd	193
Columbia	Peter J. Moeckel	(860) 228-3159	(860) 228-3159	7 Route 87	7/10/97			Adelle G. Urban	323 Rte. 87	179
Columbia	Michael Lester	(860) 228-9855		56 Szegda Road	6/3/99	6/23/98	6/23/01	Adelle G. Urban	323 Rte 87	179
Cornwall	Gene Ingvertsen	(860) 672-6230		P. O. Box 205				Gordon M. Ridgway	26 Pine Street	193
Coverly	Noel Waite	(860) 455-9885	(860) 742-4064	1712 Main St., Coverly	12/1/97	12/1/07		Mr. John Eisesser	1712 Main St.	215

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Coverly	Lester Hill	(860) 742-9024	(860) 742-6588	77 Silver Street	12/1/97	12/1/97	Mr. John Eisesser	1772 Main Street	215	
Cromwell	Thomas D. Armentano M.S.R.S.		(860) 632-3424	41 West Street	10/5/00		Stanley A. Terry, Jr.	Municipal Center	179	
Cromwell	Todd Gagnon		(860) 635-3188	P.O. Box 104	10/6/99	10/7/99	Stanley Terry, Jr.	82 Court Street	179	
Darien	Steven H. Schole		(203) 655-3570	719 Boston Post Road			Robert Harel, Jr.	2 Renshaw Road	188	
Deep River	Richard R. Daniels, Jr.		(860) 526-6036	174 Main Street			Richard Smith			
Deep River	Richard H. Smith		(860) 526-6020	174 Main Street			Richard H. Smith	174 Main Street	188	
Deep River	Keith Nolin		(860) 526-6036	174 Main Street			Richard Smith			
Deley Beach	Billie Strippling			5344 Grande Palm Circle						
Durham	George H. Planeta, Jr.		(860) 349-9827	88 David Road	12/7/98	12/9/98	Raymond Kellowski	30 Town House Road	179	
East Granby	Mr. David K. Kilbon	(860) 653-2576		9 Center Street			David K. Kilbon	9 Center Street	193	
East Haddam	John Kanarowicz		(860) 873-6004	P.O. Box K			Susan D. Merrow	7 Main Street	179	
East Hampton	Phillip W. Vishnauer		(860) 267-0088	20 East High Street	8/27/98	9/15/98	Alan H. Bergman	20 East High Street	179	
East Hartford	William Wamnesier			740 Main Street	8/13/99	8/13/99	Timothy D. Larson		215	

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Atty. Date</u> Rcv.	<u>Cert. Approved</u> Date	<u>Cert. Exp.</u> Date	<u>Highest Town</u> Official	<u>Highest Town</u> Official Address	<u>Insp. No.</u>
East Hartford	Michael O'Connell	(860) 291-7235	(860) 291-7235	740 Main Street	8/13/99	8/13/99	8/13/01	Timothy D. Larson	740 Main Street	216
East Haven	Tony Mascolo	(203) 468-3221	(203) 468-3221	250 Main Street				Joseph Maturro, Jr.	250 Main Street	179
East Lyme, Niantic	Richard E. Morris	(860) 739-2420	(860) 739-2420	171 Boston Post Road	4/12/00			Wayne Fraser	P.O. Box 519, 108 Pennsylvania Avenue	179
East Windsor	Blaime G. Simpkins	(860) 823-1103	(860) 823-2439	178 Windsorville Rd.,	3/17/99	3/17/99	3/17/00	Linda Roberts	11 Rye Street	215
Eastford	Clayton Sheard	(860) 974-1851		404 Old Colony Rd., Eastford,				Richard Woodward	18 Westford Road	215
Eastford	Dean Bunnell	(860) 974-2622	(860) 628-6623	16 Westford Road.	7/29/99	7/29/99	7/29/01	Richard Woodward	16 Westford Road	215
Easton	Peter G. Neary	(203) 328-5469	(203) 328-5469	225 Center Road				William Kuphuse	225 Center Road	188
Ellington	Jerome Connors	(860) 872-4980	(860) 892-7566	1 Virginia Drive	7/29/99	7/29/99	7/29/01	Michael Stupinski	55 Main Street	215
Ellington	Allan L. Lawrence	(860) 872-4980	(860) 892-7566	1 Virginia Drive	7/6/99	7/7/99	7/7/01	Michael Stupinski	55 Main Street	215
Enfield	William H. Blitz	(860) 745-0383	(860) 745-0383	47 North Main Street	8/4/99	8/4/99	8/4/01	Scott Shanley	820 Enfield Street	215
Enfield	Michael S. Caronna	(860) 763-0865	(860) 745-0383	47 North Main Street	8/4/99	8/4/99	8/4/01	Scott Shanley	47 North Main Street	215
Essex	Richard Leighton	(860) 388-8175	(860) 767-4342	28 West Avenue				Peter B. Webster	29 West Avenue	188
Fairfield	Arthur J. Lefort	(203) 256-3620	(203) 256-3620	611 Post Road				John Metsopoulos	611 Post Road	188

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Attdy. Date</u> Rcv.	<u>Cert. Approved</u> Date	<u>Cert. Exp.</u> Date	<u>Highest Town</u> Official	<u>Highest Town</u> Official Address	<u>Insp. No.</u>
Framlington	Vincant DiPietro		(860) 673-8254	1 Montelith Drive				Thomas Worobrk	1 Montelith Drive	193
Franklin	William K. Eyberse	(860) 899-9970		7 Meeting House Hill Road	7/2/89	7/23/99	7/23/01	Richard Maters	7 Meeting House Hill Road	179
Glastonbury	Chris Stivy		(860) 652-7525	2155 Main Street	5/7/98	6/1/98	6/1/00	Richard Johnson	2155 Main Street	179
Glastonbury	Anthony Dignoli		(860) 652-7528	2155 Main Street	5/7/98	6/1/98	6/1/00	Richard Johnson	2155 Main Street	179
Goshen	Richard Kobylienski		(860) 491-2308	P.O. Box 187				James P. O'Leary	42 North Street	193
Granby	John Eberly		(860) 566-5018	37 Silkeny Road				William Simanski	15 North Granby Road	193
Greenwich	Luke T. Frangione	(203) 622-3950		101 Field Point Road				Lolly Prince	101 Field Point Road	188
Greenwich	George	(203) 735-9531		101 Field Point Road				Lolly Prince	101 Field Point Road	188
Greenwich	Robert C. Brown		(203) 622-7838	101 Field Point Road				Lolly Prince	101 Field Point Road	188
Griswold	Frederic Marzac Jr.		(860) 376-7079	32 School St., P.O. Box 359	1/4/89	1/4/99	1/4/00	Paul J. Brycki	32 School St.	179
Griswold	Steven H. Merchant Jr.	(860) 376-8949	(860) 376-7079	32 School St., P.O. Box 359	2/4/99	2/4/99	2/4/00	Paul J. Brycki	32 School St	179
Groton	Felix Prokop III		(860) 455-8551	1 Fort Hill Road	2/1/98			Ronald LeBlanc	45 Fort Hill Road	179
Groton	Nicholas A. Della			140 Broad Street	4/2/98	4/8/98	4/8/00	Ronald LeBlanc	45 Fort Hill Road	179

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Affly. Date</u> Rcv.	<u>Cert. Approved</u> Date	<u>Cert. Exp.</u> Date	<u>Highest Town</u> Official	<u>Highest Town</u> Official Address	<u>Insp. No.</u>
Groton	Allan R. Hauser		(860) 455-2456	140 Broad Street				Ronald LeBlanc	45 Fort Hill Road	179
Guilford	Charles E. Herrschaft, Jr.		(203) 453-9056	31 Park Street	4/20/98		4/28/00	Samuel D. Barthelet	31 Park Street	179
Haddam	Mark Lundgren	(860) 345-8220	(860) 348-7123	P.O. Box 595	5/11/99	6/23/98	6/23/01	Toni Bondi	30 Field Park Drive	179
Haddam	Scott Brookes	(860) 345-2394	(860) 345-8531	30 Field Park Drive	7/10/98	7/15/98	7/15/00	Toni Bondi	30 Field Park Drive	179
Haddam	Steven J. Queltete		(860) 345-8531	30 Field Park Drive	7/10/98	7/15/98	7/15/00	Toni Bondi	30 Field Park Drive	179
Haddam	Henry Johnson	(860) 267-0343	(860) 267-2462	117 Quarry Hill Road	10/30/98	11/8/98	11/8/00	Toni Bondi	30 Field Park Drive	179
Hamden	Robert O'Donnell		(203) 238-1681	2372 Whitney Avenue				Carl Amento	2372 Whitney Avenue	188
Hamden	Rober Westervelt			2372 Whitney Avenue				Carl Amento	2372 Whitney Avenue	188
Hampton	Phill Russell			164 Main Street	1/6/98			Walter A. Stone	164 Main Street	215
Hampton	Briana Watton	(860) 455-0615		310 Drain Street	7/21/99	7/21/99	7/21/01	Walter Stone		215
Hampton	Jerry Figueroa	(860) 455-0901	(860) 465-3090	182 West Old Rt 6	7/20/99	7/23/99	7/23/01	Walter A. Stone		215
Hampton	Harold Haraghey	(860) 455-0615	(860) 455-0615	467 Providence Turnpike	7/22/99	7/21/99	7/21/01	Walter Stone		215
Hampton	Kath Christadore	(860) 455-1014	(860) 548-9060	143 North Bigelow St.	7/20/99	7/23/99	7/23/01	Walter A. Stone		215

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Affidv. Date</u> <u>RCV.</u>	<u>Cert. Approved</u> <u>Date</u>	<u>Cert. Exp.</u> <u>Date</u>	<u>Highest Town</u> <u>Official</u>	<u>Highest Town</u> <u>Official Address</u>	<u>Insp. No.</u>
Hartford	Ralph Scarpino		(860) 424-3632	79 Elm Street				Michael Peters	550 Main Street	179
Hartland	William Flagg		(860) 653-3542	Route 20				William L. Hodge	22 South Road	193
Harwinton	Donald J. Boman			100 Bentley Drive				Marte M. Knudsen	100 Bentley Drive	193
Harwinton	William Rhko	(860) 485-9744	(860) 485-1580	275 Burlington Road				Marte M. Knudsen	100 Bentley Drive	193
Harwinton	William T. Buys, Jr.			158 Burlington Road				Marte M. Knudsen	100 Bentley Drive	193
Hebron	Shane Dolan	(860) 228-2671		380 Burnt Hill Road	6/12/99	7/2/99	7/2/01	Robert E. Lee	15 Gilead Street, P.O. Box 156	179
Hebron	Raymond W. Griswold		(860) 228-3022	15 Gilead Street	6/12/99	7/2/99	7/2/01	Robert E. Lee	15 Gilead Street, P.O. Box 156	179
Hebron	Anthony Pirone	(860) 228-9857		9 Mail Road, Arnston	5/12/99	7/2/99	7/2/01	Robert E. Lee	15 Gilead Street, P.O. Box 156	179
Hebron	Daniel Larson	(860) 228-9170		147 Hope Valley Road, Arnston	5/12/99	7/2/99	7/2/01	Robert E. Lee	15 Gilead Street, P.O. Box 156	179
Hebron	Kris Kolaczanko		(860) 228-3334	305 Church Street, Arnston	7/12/99	7/2/99	7/2/01	Robert E. Lee	15 Gilead Street, P.O. Box 156	179
Kent	Stanley MacMillan		(860) 927-4625	P.O. Box 678				Dorcas R. Schiesel	41 Kent Green Blvd	193
Killingly	Joseph Roy	(860) 774-5245	(860) 779-5318	172 Main Street, Box 6000	8/18/98	11/1/98	11/1/00	R. Thomas Hornan	172 Main Street, Danbison	215
Killingworth	Richard W. Albrecht	(860) 663-2824		86 Cow Hill Road	7/23/99	7/23/99	7/23/01	W. David LeVasseur	323 Route 81	179

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Atty. Date</u> <u>Rcv.</u>	<u>Cert. Approved</u> <u>Date</u>	<u>Cert. Exp.</u> <u>Date</u>	<u>Highest Town</u> <u>Official</u>	<u>Highest Town</u> <u>Official Address</u>	<u>Insp. No.</u>
Lebanon	Chester J. Ryan	(860) 642-6111		21 First Street	1/12/01	1/12/01	1/12/03	Joyce R. Okonuk	579 Exeter Road	179
Lebanon	Scott R. Schuett	(860) 642-6191	(860) 642-7143	P.O. Box 184	4/12/99	4/27/99	4/27/01	Joyce R. Okonuk	579 Exeter Road	179
Lebanon	John H. Lyon	(860) 642-6111		80 Hoxie Road	5/7/99	6/23/98	6/23/01	Joyce R. Okonuk	579 Exeter Road	179
Ledyard	Donald H. Casavant	(860) 887-3183	(860) 464-6858	11 Lorenz Parkway, Box 130	6/16/97	6/16/97	5/1/00	Wesley J. Johnson	741 Col. Ledyard Hwy	179
Lisbon	Bob Jencks	(860) 822-8712	(860) 376-3400	155 Preston Allen Road, Baltic	4/7/99	4/7/99	4/7/00	Thomas W. Sporkman	1 Newent Road	179
Litchfield	Richard Dauphais	(860) 567-8487		74 West Street, P.O. Box 488				Craig A. Miner	74 West Street	193
Litchfield	Robert Saucer		(860) 567-7568	74 West Street	10/13/99	10/14/99	10/8/01	Graig A. Miner	P.O. Box 488	215
Lyme	Gary H. Weed	(860) 434-6440		480 Hamburg Road	9/5/97	9/15/97		Ralph F. Ero, Jr.	480 Hamburg Road	179
Madison	Samuel E. DeBurra Jr.		(203) 245-5617	8 Campus Drive	5/11/00			David S. LaFemina	Madison Town Campus	179
Madison	Sheldon A. Inkster		(203) 245-5611	8 Campus Drive	5/11/00			David S. LaFemina	Madison Town Campus	179
Madison	Eleanor McCarthy		(203) 245-5618	8 Campus Drive	5/11/00			David S. LaFemina	Madison Town Campus	179
Manchester	John C. Rivoza			41 Center Street				Richard Sartor	41 Center St.	215
Manchester	Ronald Kratz		(860) 647-3173	41 Center Street				Richard Sartor	41 Center St.	215

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Affid. Date</u> <u>Recy.</u>	<u>Cert. Approved</u> <u>Date</u>	<u>Cert. Exp.</u> <u>Date</u>	<u>Highest Town</u> <u>Official</u>	<u>Highest Town</u> <u>Official Address</u>	<u>Insp. No.</u>
Mansfield	Noel Waite	(860) 455-9885	(860) 742-4064	4 South Eagleville				Martin Berliner	4 so. Eagleville Rd.	215
Mansfield	John E. Jackman		(860) 429-3336	Four South Eagleville Road				Martin Berliner		
Mansfield	John Jackman		(860) 429-3328	4 S. Eagleville Rd., Mansfield, CT 06268-2599				Martin Berliner	A. P. Beck Building	215
Marlborough	Howard T. Dean Jr.		(860) 295-6204	26 North Main Street	4/21/98		4/29/00	Howard T. Dean Jr.	P. O. Box 29	179
Marlborough	Joseph J. Asider	(860) 295-9897	(860) 295-9124	26 North Main Street	4/24/98		4/29/00	Howard T. Dean Jr.	P. O. Box 29	179
Marlborough	Mrs. Darlene M. Crowley			P. O. Box 29, 26 North Main St.	4/21/98		4/29/00	Howard T. Dean Jr.	P. O. Box 29	179
Marlborough	Violet J. Schwarzmann			P. O. Box 153	4/24/98		5/4/00	Howard T. Dean Jr.	P. O. Box 29	179
Marlborough	Deborah Bahm		(860) 295-6204	P. O. Box 29	4/24/98		4/29/00	Howard T. Dean Jr.	26 North Main Street	179
Meriden	Raymond F. Alix		(203) 630-4274	165 Miller Street	12/11/97			Joseph Merrin, Jr.	142 East Main St.	188
Meriden	Robert Mopurgo		(203) 630-4123	142 East Main Street	12/11/97		12/11/97	Joseph Merrin, Jr.	142 East Main St.	193
Middlebury	Brett Kaies		(203) 758-2461	1212 Whittemore Road	1/1/98		1/5/98	Edward B. St. John	1212 Whittemore Rd.	188
Middlefield	Charles R. Augur		(860) 349-7114	393 Jackson Hill Road	6/1/98		7/24/98	Charles R. Augur	393 Jackson Hill Rd.	179
Middletown	Steven Krol	(860) 344-3401	(860) 344-3401	Randolph Road	8/12/97		4/23/97	Domenique Thornton	245 Dekoven Drive	179

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Attdv. Date</u> <u>Rcv.</u>	<u>Cert. Approved</u> <u>Date</u>	<u>Cert. Exp.</u> <u>Date</u>	<u>Highest Town</u> <u>Official</u>	<u>Highest Town</u> <u>Official Address</u>	<u>Insp. No.</u>
Middletown	Louis Bartolotta		(860) 347-8661	445 Randolph Road	8/14/00					
Middletown	Lewis R. LaRosa, Jr.			533 Main Street	9/3/98	9/15/98	9/15/00	Dominique Thornton	245 Dekoven Drive	179
Middletown	Art Higgins		(860) 632-2488	653 East Street	8/12/97	4/17/97	5/1/00	Dominique Thornton	245 Dekoven Drive	179
Milford	Fredrick Schumacher		(203) 783-3287					Frederick L. Listman	70 West River St.	188
Milford	Michael E. Kaynak			2051 Bridgeport Avenue				Frederick L. Listman	70 West River St.	188
Monroe	Anthony (Chip) Carpenter		(203) 452-5489	7 Fan Hill Road				Karen Burnaska	7 Fan Hill Road	188
Monroe	Lee Hitchcock		(203) 452-5438	56 Crescent Pl.				Karen Burnaska	7 Fan Hill Road	188
Montville	Raymond T. Occhialini		(860) 848-1175	836 Old Colchester Road, Oakdale	4/14/98	4/20/98	4/20/00	Howard R. Baetham, Jr.	310 Norwich-New London Road.	179
Montville	Shawn P. Ryan	(860) 848-1175	(860) 848-3030	836 Old Colchester Road	5/1/98	6/4/98	6/4/00	Howard R. Baetham, Jr.	310 Norwich-New London Road.	179
Morris	Lewis Clark		(860) 567-7430	3 East Street	3/26/98			Alan Schoenbach	3 East Street.	188
Morris	John Rudzavice			3 East Street	8/27/99	9/2/99	8/2/01	Alan Schoenbach	3 East Street.	188
Morris	Vicent Aiello		(860) 567-3538	3 East Street	3/26/98			Alan Schoenbach	3 East Street	188
Mystic	Frank C. Hilbert		(860) 572-7567	P. O. Box 338	8/24/00					179

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Affly. Date</u> Rcv.	<u>Cert. Approved</u> Date	<u>Cert. Exp.</u> Date	<u>Highest Town</u> Official	<u>Highest Town</u> Official Address	<u>Insp. No.</u>
Naugatuck	Mark F. Seeger		(203) 727-7000	246 Rubber Avenue				Joan Tel	229 Church St.	188
New Britain	Pvt. Charles Carafin							Lucian Pawlak	27 West Main Street	193
New Canaan	Jack Vandusen		(203) 966-1612	60 Main Street	2/1/97			Richard Bond	77 Main Street	188
New Fairfield	Michael Crawford	(203) 746-2518	(203) 746-2766	8 Rita Drive				Patricia Gay	Rte. 39 & Brush Hill Road	188
New Hartford	Albert F. Linnell Sr.		(860) 379-3389	Main Street	3/19/98			Kelby Riager	530 Main Street	193
New Haven	Nelson Casillas		(203) 946-8383	962 Grand Avenue				John DeStefano, Jr.	200 Orange Street	188
New Haven	Patrick Cassell		(203) 946-8246					John DeStefano	200 Orange Street	188
New London	Calvin B. Darow		(860) 447-5294	289 Bank Street	11/10/97	12/11/97		Richard Brown	181 State Street	179
New Milford	Bill May		(860) 355-6099	10 Main Street				Arthur Peltier	P.O. Box 360.	188
Newington	Robert M. Cosgrave Jr.		(860) 668-4661	131 Cedar Street	8/4/99	8/4/99	8/4/01	Robert Rarrlich	131 Cedar Street	193
Newtown	Bill Hasklead		(203) 270-4210	4 South Fairfield Circle Newtown	1/22/01	1/22/01	1/22/03	Herbert Rosenthal		188
Newtown	Maureen C. Schaefer	(203) 270-4291	(203) 270-4210		5/20/99	5/25/99	5/25/01	Herbert Rosenthal	45 Main Street	188
Newtown	Mark A.R. Copper	(203) 270-4291	(203) 270-4210		5/25/99	5/25/99	5/26/01	Herbert Rosenthal	45 Main Street	188

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Atty. Date</u> Rcv.	<u>Cert. Approved</u> Date	<u>Cert. Exp.</u> Date	<u>Highest Town</u> Official	<u>Highest Town</u> Official Adress	<u>Insp. No.</u>
Newtown	Leslie A. Russell	(203) 270-4291	(203) 270-4210		5/20/99	5/25/99	5/25/01	Herbert Rosenthal	45 Main Street	188
Newtown	Donna M. McCarthy		(203) 270-4210	45 Main Street	5/20/99	5/25/99	5/25/01	Herbert Rosenthal	45 Main Street	188
Newtown	Martha S. Wright	(203) 270-4291	(203) 270-4210		5/20/99	5/25/99	5/25/01	Herbert Rosenthal	45 Main Street	188
Norfolk	Arthur S. Rosenblatt			19 Maple Avenue				Susan Dyer	19 Maple Avenue	193
Norfolk	John McGoldick			19 Maple Avenue				Susan Dyer	19 Maple Avenue	193
Norfolk	Carl F. Gundlach			19 Maple Avenue				Susan Dyer	19 Maple Avenue	193
North Branford	Ralph Thomas		(203) 484-9954	167 Village Street				Frank Connolly	1599 Foxon Rd	179
North Canaan	Lawrence D. Carlson		(860) 824-0330	100 Pease Street	3/1/99			Douglas E. Humes, Jr.	100 Pease Street	193
North Canaan	John Kroehle		(860) 824-0330		2/1/98			Douglas E. Humes, Jr.	100 Pease Street	193
North Haven	John E. Ober. Jr.		(203) 239-5321					Anthony P. Rescigno	18 Church Street	188
North Stonington	Nicholas H. Mullane		(860) 535-2877	40 Main Street	1/16/98	1/16/98		Nicholas H. Mullane II	40 Main Street	179
Norwalk	John Schwartz		(203) 838-7531					Frank J. Esposito	125 East Avenue	188
Norwich	William Tessier	(860) 886-2381		10 North Main Street	5/19/98	5/27/98	5/27/00	Richard Abete	10 North Main Street	179

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Amtdv. Date</u> Rcv.	<u>Cert. Approved</u> Date	<u>Cert. Exp.</u> Date	<u>Highest Town</u> Official	<u>Highest Town</u> Official Address	<u>Insp. No.</u>
Old Lyme	Edward C. Adant	(860) 388-2851	(860) 434-2461	3 Machrick Drive	6/10/97			Timothy C. Griswold	52 Lyme Street	179
Old Lyme	Paul R. Dorothy Sr.	(860) 388-2978	(860) 434-2461	Hatchett Hill Road	6/10/97			Timothy C. Griswold	52 Lyme Street	179
Old Lyme	Joseph Ensulo	(860) 691-1124	(860) 434-1337	Hatchett Hill Road	6/10/97			Timothy C. Griswold	52 Lyme Street	179
Old Lyme	Philip J. Bliss	(860) 434-9823	(860) 434-1605	52 Lyme Street	9/21/00			Timothy C. Griswold	52 Lyme Street	179
Old Saybrook	Dann V. Dobson	(860) 395-3133	(860) 395-3133	302 Main Street	7/20/00			Michael Pace	302 Main Street	179
Old Saybrook	Candace McConchle	(860) 388-3401	(860) 388-6609	302 Main Street	1/1/97			Michael Pace	302 Main Street	179
Orange	Timothy P. Smith	(203) 795-0751	(203) 795-0751	617 Orange Center Road	6/10/99	8/23/98	6/23/01	Robert C. Sousa	617 Orange Center Road	188
Oxford	Scott J. Pelletier	(203) 888-7790	(203) 888-2136	486 Oxford Road	10/15/97			Paul Schreiber	486 Oxford Road	188
Oxford	John A. Nemeč	(203) 888-0178	(203) 888-0178	486 Oxford Road	5/10/99	5/25/99	5/25/01	Paul Schreiber	486 Oxford Road	188
Plainfield	Paul J. Yellen	(860) 564-8586	(860) 230-3013	8 Community Avenue	2/5/98	2/1/98	5/1/01	Paul E. Sweet	8 Community Avenue	179
Plainville	Robert F. Finn	(860) 793-0221	(860) 747-6844	1 Central Square	12/11/97	1/20/99		Robert Jackson	1 Central Square	183
Plainville	William B. Chamberlin	(860) 793-0221	(860) 747-6844	1 Central Square	11/10/07	12/1/97		Robert Jackson	1 Central Square	193
Plainville	Larry A. Sutherland	(860) 793-0221	(860) 747-6844	1 Central Square	11/10/97	12/1/97		Robert Jackson	1 Central Square	193

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Atty. Date</u> <u>Rcv.</u>	<u>Cert. Approved</u> <u>Date</u>	<u>Cert. Exp.</u> <u>Date</u>	<u>Highest Town</u> <u>Official</u>	<u>Highest Town</u> <u>Official Address</u>	<u>Insp. No.</u>
Plymouth	John F. Schubert		(860) 585-4012	60 Main Street	11/25/97	11/25/97		David Mischke	80 Main Street	188
Poultney	Nora V. Johnson		(860) 974-0343	5 Haven Road	7/26/99	7/26/99	7/26/01	David Patenaude	5 Haven Road	215
Poultney	Cheryl A. Gisel		(860) 974-0191	5 Haven Road	7/26/99	7/26/99	7/26/01	David Patenaude	5 Haven Road	215
Portland	Joseph F. Lynch	(860) 342-0735		10 Waverly Avenue				Edward Kalinowski	265 Main Street, P.O. Box 71	179
Portland	David Powers		(860) 342-6715	265 Main Street				Edward L. Kalinowski	265 Main Street	179
Preston	Robert Congdon	(860) 888-1217	(860) 887-5581	389 Route 2	8/18/97		5/1/00	Robert Congdon	389 Route 2	179
Prospect	Robert J. Chaffield	(203) 758-4481		36 Center Street				Robert Chaffield	36 Center Street	188
Putnam	John Williams	(860) 928-3522	(860) 963-6800	407 Chase Road East Putnam	8/19/99	8/19/99	8/19/01	Daniel S. Rovero	126 Church St	215
Reading	Tom Newsome		(203) 938-3026	P.O. Box 1028				Natalie Ketcham	100 Hill Road	188
Reading	Henry Blalaw	(203) 938-2558		Town Hall				Natalie Ketcham	100 Hill Road	188
Reading	Roy C. Bradshaw R.S.			P.O. Box 1028	3/17/98			Natalie Ketcham	100 Hill Road	188
Ridgefield	Edward L. Briggs		(203) 438-7301	66 Prospect Street	6/1/98	6/1/98	6/1/00	Rudolph Marconi	400 Main Street	188
Ridgefield	Barbara Hock			66 Prospect Street	6/1/98	6/1/98	6/1/00	Rudolph Marconi	400 Main Street	188

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Affly. Date</u> RCV.	<u>Cert. Approved</u> Date	<u>Cert. Exp.</u> Date	<u>Highest Town</u> Official	<u>Highest Town</u> Official Address	<u>Insp. No.</u>
Rocky Hill	Alexander Brilliant	(860) 258-7604	699 Old Main Street	5/31/98	6/1/98	6/1/00	Antonio Guerrera	699 Old Main Street	193	
Rocky Hill	Philip Block	(860) 563-1451	699 Old Main Street	5/31/98	6/1/98	6/1/00	Antonio Guerrera	699 Old Main Street	193	
Roxbury	James Pierpont		7 South Street	5/31/98	6/1/98	6/1/00	Barbara Henry	29 North Street	188	
Roxbury	Barbara Henry	(860) 355-4467	7 South Street	5/31/98	6/1/98	6/1/00	Barbara Henry	29 North Street	188	
Salem	Donald Bourdeau	(860) 892-3653	346 Old Colchester Road	5/31/98	6/1/98	6/1/00	James D. Fogarty	270 Hartford Road	179	
Salem	Donald Ellis		459 New London Road	5/31/98	6/1/98	6/1/00	James Fogarty	270 Hartford Road	179	
Salem	Jeffrey Standish		977 West Road	5/31/98	6/1/98	6/1/00	James Fogarty	270 Hartford Road	179	
Salem	James Saville		297 Buckley Road	5/31/98	6/1/98	6/1/00	James Fogarty	270 Hartford Road	179	
Salisbury	Nancy W. Brusie	(860) 435-5190	27 Main St.	5/31/98	6/1/98	6/1/00	Val Bernardonj	P.O. Box 548		
Scotland	D. Andrew Syme	(860) 423-8634	P.O. Box 155	2/26/98			Elizabeth A. Wilson	9 Devotion Road	179	
Seymour	Robert H. Darins	(203) 888-6011	98 West Street				Scott Barton	1 First Street	188	
Seymour	Ronald Zubrick		4 Rocky Glen				Scott Barton	1 First Street	188	
Sharon	Paul Robert Moehler	(860) 364-5789	Main Street	(860) 387-0347			P. Robert Moehler	63 Main Street	193	

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Affidv. Date</u> Rev.	<u>Cert. Approved</u> Date	<u>Cert. Exp.</u> Date	<u>Highest Town</u> Official	<u>Highest Town</u> Official Address	<u>Insp. No.</u>
Sharon	Dana J. Purdy			374 Gay Street				P. Robert Moeller	63 Main Street	193
Shelton	James M. Tortora		(203) 924-1555	54 Hill Street	10/19/00			Mark Lauretti	54 Hill Street	188
Sherman	Ernie Winkler	(860) 355-0166	(860) 355-1139	Church Road				Donna D. Tuck	9 Rte 39, P. O. Box 39	188
Simsbury	Kevin Kowalski		(860) 658-1973	871 Hopmeadow Street				Anika L. Mielert	933 Hopmeadow Street	193
Simsbury	William J. Rose		(860) 658-1971	871 Hopmeadow Street				Anika Mielert	933 Hopmeadow Street	193
Simsbury	Patrick Tourville		(860) 658-1973	871 Hopmeadow Street				Anika L. Mielert	933 Hopmeadow Street	193
Somers	Robert J. Sciarnella	(880) 783-0734	(860) 749-7626	451 Main Street	5/28/98	6/1/98	6/1/00	Gordon Mallo	600 Mfan Street	215
South Windsor	N/A - NO BURNING		(860) 644-8547					Matthew Galligan	1540 Sullivan Avenue	215
Southbery	Nancy Brusin									
Southbury	Robert W. Harrison		(203) 284-0606	601 Main Street				Alfio A. Candido, Jr.	501 Main Street	188
Southbury	Alfio Candido		(203) 262-0647					Alfio Candido, Jr.	501 Main Street	188
Southington	Richard McDonough		(860) 621-3202	North Main Street				John Weichstef	75 Main Street	188
Southington	Tom Weisner	(860) 628-7505		North Main Street				John Weichstef	75 Main Street	188

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Att'dv. Date</u> <u>Rcv.</u>	<u>Cert. Approved</u> <u>Date</u>	<u>Cert. Exp.</u> <u>Date</u>	<u>Highest Town</u> <u>Official</u>	<u>Highest Town</u> <u>Official Address</u>	<u>Imp. No.</u>
Sprague	Richard A. Hamel	(860) 376-0376	(860) 691-6327	263A No. Burnham Highway, Lisbon	6/29/00	6/29/04		Stephen J. Pepinseau, Sr.	Main Street, P.O. Box 677	179
Stafford	Thomas Finch							John Julian	Dept. Public Works	215
Stafford	John Julian		(860) 684-2130	Town Hall				John Julian	P.O. Box 11	215
Stafford	Bruce Dutton	(860) 684-4571	(860) 684-2532	P.O. Box 11	1/23/01	1/23/01	1/23/02	John E. Julian	P.O. Box 11	215
Sterling	Dale P. Clark		(860) 564-2904	P.O. Box 157	2/1/88	2/1/98		Dale P. Clark	1114 Plainfield Pike	179
Stonington	George P. Brennan	(860) 599-3829		152 Elm Street, Box 352	3/2/88	2/1/98		Donald R. Maranell	152 Elm Street	179
Stonington	Kevin Burns	(860) 599-5187	(860) 589-4251	33 Liberty Street	6/10/98	6/11/98	6/11/00	Donald R. Maranell	152 Elm Street	179
Stafford	Steve Pehonak	(203) 385-4073	(203) 385-4090	2730 Main Street	6/1/97			Stephen Pihonak	2725 Main Street	188
Stafford	Harold J. Finch	(860) 684-2046	(860) 684-3776	Colburn Road				Mark Barthert	2725 Main Street	215
Stafford	William Monaid			36 Eodkin Road				Mark Barthert	2725 Main Street	188
Suffield	Thomas Belmore		(860) 688-3888					Robert Skinner	83 Mountain Road	193
Thomaston	Robert Norton							Clifford Brammer, Jr.	158 Main Street	193
Thomaston	Clifford C. Brammer, Jr.		(860) 283-8144	435 Watertown Road				Clifford Brammer, Jr.	158 Main Street	193

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>AM/Div. Date</u> Rcv.	<u>Cert. Approved</u> Date	<u>Cert. Exp.</u> Date	<u>Highest Town</u> Official	<u>Highest Town</u> Official Address	<u>Insp. No.</u>
Thompson	Paul Grenier	(860) 923-9838	(860) 923-9561	205 Pompey Road	5/26/98	6/1/98	6/1/00	Brian Lynch	815 Riverside Drive	215
Tolland	John C. Likier		(860) 871-3674	21 Tolland Street						
Tolland	Ronald Littlell		(860) 871-3678	21 Tolland Green				Timothy Teperman	21 Tolland Green	215
Torrington	Marquain R. Johnson		(860) 489-2257	117 Water Street				Mary Jane Gynluk	140 Main Street	193
Trumbull	Joseph P. Adzina		(203) 261-3631	5866 Main Street	6/27/00			Kenneth Halaby	5866 Main Street	188
Trumbull	John R. Butz			5866 Main Street	6/27/00					188
Trumbull	Paul J. Kurtz			5866 Main Street	6/27/00			Kenneth Halaby	5866 Main Street	188
Trumbull	Konald F. Schwarz		(203) 261-3631	5866 Main Street	6/27/00			Kenneth Halaby	5866 Main Street	188
Trumbull	Robert J. Pescara				6/27/00			Kenneth Halaby	5866 Main Street	188
Uncasville/Oakdale	Raymond Occhialini			838 Old Colchester Road		9/15/97		Howard Beetham, Jr.		179
Union	Thomas L. Fitzgerald	(860) 884-9554	(860) 884-4621	1163 Buckley Highway	3/1/98		5/1/01	Albert L. Goodhall, Jr.	1024 Buckley Highway	215
Vernon	Donald Maguda		(860) 872-8591	61 Franklin St., Vernon,				Stephen Marchetti	14 Park Place	215
Voluntown	Joseph H. Grenier, Jr.		(860) 204-7327	P. O. Box 10	3/6/98	3/24/98	5/1/01	Thomas H. Wilber	P. O. Box 96, 115 Main Street	179

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>AMTY. Date</u> Rcv.	<u>Cart Approved</u> Date	<u>Cart Exp.</u> Date	<u>Highest Town</u> Official	<u>Highest Town</u> Official Address	<u>Ins P. No.</u>
Wallingford	Joseph P. Micalizzi Jr.	(203) 294-2766	(203) 294-2065	350 Center Street	6/15/00			William Dickinson, Jr.	45 South Main Street	188
Warren	Beecher Perkins	(860) 868-2547		Windy Ridge Road				Lewis A. Tanner	7 Sackett Hill Road	193
Warwick	Gilbert Brennan			205 Hattene Road						179
Washington	Vincent B. Ives	(860) 868-7201		1 Green Hill Road	7/29/99	7/29/99	7/29/01	Alan J. Chapkin	P.O. Box 383	188
Waterbury	James Stemm	(203) 756-9494						Phillip Giordano	235 Grand Street	188
Waterford	Bruce A. Miller	(860) 440-0544		204 Boston Post Road	5/3/99	6/23/98	6/23/01	Paul Eccard	15 Rope Ferry Road	179
Waterford	Peter Schlink	(860) 440-0544		204 Boston Post Road	6/17/99	6/23/98	6/23/01	Paul Eccard	15 Rope Ferry Road	179
Waterford	David Garside Jr.	(860) 440-0544		204 Boston Post Road	5/3/99	6/23/98	6/23/01	Paul B. Eccard	15 Rope Ferry Road	179
Waterford	Jeffrey J. Lalbro	(860) 440-0544		204 Boston Post Road	5/3/99	6/23/98	6/23/01	Paul Eccard	15 Rope Ferry Rd	179
Waterford	Mark M. Parker	(860) 440-0544		204 Boston Post Road	5/3/99	6/23/98	6/23/01	Paul B. Eccard	15 Rope Ferry Road	179
Watertown	David Hardt			935 Main Street	8/4/99	8/4/99	8/4/01	Charles O'Connor, Jr.	37 DeForest Street	188
Watertown	O'Neill S. Burrows			935 Main Street	8/4/99	8/5/99	8/5/01	Charles O'Connor, Jr.	37 DeForest Street	188
Watertown	Larry Black	(860) 274-5411		935 Main Street	8/4/99	8/4/99	8/4/01	Charles O'Connor, Jr.	37 DeForest Street	188

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Acct. Date</u> Rcv.	<u>Cert. Approved</u> Date	<u>Cert. Exp.</u> Date	<u>Highest Town</u> Official	<u>Highest Town</u> Official Address	<u>Ins. No.</u>
West Hartford	William H. Austin	(860) 236-3231		50 South Main Street	7/24/00			Robert R. Bouvier	50 South Main Street	193
West Haven	William A. Mukey	(203) 933-2541	(203) 937-3710	366 Elm Street				H. Richard Borer, Jr.	355 Main Street	188
West Haven	Victor Sandpietro			20 Admiral Street				H. Richard Borer, Jr.	355 Main Street	188
West Haven	Harold Burns		(203) 933-9420	852 Ocean Avenue				H. Richard Borer, Jr.	355 Main Street	188
Westbrook	Loren E. Baker Jr.	(860) 399-7036		25 Andra Drive	6/15/00			Frances C. Russell	Box G, 1163 Boston Post Road	179
Weston	Fredick Moore		(860) 222-2656	Norfield Road				Hal Shupack	56 Norfield Road	188
Westport	Jonathan M. Gottfried		(203) 227-1511					Diane Farrell	110 Myrtle Avenue	188
Wethersfield	Gary		(860) 721-2808	505 Silas Deane Highway					Wethersfield	
Wethersfield	Paul Hutcheon		(860) 529-8611	505 Silas Deane Hwy.				Lee Erdmann	505 Silas Deane Hwy.	193
Willington	Charles Pippin			40 Old Farms Road	6/1/98	6/4/98	6/4/00	John Patton	40 Old Farms Road	215
Willington	Charles Cosgrove			40 Old Farms Road				John Patton	Town Office Building	215
Willington	Richard Palmer			405 Old Farms Road				John Patton	405 Old Farms Road	
Willington	Adalbert Ekenbarger			40 Old Farms Road	6/1/98	6/1/98	6/1/00	John Patton	40 Old Farms Road	215

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>AM/Adv. Date</u> <u>RCV.</u>	<u>Cert. Approved</u> <u>Date</u>	<u>Cert. Exp.</u> <u>Date</u>	<u>Highest Town</u> <u>Official</u>	<u>Highest Town</u> <u>Official Address</u>	<u>Map. No.</u>
Wilmington	Leslie Kettle			40 Old Farms Road	6/1/98	6/1/98	6/1/00	John Patton	40 Old Farm Road	215
Wilmington	Kevin Goodwin			40 Old Farms Road	6/11/98	6/11/98	6/11/00	John Patton	40 Old Farms Road	215
Wilmington	Ron Miles			40 Old Farms Road	6/1/98	6/2/98	6/3/00	John Patton	40 Old Farms Road	215
Wilmington	Stuart Cobb	(860) 429-3242	(860) 429-0288	40 Old Farms Road	4/30/98	5/4/98	5/4/00	John Patton	40 Old Farms Road	215
Wilmington	Richard A. Libell	(860) 429-6874	(860) 429-5649	Route 44				John Patton		215
Wilmington	Jeffrey Pierce		(860) 429-0288	40 Old Farms Road	5/15/98	5/20/98	5/20/98	John Patton	40 Old Farms Road	215
Wilmington	Charles Coe Coe Grove			40 Old Farms Road				John Patton	Town Office Building	
Wilton	William Von Zehle, Jr.		(203) 834-6248	236 Danbury Rd.					236 Danbury Rd.	
Winchester	Joseph W. Beadie			27 Elm Street	9/14/00					
Winchester	Mark Melanson		(860) 379-3818					Margaret Johnson		103
Winchester	Donald J. Sherman			27 Elm Street	9/14/00					
Windham	Michael Licata	(860) 456-3569	(860) 509-7484	P.O. Box 311	10/1/97	10/2/97	10/2/99	John J. Lescoe	979 Main Street (Town Hall)	179
Windham	Eugene Light	(860) 423-4480	(860) 456-3004	289 Ballamhack Road	10/1/97	10/1/97	10/1/99	John Lescoe	P.O. Box 311	179

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Affili. Date</u> <u>RCV.</u>	<u>Cert. Approved</u> <u>Date</u>	<u>Cert. Exp.</u> <u>Date</u>	<u>Highest Town</u> <u>Official</u>	<u>Highest Town</u> <u>Official Address</u>	<u>Insd. No.</u>
Windham	Ronald L. Miles	(860) 423-9667	(860) 456-3004	4 Jordan Lane	10/1/97	10/9/97	10/9/99	John Lescoe	P. O. Box 311	179
Windsor	Raymond A. Walker Jr.	(860) 688-3675		275 Broad Street	7/27/99	7/27/99		Albert Hig		193
Windsor Lock	Francis A. Gagnon	(860) 623-7829		252 Old Country Road				Edward Ferrari		193
Windsor Locks	Kenneth J. Jeffrey	(880) 627-1468		4 Volunteer Drive	11/20/00					
Windsor Locks	Mr. Ron Carlson	(860) 654-4742		1 Hamilton Road				Edward Ferrari		
Wolcott	Charles Marsella	(203) 879-0662		255 Nichols Road				Michael DeNegris		193
Wolcott	Philip G. Calkver	(203) 879-5683	(203) 879-1414	255 Nichols Road	2/13/98			Michael DeNegris		193
Woodbridge	John J. Brennan	(203) 393-3378	(203) 387-3378	96 Rinon Road				Roger M. Harrington		188
Woodbury	Richard L. Rooney	(860) 236-2141		P. O. Box 369	6/18/98	6/18/98	6/19/00	Richard Crane		188
Woodbury	Chuck Kiessling	(203) 263-2143						Richard Crane		188
Woodstock	Russell J. Dow	(860) 928-5397	(860) 923-2280	P. O. Box 123	6/9/99	6/23/98	6/23/01	Ernest Wetzel	415 Route 169	215
Woodstock	Timothy D. Young	(860) 928-4773	(860) 928-0283	P. O. Box 123	6/9/99	6/23/98	6/23/01	Ernest Wetzel	415 Route 169	215
Woodstock	Richard G. Baron			415 Route 169				Ernest Wetzel	Town Hall	179

<u>Town</u>	<u>Name</u>	<u>Home Phone</u>	<u>Work Phone</u>	<u>Address</u>	<u>Affili. Date</u> <u>RCV.</u>	<u>Cert. Approved</u> <u>Date</u>	<u>Cert. Exp.</u> <u>Date</u>	<u>Highest Town</u> <u>Official</u>	<u>Highest Town</u> <u>Official Address</u>	<u>Insd. No.</u>
Windham	Ronald L. Miles	(860) 423-9667	(860) 456-3004	4 Jordan Lane	10/1/97	10/9/97	10/9/99	John Lescoe	P. O. Box 311	179
Windsor	Raymond A. Walker Jr.	(860) 688-3675		275 Broad Street	7/27/99	7/27/99		Albert Hig		193
Windsor Lock	Francis A. Gagnoli	(860) 623-7829		262 Old Country Road				Edward Ferrari		193
Windsor Locks	Kenneth J. Jeffrey	(880) 627-1468		4 Volunteer Drive	11/20/00					
Windsor Locks	Mr. Ron Carlson	(860) 654-4742		1 Hamilton Road				Edward Ferrari		
Wolcott	Charles Marsella	(203) 879-0662		255 Nichols Road				Michael DeNegris		193
Wolcott	Philip G. Culler	(203) 879-5683	(203) 879-1414	255 Nichols Road	2/13/98			Michael DeNegris		193
Woodbridge	John J. Brennan	(203) 393-3378	(203) 387-3378	96 Rinon Road				Roger M. Harrington		188
Woodbury	Richard L. Rooney	(860) 236-2141		P. O. Box 369	6/18/98	6/18/98	6/19/00	Richard Crane		188
Woodbury	Chuck Kiessling	(203) 263-2143						Richard Crane		188
Woodstock	Russell J. Dow	(860) 928-5397	(860) 923-2280	P. O. Box 123	6/9/99	6/23/98	6/23/01	Ernest Wetzel	415 Route 169	215
Woodstock	Timothy D. Young	(860) 928-4773	(860) 928-0283	P. O. Box 123	6/9/99	6/23/98	6/23/01	Ernest Wetzel	415 Route 169	215
Woodstock	Richard G. Baron			415 Route 169				Ernest Wetzel	Town Hall	179

Town

Name

Home Phone

Work Phone

Address

Atty. Date
Rcv.

Cert. Approved
Date

Cert. Exp.
Date

Highest Town
Official

Highest Town
Official Address

Insp. No.

Woodstock

Joseph A. Surzanski

(860) 928-6595

395 Joy Road

5/29/99

6/23/99

6/23/01

Ernest Weizel

Woodstock

215

Woodstock

Wayne A. Schreiner

(860) 974-3561

(860) 974-2156

395 Joy Road

6/8/99

6/17/99

6/17/01

Ernest Weizel

415 Route 169

215

TOTAL P. 27

DELAWARE

FIRE COMPANIES 2001

26-Apr-01

10010 **WILMINGTON BUREAU OF FIRE**
300 N WALNUT ST
PUBLIC SAFETY BLDG., 1ST FL.
WILMINGTON DE 19801
PHONE: (302)571-4414 **FAX:** (302)573-5768
CHIEF: CLIFTON E. ARMSTEAD

20011 **BRANDYWINE HUNDRED FIRE CO #1**
1006 BRANDYWINE BLVD

WILMINGTON DE 19809
PHONE: (302) 764-4901 **FAX:** (302) 764-8414
CHIEF: MIKE DIMAURO JR.

20013 **CLAYMONT FIRE CO**
3223 PHILADELPHIA PK

CLAYMONT DE 19703
PHONE: (302) 798-9274 **FAX:** (302) 798-6310
CHIEF: ERIC J HALEY

20015 **DELAWARE CITY FIRE CO**
150 CLINTON ST
PO BOX 251
DELAWARE CITY DE 19706
PHONE: (302) 834-9336 **FAX:** (302) 836-9126
CHIEF: JAMES D ROSSEEL

20017 **FIVE POINTS FIRE CO**
209 S MARYLAND AVE

WILMINGTON DE 19804
PHONE: (302) 994-0114 **FAX:** (302) 994-7671
CHIEF: DONALD J ZULINSKI

20019 **HOCKESSIN FIRE CO**
1225 OLD LANCASTER PK
PO BOX 596
HOCKESSIN DE 19707
PHONE: (302) 239-7159 **FAX:** (302) 239-7692
CHIEF: DAVID P ROSER

20009 **AETNA HOSE HOOK & LADDER CO**
31 ACADEMY ST
PO BOX 148
NEWARK DE 19714
PHONE: (302)454-3300 **FAX:** (302)454-3532
CHIEF: STEVE KAVANAGH

20012 **CHRISTIANA FIRE CO**
2 E MAIN ST
PO BOX 189
BEAR DE 19701-0189
PHONE: (302) 737-2433 **FAX:** (302) 738-0859
CHIEF: BRIAN REEDER

20014 **CRANSTON HEIGHTS FIRE CO #1**
3306 KIRKWOOD HWY

WILMINGTON DE 19808
PHONE: (302)998-3140 **FAX:** (302) 995-0954
CHIEF: ROCCO GHIONE

20016 **ELSMERE FIRE CO #1 INC**
1107 NEW RD

WILMINGTON DE 19805
PHONE: (302) 999-0183 **FAX:** (302) 999-1721
CHIEF: GEORGE B GILES

20018 **GOOD-WILL FIRE CO #1**
401 SOUTH ST
PO BOX 56
NEW CASTLE DE 19720
PHONE: (302) 328-2211 **FAX:** (302) 328-2216
CHIEF: J. DAVID MAJEWSKI

20020 **HOLLOWAY TERRACE VOL FIRE CO**
700 WEST AVE
PO BOX 684
NEW CASTLE DE 19720
PHONE: (302) 654-2817 **FAX:** (302) 654-7809
CHIEF: PAUL MAXWELL

FIRE COMPANIES 2001

26-Apr-01

20021 **MILL CREEK FIRE CO**
3900 KIRKWOOD HWY
PO BOX 5034
WILMINGTON DE 19808
PHONE: (302) 998-8911 **FAX:** (302) 998-8342
CHIEF: JAMES (JD) HOWELL

20023 **MINQUAS FIRE CO #1 INC**
21 N JAMES ST
PO BOX 3073
WILMINGTON DE 19804-0073
PHONE: (302) 998-3474 **FAX:** (302) 998-3554
CHIEF: RICHARD THOMPSON JR

20025 **TALLEYVILLE FIRE CO**
3919 CONCORD PK
PO BOX 7025
TALLEYVILLE DE 19803-9981
PHONE: (302) 478-1110 **FAX:** (302) 478-9163
CHIEF: THOMAS P LOONEY

20027 **VOLUNTEER HOSE CO INC**
27 WEST GREEN ST

MIDDLETOWN DE 19709
PHONE: (302) 378-7799 **FAX:** (302) 378-9130
CHIEF: KEVIN B REINIKE

20029 **PORT PENN VOLUNTEER FIRE CO**
26 W MARKET ST
PO BOX 29
PORT PENN DE 19731
PHONE: (302) 834-7483 **FAX:** (302) 832-7622
CHIEF: FRANK SCHOFFLER

30040 **NORTH BOWERS FIRE CO**
3285 MAIN ST
PO BOX 348
FREDERICA DE 19946
PHONE: (302)335-4640 **FAX:** (302) 335-1324
CHIEF: WILLIAM A HALL

20022 **MINQUADALE FIRE CO #1 INC**
129 E HAZELDELL AVE
PO BOX 663, MANOR BRANCH
NEW CASTLE DE 19720
PHONE: (302) 652-0986 **FAX:** (302) 652-4507
CHIEF: DAVID GARCIA

20024 **ODESSA FIRE CO**
304 MAIN ST
PO BOX 81
ODESSA DE 19730
PHONE: (302) 378-8929 **FAX:** (302) 378-6072
CHIEF: TIMMY LYNCH

20026 **TOWNSEND FIRE CO**
107 MAIN ST
PO BOX 194
TOWNSEND DE 19734
PHONE: (302) 378-8111 **FAX:** (302) 378-9201
CHIEF: DAVID A. HALL

20028 **WILMINGTON MANOR VOL FIRE CO**
301 N DUPONT HWY
PO BOX 631, MANOR BRANCH
NEW CASTLE DE 19720-0631
PHONE: (302) 328-3209 **FAX:** (302) 328-8312
CHIEF: JAMES JOHNSON

20030 **BELVEDERE FIRE CO**
1000 LIBERTY RD

WILMINGTON DE 19804
PHONE: (302) 998-8021 **FAX:** (302) 998-5201
CHIEF: PREIST AIKEN

30041 **CAMDEN-WYOMING FIRE CO INC**
200 E CAMDEN-WYOMING AVE
PO BOX 186
CAMDEN DE 19934
PHONE: (302) 697-8671 **FAX:** (302) 697-8672
CHIEF: DAVID REED

FIRE COMPANIES 2001

26-Apr-01

30042 **CARLISLE FIRE CO INC**
615 NW FRONT ST
PO BOX 292
MILFORD DE 19963
PHONE: (302) 422-2178 **FAX:** (302) 422-2146
CHIEF: KEVIN TWILLEY

30044 **CITIZEN'S HOSE CO #1 INC**
103 W COMMERCE ST
PO BOX 97
SMYRNA DE 19977
PHONE: (302) 653-9858 **FAX:** (302) 653-9422
CHIEF: DONALD EBRIGHT JR

30046 **DOVER ROBBINS HOSE CO #1 INC**
103 S GOVERNORS AVE

DOVER DE 19904
PHONE: (302) 736-7168 **FAX:** (302) 736-7166
CHIEF: DONALD BATES

30048 **FELTON COMMUNITY FIRE CO**
#9 E MAIN ST
PO BOX DRAWER F
FELTON DE 19943
PHONE: (302) 284-4800 **FAX:** (302) 284-9581
CHIEF: GARY MOORE

30050 **HARRINGTON FIRE CO INC**
20 CLARK ST

HARRINGTON DE 19952
PHONE: (302) 398-8931 **FAX:** (302) 398-4350
CHIEF: GARY HARRINGTON

30052 **HOUSTON VOLUNTEER FIRE CO**
BROAD ST
PO BOX 122
HOUSTON DE 19954
PHONE: (302) 422-5811 **FAX:** (302) 422-3821
CHIEF: CARROLL B JESTER

30043 **CHESWOLD VOLUNTEER FIRE CO**
371 MAIN ST
PO BOX 186
CHESWOLD DE 19936
PHONE: (302) 736-1516 **FAX:** (302) 674-8560
CHIEF: WILLIAM DEMPSEY

30045 **CLAYTON FIRE CO #1 INC**
RAILROAD AVE
PO BOX 1050
CLAYTON DE 19938
PHONE: (302)653-7317 **FAX:** (302)653-3712
CHIEF: ROBERT J. LIGHTCAP

30047 **FARMINGTON FIRE CO**
20920 S DUPONT HWY
PO BOX 256
FARMINGTON DE 19942
PHONE: (302) 398-4445 **FAX:** (302) 398-0106
CHIEF: JEFF DECARLO

30049 **FREDERICA VOLUNTEER FIRE CO**
PO BOX 283

FREDERICA DE 19946
PHONE: (302) 335-3235 **FAX:**
CHIEF: JOHN E. JOHNSON

30051 **HARTLY VOLUNTEER FIRE CO**
2898 ARTHURSVILLE RD
PO BOX 28
HARTLY DE 19953
PHONE: (302) 492-3677 **FAX:** (302) 492-3680
CHIEF: JAMES FOX, JR.

30053 **LEIPSIC VOLUNTEER FIRE CO**
318 MAIN ST

DOVER DE 19903
PHONE: (302) 674-0829 **FAX:** (302) 674-2694
CHIEF: MAURICE SIPPLE JR

FIRE COMPANIES 2001

26-Apr-01

30054 **LITTLE CREEK VOLUNTEER FIRE CO**
311 MAIN ST
PO BOX 327
LITTLE CREEK DE 19961
PHONE: (302) 674-2149 **FAX:** (302) 674-0522
CHIEF: MICHAEL R. BUNDEK

30056 **MARYDEL VOLUNTEER FIRE CO INC**
110 FIRE HOUSE LN
PO BOX 400
MARYDEL DE 19964
PHONE: (302) 492-9917 **FAX:** (302) 492-1935
CHIEF: BUFFY MADDEN

40070 **BETHANY BEACH FIRE CO**
215 HOLLYWOOD ST
PO BOX 142
BETHANY BEACH DE 19930-0142
PHONE: (302) 539-7700 **FAX:** (302) 539-7572
CHIEF: DOUGLAS MURRAY

40072 **BRIDGEVILLE VOLUNTEER FIRE CO**
314 MARKET ST
PO BOX 727
BRIDGEVILLE DE 19933
PHONE: (302)337-3000 **FAX:** (302) 337-3009
CHIEF: JACK CANNON

40074 **DELMAR FIRE DEPT INC**
GROVE ST & BI-STATE BLVD
PO BOX 143
DELMAR DE 19940
PHONE: (302) 846-2530 **FAX:** (302)846-2505
CHIEF: JOHN (JACK) MORRIS JR

40076 **FRANKFORD VOLUNTEER FIRE CO**
#5 MAIN ST
PO BOX 27
FRANKFORD DE 19945
PHONE: (302) 732-6662 **FAX:** (302) 732-9035
CHIEF: BRAD WHARTON

30055 **MAGNOLIA VOLUNTEER FIRE CO INC**
2 N MAIN ST
PO BOX 55
MAGNOLIA DE 19962
PHONE: (302) 335-3260 **FAX:** (302) 335-3587
CHIEF: ED SEMANS

30057 **S BOWERS VOLUNTEER FIRE CO**
57 SCOTTS CORNER RD
MILFORD DE 19963
PHONE: (302) 335-4666 **FAX:**
CHIEF: DAVID B LEGATES

40071 **BLADES VOLUNTEER FIRE CO**
5TH & CANNON ST
PO BOX 683
SEAFORD DE 19973
PHONE: (302) 629-4896 **FAX:** (302) 628-1435
CHIEF: GARY WALLS JR.

40073 **DAGSBORO FIRE CO**
200 WAPLES ST
PO BOX 509
DAGSBORO DE 19939
PHONE: (302) 732-6151 **FAX:** (302) 732-1091
CHIEF: RONN CAREY

40075 **ELLENDALE VOLUNTEER FIRE CO**
P O BOX 75
PO BOX 75
ELLENDALE DE 19941
PHONE: (302)422-7500 **FAX:** (302)424-7500
CHIEF: ANDY JONES

40077 **GEORGETOWN FIRE CO INC**
100 S BEDFORD ST
PO BOX 77
GEORGETOWN DE 19947
PHONE: (302) 856-7700 **FAX:** (302) 855-1080
CHIEF: RODNEY T MARVEL, JR

FIRE COMPANIES 2001

26-Apr-01

40078 **GREENWOOD VOLUNTEER FIRE CO**
13 E GOVERNOR'S AVE
PO BOX 1
GREENWOOD DE 19950
PHONE: (302) 349-4529 **FAX:** (302)349-9810
CHIEF: THOMAS E. JONES

40080 **INDIAN RIVER VOLUNTEER FIRE CO**
RT 5 OAK ORCHARD
RD 4 BOX 175
MILLSBORO DE 19966
PHONE: (302) 945-2800 **FAX:** (302) 945-2801
CHIEF: STEVEN R HAWKINS

40082 **LEWES FIRE DEPT INC**
347 SAVANNAH RD
PO BOX 225
LEWES DE 19958
PHONE: (302) 645-6556 **FAX:** (302) 645-8421
CHIEF: GORDON DAVIS

40084 **MILLVILLE VOLUNTEER FIRE CO**
316 ATLANTIC AVE
PO BOX 64
MILLVILLE DE 19970
PHONE: (302)539-7557 **FAX:** (302) 539-7319
CHIEF: CLARKE T DRONEY

40086 **REHOBOTH BEACH VOL FIRE CO**
219 REHOBOTH AVE
PO BOX 327
REHOBOTH BEACH DE
PHONE: (302) 227-8400 **FAX:** (302) 227-8960
CHIEF: WILLIAM J. BLIZZARD

40088 **SELBYVILLE VOLUNTEER FIRE CO**
32 N MAIN ST
PO BOX 438
SELBYVILLE DE 19975
PHONE: (302) 436-8802 **FAX:** (302) 436-6061
CHIEF: RICHARD A DUNCAN SR

40079 **GUMBORO VOLUNTEER FIRE CO**
RT 3 BOX 250A
MILLSBORO DE 19966
PHONE: (302) 238-7411 **FAX:** (302) 238-7299
CHIEF: MICHAEL LACURTS

40081 **LAUREL FIRE DEPT INC**
10TH & RAILROAD AVE
PO BOX 410
LAUREL DE 19956
PHONE: (302) 875-5666 **FAX:** (302) 875-1981
CHIEF: JEFF HILL

40083 **MILLSBORO VOLUNTEER FIRE CO**
E STATE ST
PO BOX 83
MILLSBORO DE 19966
PHONE: (302) 934-8359 **FAX:** (302) 934-7960
CHIEF: LEW TALLEY

40085 **MILTON FIRE DEPT INC**
116 FRONT ST
MILTON DE 19968
PHONE: (302) 684-8500 **FAX:** (302)684-0202
CHIEF: LYNN J ROGERS

40087 **SEAFORD VOLUNTEER FIRE DEPT INC**
PO BOX 87
PO BOX 87
19971 SEAFORD DE 19973
PHONE: (302) 629-3112 **FAX:** (302)628-9438
CHIEF: STEVE MAYER

40089 **MEMORIAL FIRE CO INC**
RD 1 BOX 327-C
MILFORD DE 19963
PHONE: (302) 422-8888 **FAX:** (302) 422-5944
CHIEF: ROBERT WECHTENHISER

FIRE COMPANIES 2001

26-Apr-01

40090 **ROXANA VOLUNTEER FIRE CO**

CR 382 EAST OF CR 392

P O BOX 420

FRANKFORD DE 19945

PHONE: (302) 436-2300 **FAX:** (302) 436-0230

CHIEF: JEFF LYNCH

MARYLAND

Open Burning Contacts (year 2000)

County	Contact Name	Phone	Burning Permits Issued
Allegany	Mr. Brian Dicken	1-301-777-5649	4,542
Anne Arundel	Mr. Hernando Orduna	1-410-222-7250	60
Baltimore City			0
Baltimore Co.	Mr. Jerry Siewierski	1-410-887-3745	178
Calvert	Ms. Melisa Cook	1-410-535-3922	145
Caroline	Mr. Bill Deck	1-410-479-8045	0
Carroll	Mr. Barry Fortune	1-410-876-2152	229
Cecil	Ms. Doris Loyd	1-410-996-5160	628
Charles	Mr. Mark Williams	1-301-609-6758	295
Dorchester	Ms. Mary Webb	1-410-228-1167	2
Frederick County	Ms. Karean Louis	1-301-694-1719	674
Garrett	Mr. Steve Sherrard	1-301-334-8980	1180
Harford	Ms. Doris Kahl secretary	1-410-638-8437	142
Howard	Ms. Maryland Weeks	1-410-313-3947	38
Kent	Ms. Lynn Bennett	1-410-778-1361	150
Montgomery	Ms. Mary Richman	1-240-777-7770	44
Prince George's	Mr. Manfred Reichwein	1-301-883-7682	82
Queen Anne's...	Ms. Vi Brown	1-410-758-2281	121
Saint Mary's	Ms. Mary Snavelly	1-301-475-4321	272
Somerset	Darcy Haldeman	1-410-651-5670	29
Talbot	Ms. Debbie Renshaw	1-410-819-5660	74
Washington	Ms. Tera Funk	1-301-791-3270	49
Wicomico	Mr. Skip Twilley	1-410-546-4446	65
Worcester	Mr. Bob Benak	1-410-632-1200 ext. 165	41

NEW HAMPSHIRE

Chief Elbert D. Knicely
Acworth Volunteer Fire & Rescue
Hill Road, Box 86
Acworth, NH 03601
F.D.: 835-2233

Chief Brian Taylor
Albany Fire Department
Box 1717
Conway, NH 03818

Chief Francis I. Butler
Alexandria Volunteer F.D.
158 Washburn Rd.
Alexandria, NH 03222
F.D.: 744-3165

Chief Richard Verville
Allentown Fire Dept.
5 Ferry Street
Allentown, NH 03275
F.D.: 485-9202
FAX: 268-0640

Chief Kim Kercewich
Alstead Fire Department
HC 63 Box 41A
Alstead, NH 03602-7702
F.D.: 835-2347

Chief Russell Sample
Alton Fire Department
PO Box 472
Alton, NH 03809-0472
F.D.: 875-0222
FAX: 879-3894

Chief Rick Crocker
Amherst Fire Department
177 Amherst Street
P.O. Box 1199
Amherst, NH 03031
F.D.: 673-1545
Fax 672-3927

Chief John McDonald
Andover Fire Department
PO Box 117
Andover, NH 03216-0117
F.D.: 735-5353

Chief Marshall Beauchamp
Antrim Fire Department
Maple Avenue
Antrim, NH 03440
F.D.: 588-2114

Chief Scott Weden
Ashland Fire Department
P.O. Box 856
Ashland, NH 03217
F.D.: 968-7772

Chief Michael E. Murphy
Atkinson Fire Department
P.O. Box 6
Atkinson, NH 03811
F.D.: 362-5611
FAX: 362-8764

Chief Bruce Phillips
Auburn Fire Department
1 Pingree Hill Road
Auburn, NH 03032-1807
F.D.: 483-8141 or 8320

Chief George R. Kruase II
Barnstead Fire/Rescue Inc.
305 Parade Road
PO Box 117
Barnstead, NH 03218
F.D.: 435-6691
FAX: 269-4122

Chief Richard A. Walker Jr.
Barrington Fire Department
PO Box 820
Barrington, NH 03825
F.D.: 664-2241
Fax: 664-2241

Chief Roger Labbe
Bartlett Fire Department
PO Box 104
Glen, NH 03838
F.D.: 383-9555

Chief Steve Driscoll
Bath Fire Department
P.O. Box 63
Bath, NH 03740
F.D.: 747-2035

Chief Joseph Clow
Bedford Safety Complex
Bedford Fire Department
55 Constitution Drive
Bedford, NH 03110
F.D.: 472-3219
FAX: 472-8299

Chief Albert J. Akerstrom III
Belmont Fire Department
14 Gilmanton Road
P.O. Box 837
Belmont, NH 03220
F.D.: 267-8333
FAX: 267-8337

Chief Albert J. Akerstrom III
Belmont Fire Department
14 Gilmanton Road
PO Box 837
Belmont, NH 03220
F.D.: 267-8333

Chief Nick Collemacine
Bennington Fire Department
7 School Street, Box 103
Bennington, NH 03442
F.D.: 588-2188

Chief Paul E. Fortier
Berlin Fire Department
263 Main Street
Berlin, NH 03570
F.D.: 752-3135 & 3176
FAX: 752-8583

Chief Jack Anderson
Bethlehem Fire Department
PO Box 189
Bethlehem, NH 03574
F.D.: 869-3342

Chief Raymond R. Fisher
Boscawen Fire Department
200 Water Street
Boscawen, NH 03303
F.D.: 796-2414

Chief H. Dana Abbott
Bow Fire Department
10 Grandview Road
Bow, NH 03304
F.D.: 228-4320

Chief Mark S. Goldberg
Bradford Fire Department
PO Box 206
Bradford, NH 03221-0206
F.D.: 938-2231

Chief Norman Byrne
Brentwood Fire Department
RFD 1, 148 Crawley Falls Rd.
Brentwood, NH 03833
F.D.: 642-8132

Chief Andrew Denton
Bridgewater Fire Department
297 Mayhew Turnpike
Bridgewater, NH 03222
F.D.: 744-6047
FAX: 536-4298

Chief Norm Skantze
Bristol Fire Department
85 Lake Street
Bristol, NH 03222
F.D.: 744-2632
Fax: 744-2521

Chief Todd Nason
Brookfield Fire Department
Town Office, Rte 109
Brookfield, NH 03872
F.D.: 522-2261

Chief Charles Corey Sr.
Brookline Fire Department
P.O. Box 343
Brookline, NH 03033
F.D.: 673-5586

Chief David Tobine
Campton-Thornton Fire Dept.
P.O. Box 1258
Campton, NH 03223
F.D.: 726-3300
FAX: 726-3545

Chief William Bellion
Canaan Fire Department
P.O. Box 353
Canaan, NH 03741
F.D.: 523-4850

Chief Les Cartier
Candia Fire Department
P.O. Box 72
Candia, NH 03034
F.D.: 483-2202

Chief Dale Caswell
Canterbury Fire Department
Baptist Hill Road, Box 260
Canterbury, NH 03224
F.D.: 783-4123

Chief Robert Stalaboin
Carroll Fire Department
PO Box 119
Carroll, NH 03595
F.D.: 846-5545

Chief Gary Wallace
Charlestown Fire Department
P.O. Box 304
Charlestown, NH 03603-0304
F.D.: 826-3311

Chief Webster Fox
Chatham Saco Valley
Fire Department
HCR 68, Box 147
N. Fryeburg, ME 04037
F.D.: 207-697-2475

Chief Steve Tunberg
Chester Fire Department
51 Chester Street
Chester, NH 03036
F.D.: 887-3878

Chief Louis Perham
Chesterfield Fire Department
P.O. Box 95
Chesterfield, NH 03443-0095
F.D.: 363-4665 or 256-8410

Chief John Prickett
Chichester Fire Department
22 Main Street
Chichester, NH 03234
F.D.: 798-5954
FAX: 798-3170

Chief Peter Chase
Claremont Fire Department
100 Broad Street
Claremont, NH 03743
F.D.: 542-5156
Fax: 542-7028

Chief Phil Ducret
Colebrook Fire Department
PO Box 273
Colebrook, NH 03576-0273
F.D.: 237-5798

Chief John Dionne
Concord Fire Department
24 Horseshoe Pond Lane
Concord, NH 03301-5028
F.D.: 225-8650
FAX: 225-5833

Chief Larry B. Wade
Conway Fire Department
PO Box 342
Conway, NH 03818
F.D.: 447-2681
FAX: 447-3271

Chief Paul Richardson
Conway Village Fire Dept.
P.O. Box 342
Conway, NH 03818
F.D.: 447-2681

Chief Nathan Cass
Cornish Fire Department
P.O. Box 13
Cornish, NH 03746
F.D.: 675-2177

Chief Harry P. Newcomb
Croydon Fire Department
RFD 1, Box 302
Newport, NH 03773
F.D.: 863-6916

Chief David Pandora
Ctr. Conway Fire Department
P.O. Box 10
Ctr. Conway, NH 03813
F.D.: 447-5111

Chief Leon Manville
Ctr. Harbor Fire Department
P.O. Box 222
Ctr. Harbor, NH 03226
F.D.: 253-4451
FAX: 253-8540

Chief Roland Stockbridge
Ctr. Ossipee Fire Department
Ctr. Ossipee, NH 03814
F.D.: 539-4401

Chief Allen C. Blakslee
Dalton Vol. Fire Department
RFD 2
Whitefield, NH 03598
F.D.: 837-3100
FAX: 837-9642

Chief Mert Austin
Danbury Fire Department
Box 188A
Danbury, NH 03230
F.D.: 768-3652

Chief David Kimball
Danville Fire Department
P.O. Box 675
Danville, NH 03819
F.D.: 382-5133
FAX: 382-1212

Chief Mark A. Tibbetts
Deerfield Fire Department
PO Box 90
Deerfield, NH 03037
F.D.: 463-7721
FAX: 463-2820

Chief Andy Anderson
Deering Fire & Rescue
PO Box 1292
Deering, NH 03244-1292
F.D.: 529-4303

Chief Ronald D. Stowers
Derry Fire Department
131 East Broadway
Derry, NH 03038
F.D.: 432-6121
FAX: 432-6752

Chief David F. Bibber
Dover Fire & Rescue
Municipal Building
288 Central Avenue
Dover, NH 03820
F.D.: 742-4646, Ext. 150
FAX: 743-6146

Chief Michael Worcester
Dublin Fire Department
Main Street
P.O. Box 235
Dublin, NH 03444
F.D.: 563-8137

Chief Jonathan Wiggin
Dunbarton Fire Department
1011 School St.
Dunbarton, NH 03046
F.D.: 774-3542

Chief Ron O'Keefe
Durham Fire Department
51 College Road
Durham, NH 03824-3585
F.D.: 868-5531
Fax: 862-1513

Chief Alan Mazur
E. Kingston Fire Department
PO Box 171
East Kingston, NH 03827-0171
F.D.: 642-3141

Chief Rene Lefebvre
East Andover Fire Department
P.O. Box 195
East Andover, NH 03231
F.D.: 735-5428

Chief James Deschambeault
East Conway Fire Department
HCR 68
Center Conway, NH 03813

Chief Albert H. Dionne
East Derry Fire Department
PO Box 104
East Derry, NH 03041
F.D.: 432-9559
FAX: 425-1847

Chief Charles Casey
Easton Fire Department
P.O. Box 424
Franconia, NH 03580
F.D.: 823-5531

Chief James A. Coogan
Eaton Fire Department
Rte. 153
Eaton, NH 03832
F.D.: 447-2681

Chief Richard W. Thompson
Effingham Fire Department
P.O. Box 6
Effingham, NH 03882
F.D.: 539-7956

Chief Donald A. Crate
Enfield Fire Department
Sargent Street
Enfield, NH 03748
F.D.: 632-4332

Chief Christopher Murphy
Epping Fire Department
147 Main Street
Epping, NH 03042
F.D.: 679-5446
FAX: 679-3000

Chief Stewart Yeaton
Epsom Fire Department
1714 Dover Road
Epsom, NH 03234
F.D.: 736-9291
FAX: 736-9299

Chief Everett R. Eames
Errol Fire Department
PO Box 487
Errol, NH 03579
F.D.: 482-3351
FAX: 482-3804

Chief John Carbonneau
Exeter Fire Department
20 Court Street
Exeter, NH 03833
F.D.: 772-1212
FAX: 773-6128

Chief Richard Moulton
Farmington Fire Department
P.O. Box 492
Farmington, NH 03835
F.D.: 755-2131

Chief William Prigge
Fitzwilliam Fire Department
Box 725
Fitzwilliam, NH 03447
F.D.: 585-6561

Chief Donald Abbott
Francestown Fire Department
2nd NH Turnpike S.
Francestown, NH 03043
F.D.: 547-6664

Chief Harvey Flanders
Franconia Fire Department
P.O. Box 900
Franconia, NH 03580
F.D.: 823-8821

Chief Scott R. Clarenbach
Franklin Fire Department
59 West Bow Street
Franklin, NH 03235
F.D.: 934-2205
Fax: 934-7408

Chief Gene Doe
Freedom Fire Department
PO Box 129
Freedom, NH 03836-0129
F.D.: 539-4261

Chief Richard C. Heselton
Fremont Fire Department
Main Street
Fremont, NH 03044
F.D.: 895-2512

Chief Michael D. Mooney
Gilford Fire Department
39 Cherry Valley Road
Gilford, NH 03246
F.D.: 524-7500
FAX: 524-7529

Chief Glenn Davis
Gilmanton Fire Department
Church Street
PO Box 128
Gilmanton, NH 03837
F.D.: 364-2500
FAX: 364-2501

Chief
Gilsum Fire Department
Box 183
Gilsum, NH 03448
F.D.: 352-3468

Chief Roger Labbe
Glen Fire Department
Box 104
Glen, NH 03838
F.D.: 383-9555

Chief Edward Hunter
Goffstown Fire Department
18 Church Street
Goffstown, NH 03045
F.D.: 497-3619
FAX: 497-5704

Chief George (Rick) Eichler
Gorham-Cascade Fire Department
347 Main Street
Gorham, NH 03581
F.D.: 466-2549
FAX: 466-5611

Chief Rick Shepard
Goshen Fire Department
Star Route
Goshen, NH 03752
F.D.: 542-5155
Work: 865-2353

Chief Peter Baker
Grafton Fire Department
P.O. Box 175
Library Rd.
Grafton, NH 03240
F.D.: 523-7500

Chief Robert Seavey
Grantham Fire Department
P.O. Box 80
Grantham, NH 03753
F.D.: 863-5710

Chief James Conway
Greenfield Fire Department
Slip Road, Box 113
Greenfield, NH 03047
F.D.: 547-3501

Chief Timothy Collins
Greenland Fire Department
Box 100
Greenland, NH 03840
F.D.: 436-1188
FAX: 436-9235

Chief Scott A. Vaillancourt
Greenville Fire Department
PO Box 361
Greenville, NH 03048-0361
F.D.: 878-1242
FAX: 878-1242

Chief Tony J. Albert
Groton Fire Department
HC 58 Box 528
Groton, NH 03241

Chief James D. Kinney
Groveton Fire Department
Church Street
Groveton, NH 03582
F.D.: 636-2181

Chief Chip Hastings
Hampstead Fire Department
11 Little's Lane
Hampstead, NH 03841
F.D.: 329-6006
FAX: 329-4311

Chief Mark Wooles
Hampton Falls Fire Dept.
3 Drinkwater Road
Hampton Falls, NH 03844
F.D.: 926-5752
FAX: 926-6042

Chief Hank Lipe
Hampton Fire Department
Station #1
64 Ashworth Avenue
Hampton, NH 03842
F.D.: 926-3316
FAX: 929-1915

Chief Linden Joseph
Hancock Fire Department
P.O. Box 6
Hancock, NH 03449
F.D.: 525-3366
FAX: 525-4722

Chief Roger Bradley
Hanover Fire Department
46 Lyme Road
Hanover, NH 03755
F.D.: 643-3424
FAX: 643-0741

Chief Rand E. Duffy
Harrisville Fire Department
Chesham Road
P.O. Box 367
Harrisville, NH 03450
F.D.: 827-3412

Chief Mike Lavoie
Haverhill Corner Fire Dept.
RR 1 Box 303
Haverhill, NH 03765
F.D.: 989-5655
FAX: 787-2005

Chief John M. Fischer
Hebron Fire Department
Box 37
Hebron, NH 03241
F.D.: 744-9468
FAX: 744-5883

Chief Benjamin Ayer
Henniker Fire Department
PO Box 307
Henniker, NH 03242-0307
F.D.: 428-7552

Chief Thomas Jacobs
Hill Fire Department
P.O. Box 226
Hill, NH 03243
F.D.: 934-5350

Chief David L. Holmes
Hillsboro Fire Dept
PO Box 7
13 Central St.
Hillsboro, NH 03244-0007
F.D.: 464-3477
FAX: 464-6052

Chief Robert J. Johnson
Hinsdale Fire Department
Depot Street, P.O. Box 13
Hinsdale, NH 03451
F.D.: 336-5512

Chief Richard E. Mardin
Holderness Fire Department
P.O. Box 465
Holderness, NH 03245
F.D.: 968-4491

Chief Rick Towne
Hollis Fire Department
PO Box 38
Hollis, NH 03049
F.D.: 465-6001
FAX: 465-9999

Chief Michael Howard
Hooksett Fire Department
15 Legends Drive
Hooksett, NH 03106-1848
F.D.: 623-7272
Fax: 626-6742

Chief Rick Schaefer
Hopkinton Fire Department
9 Pine Street
Contoocook, NH 03229
F.D.: 746-3181
Fax: 746-3182

Chief Frank Carpentino
Hudson Fire Department ⑥
15 Library Street
Hudson, NH 03051
F.D.: 886-6021
FAX: 882-7115

Chief Edward F. Dubie
Jackson Fire Department
P.O. Box 329
Jackson, NH 03846
F.D.: 383-4090

Chief John A. White
Jaffrey Fire Department
10 Goodnow Street
Jaffrey, NH 03452
F.D.: 532-8377
Fax: 532-7862

Chief Christopher D. Milligan
Jefferson Fire Department
PO Box 173
Jefferson, NH 03583
FD: 586-4444
Fax: 586-4553

Chief Brad Payne
Keene Fire Department
32 Vernon Street
Keene, NH 03431
F.D.: 357-9861
FAX: 357-1985

Chief Robert N. Upton
Kensington Fire Department
124 Amesbury Road
Kensington, NH 03833
F.D.: 772-5751

Chief Norman R. Hurley
Kingston Fire Department
148 Main Street
P.O. Box 302
Kingston, NH 03848
F.D.: 642-3626

Chief George Landry
Laconia Fire Department
848 North Main Street
Laconia, NH 03246
F.D.: 524-6881
FAX: 524-0437

Chief Michael Currier
Lancaster Fire Department
Main Street
Lancaster, NH 03584
F.D.: 788-4026 or 788-4830
FAX: 788-2114

Chief Douglas F. Erb
Landaff Fire Department
RR 1, Box 18
Lisbon, NH 03585

Chief Wendell W. Holbrook
Langdon Fire Department
RR 1, Box 153B
Alstead, NH 03602-9626
F.D.: 835-6353

Chief Stephen Allen
Lebanon Fire Department
12 South Park Street
Lebanon, NH 03766-4207
F.D.: 448-8810
FAX: 448-8811

Chief Richard Doucette
Lee Fire Department
RFD 1
Durham, NH 03824
F.D.: 659-5411(non-emergency #)
868-2400

Chief Phillip J. Tirrell Sr.
Lempster Fire Department
11 Lempster St
Lempster, NH 03606
F.D.: 863-6375
FAX: 357-1958

Chief Clifton Dauphine
Lincoln Fire Department
Main Street
PO BOX 282
Lincoln, NH 03251
F.D.: 745-2238

Chief Gerlad Houston
Lisbon Fire Department
21 School Street
Lisbon, NH 03585
F.D.: 838-2211

Chief Brent T. Lemire
Litchfield Fire Department
257 Charles Bancroft Highway
Litchfield, NH 03052
F.DD.: 424-8071

Chief Harold D. McGovern
Littleton Fire Department
230 West Main Street
Littleton, NH 03561
F.D.: 444-2137
Fax: 444-2218

Chief Alan J. Sypek
Londonderry Fire Department
280 Mammoth Road
Londonderry, NH 03053
F.D.: 432-1124, 1125, & 1149
Fax: 432-1129

Chief Richard E. Wright
Loudon Fire Department
PO Box 7032
8 Cooper Street
Loudon, NH 03301
F.D.: 798-5612
Fax: 228-0983

Chief Don Elder
Lyme Fire Department
P.O. Box 202
Lyme, NH 03768
F.D.: 795-2047

Chief Timothy McEntee
Lyndeborough Fire Department
Mountain Road
PO Box 158
Lyndeborough, NH 03082
F.D.: 654-9318

Chief Thomas K. Perley
Madbury Fire Department
13 Town Hall Road
Madbury, NH 03820-9509
F.D.: 742-1164

Chief Alan Smith
Madison Fire Department
PO Box 158
Madison, NH 03849
F.D.: 367-4602

Chief Emanuel A. Lagerberg
Manchester Airport Fire Dept
709 Barrett Drive
Manchester, NH 03103
F.D.: 624-1614
FAX: 669-7707

Chief Joseph Kane
Manchester Fire Department
100 Merrimack Street
Manchester, NH 03101
F.D.: 669-2256
FAX: 669-7707

Chief Wayne F. Crowell
Marlborough Fire Department
PO Box 487
Marlborough, NH 03455-0487
F.D.: 876-4413
876-3751

Chief Robert Stewart
Marlow Fire Department
P.O. Box 275
Marlow, NH 03456
F.D.: 446-7511

Chief David Cook
Mason Fire Department
101 Depot Road
Greenville, NH 03048
F.D.: 878-2208
FAX: 878-0818

Chief Robert Crowell
Meadowood Fire Department
P.O. Box 599
Fitzwilliam, NH 03447-0599
F.D.: 242-3061
FAX: 358-3420

Chief Chuck Palm
Meredith Fire Department
PO Box 494
Meredith, NH 03253
F.D.: 279-6061

Chief David R. Best
Meriden Fire Department
P.O. Box 337
Meriden, NH 03770
F.D.: 469-3334

Chief William H Pepler Jr.
Merrimack Fire Department
PO Box 130
Merrimack, NH 03054
F.D.: 424-3690
FAX: 424-0603

Chief Michael S. Davenport
Middleton Fire Department
15 Lake Shore Drive
Middleton, NH 03887
F.D.: 473-2750

Chief Robert Glover
Milan Fire Department
P.O. Box 300
Milan, NH 03588-300
F.D.: 449-3641

Chief Rich Pauley
Milford Fire Department
39 School Street
Milford, NH 03055
F.D.: 673-3136
FAX: 673-0657

Chief Andy Lucier
Milton Fire Department
PO Box 588
Milton, NH 03851
F.D.: 652-4201

Chief Maynard Farr
Monroe Fire Department
71 Hammond Road
Monroe, NH 03771
F.D.: 638-2585

Chief Kevin Pomeroy
Mount Vernon Fire Department
4 Amherst Road
Mont Vernon, NH 03057
F.D.: 673-1383

Chief Richard Plaisted
Moultonboro Fire Department
Box 446
Moultonboro, NH 03254
F.D.: 476-5658
FAX: 476-2738

Chief Richard Navaroli
Nashua Fire Department
177 Lake Street
Nashua, NH 03060-4402
F.D.: 594-3651
FAX: 594-3654

Chief Richard Lothrop
Nelson Fire Department
P.O. Box 95
Nelson, NH 03457
F.D.: 847-9951

Chief Dan McDonald
New Boston Fire Dept
Meetinghouse Hill Road
PO Box 250
New Boston, NH 03070
F.D.: 487-5532

Chief Henry Thomas
Newbury Fire Dept
PO Box 373
Newbury, NH 03255
FD: 763-4403

Chief Richard H. White
New Castle Fire Department
43 Main Street
New Castle, NH 03854
F.D.: 436-1132
FAX: 436-7710

Chief Brad Meyerriecks
New Durham Fire Dept
7 Main St
PO Box 207
New Durham, NH 03855
F.D.: 859-3473

Chief David Clement
New Hampton Fire Department
P.O. Box 385
New Hampton, NH 03256
F.D.: 744-2735

Chief Rick Hewitt, Jr.
New Ipswich Fire Department
P.O. Box 357
New Ipswich, NH 03071
F.D.: 878-1364
FAX: 878-1552

Chief Peter S. Stanley
New London Fire Dept.
PO Box 240
New London, NH 03257
F.D.: 526-6073

Chief Henry Thomas
Newbury Fire Department
Box 373
Newbury, NH 03255
F.D.: 763-4403

Chief Jeff Buxton
Newfields Fire Department
PO Box 300
Newfields, NH 03856
F.D.: 778-0311
FAX: 659-8507

Chief Larry Wahl
Newington Fire Department
80 Fox Point Road
Newington, NH 03801
F.D.: 436-9441
FAX: 430-2007

Chief Richard Swindell
Newmarket Fire Department
186 Main Street
Newmarket, NH 03857
F.D.: 659-3334

Chief Peter M. Lamb
Newport Fire -EMS
11 Sunapee Street
Newport, NH 03773
F.D.: 863-1416
FAX 863-8016

Chief David A. Baker
Newton Fire Department
P.O. Box 209
Newton, NH 03858
F.D.: 382-8811
382-6048

Chief Michael Bennett
N. Stratford Fire Dept.
RFD 1
North Stratford, NH 03590
F.D.: 636-2375

Chief David Halpin
N. Conway Fire Department
PO Box 218
North Conway, NH 03860
F.D.: 356-5327
FAX: 356-2424

Chief Thomas S. Lambert
N. Hampton Fire Department
235 Atlantic Avenue
PO Box 606
North Hampton, NH 03862
F.D.: 964-5500
Fax: 964-7249

Chief Don Hammond
North Haverhill F.D.
PO Box 429
North Haverhill, NH 03774
F.D.: 787-6991
FAX: 787-2005

Chief Richard Westney
North Walpole F.D.
70 Church St.
North Walpole, NH 03609
F.D.: 445-5353
Work: 826-4070 ext. 201

Chief Robert R. Petrin
Northfield/Tilton Fire Department
149 Park Street
Northfield, NH 03276
F.D.: 286-4781/4787
Fax: 286-4767

Chief George Ashford
Northwood Fire Department
499 1st NH Turnpike
Northwood, NH 03261
F.D.: 942-9103/9104
Fax: 942-9104

Chief Gary E. Chase
Nottingham Fire-Rescue Dept.
128 Stage Road
P.O. Box 68
Nottingham, NH 03290
F.D.: 679-5666
FAX: 679-1504

Chief Arthur Dennis
Orford Fire Department
P.O. Box 106
Orford, NH 03777
F.D.: 353-4588

Chief Adam T. Riley
Ossipee Corner F.D.
PO Box 415
Ossipee, NH 03864-0415
F.D.: 539-2407
FAX: 539-4453

Chief William Brown
Pease Fire Department
302 Newmarket St
Pease ANGB, NH 03803-0157
F.D.: 430-2700
FAX: 430-2379

Chief E. David Fisher
Pelham Fire Department
PO Box 321
Pelham, NH 03076
F.D.: 635-2703
FAX: 635-6970

Chief Harold Paulsen
Pembroke Fire Department
247 Pembroke Street
Pembroke, NH 03275
F.D.: 485-3621

Chief Stephen A. Black
Peterborough Fire Department
16 Summer Street
Peterborough, NH 03458
F.D.: 924-8090
FAX: 924-8091

Chief Wayne Godfrey
Piermont Fire Department
19 Barton Road
Piermont, NH 03779
F.D.: 272-4911

Chief Sandy Young
Pittsburg Fire Department
Main Street, PO Box 51
Pittsburg, NH 03592
F.D.: 538-6972
Fax: 538-6972

Chief Lenny Deane
Pittsfield Fire Department
33 Catamount Street
Pittsfield, NH 03263
F.D.: 435-6807
Fax: 435-7922

Chief Douglas Plummer
Plainfield Fire Department
Box 212
Plainfield, NH 03781
F.D.: 675-6298

Chief Donald Petzold
Plaistow Fire Department
27 Elm Street
Plaistow, NH 03865
F.D.: 382-5012
FAX: 382-4172

Chief Brian Thibeault
Plymouth Fire Department
42 Highland Street
Plymouth, NH 03264
F.D.: 536-1253
Fax: 536-0035

Chief Rick A. Plummer
Portsmouth Fire Department
170 Court Street
Portsmouth, NH 03801
F.D.: 427-1515
Fax: 427-1555

Chief Harry J. Tagen
Portsmouth Naval Shipyard
Code 1740
Portsmouth, NH 03801-5000
F.D.: (207) 438-2292 or 1896
FAX: 207-438-4444

Chief Karl Methven
Proctor Academy F.D.
Main Street
Andover, NH 03216

Chief Michael Steele
Randolph Fire Department
Rte 2 Box 140A
Jefferson, NH 03583
F.D.: 466-3855

Chief Kevin Pratt
Raymond Fire Department
1 Scribner Road
Raymond, NH 03077
F.D.: 895-3321
FAX: 895-0901

Chief Matt Bryant
Redstone Fire Department
163 Redstone Street
Redstone, NH 03813
F.D.: 356-8800

Chief Herbert (Buzz) Shaw
Richmond Fire Department
17 Winchester Road
Richmond, NH 03470
F.D.: 239-6076
FAX: 239-6589

Chief Chris Christopoulos Jr.
Rindge Fire Department
P.O. Box 163
Rindge, NH 03461
F.D.: 899-3195
FAX: 899-2101

Chief Mark A. Dellner
Rochester Fire Department
31 Wakefield Street
Rochester, NH 03867
F.D.: 335-7545
FAX: 332-9711

Chief Harry S. Knowles
Rollinsford Fire Department
P.O. Box 418
Rollinsford, NH 03869
F.D.: 742-2803
FAX: 749-2024

Chief Richard J. Donohue
Roxbury Fire Department
RR #4, Box 293
Keene, NH 03431
F.D.: 352-1100

Chief Kenneth A. Ward
Rumney Fire Department
P.O. Box 210
59 Depot St.
Rumney, NH 03266
F.D.: 786-9924
FAX: 786-9842

Chief Leon Blaisdell
Rye Fire Department
563 Washington Road
Rye, NH 03870
F.D.: 964-6411
Fax: 964-9894

Chief John Nadeau
Salem Fire Department
152 Main Street
Salem, NH 03079-3134
F.D.: 890-2200
FAX: 893-3789

Chief Edwin Bowne
Salisbury Fire Department
P.O. Box 56A
Salisbury, NH 03268
F.D.: 648-2540

Chief Jon Sanborn
Sanbornton Fire Department
P.O. Box 112
Sanbornton, NH 03269
F.D.: 286-4819
FAX: 286-7116

Chief Irving Bassett
Sandown Fire Department
Sandown, NH 03873
F.D.: 887-3220

Chief James Mykland
Sandwich Fire Department
P.O. Box 37
Ctr. Sandwich, NH 03227-0037
F.D.: 284-6264

Chief Martin Janvrin
Seabrook Fire Department
87 Centennial Street
Seabrook, NH 03874
F.D.: 474-3880
Fax: 474-5187

Chief David Conti
Seabrook Station Fire Brigade
PO Box 300
Seabrook, NH 03874
F.D.: 773-7000 ext 2000
FAX: 773-7671

Chief Warren Hayes
Shelburne Fire Department
64 Village Road
Shelburne, NH 03581
F.D.: 466-3345
FAX: 466-5644

Chief John Gamble
So. Hampton Fire Department
128 Main Ave.
So. Hampton, NH 03827
F.D.: 394-7350

Chief Paul Vallee
Somersworth Fire Department
195 Maple Street Ext.
Somersworth, NH 03878
F.D.: 692-3457
FAX: 692-5147

Chief Stephen Buckley
Spofford Fire Department
P.O. Box 163
Spofford, NH 03462
F.D.: 363-4287

Chief Matthew A Waddell
Springfield Fire Department
PO Box 175
Springfield, NH 03284
F.D.: 763-4033

Chief Ronald Lunn
Stark Fire Department
RFD #1, Box 388
Stark, NH 03582
F.D.: 636-1224

Chief Brian W. Cahill
Stoddard Fire & Rescue
HCR 32, Box 503
Stoddard, NH 03464
F.D.: 446-3919

Chief Loren Pierce
Strafford Fire & Rescue
P.O. Box 25
Ctr. Strafford, NH 03815
F.D.: 664-2915
Fax & Home: 269-7123

Chief Lawrence Curley
Stratford Fire Department
Box 344, RR 1
North Stratford, NH 03590
F.D.: 636-2375

Chief Robert Law
Stratham Fire Department
Town of Stratham-SVFD
10 Bunker Hill Avenue
Stratham, NH 03885
F.D.: 772-9756

Chief Paul W. Pinkham
Sugar Hill Fire Department
PO Box 574
Sugar Hill, NH 03585
F.D.: 823-8415
Business: 823-8123

Chief Robert Hummel
Sullivan Fire Department
PO Box 39
Sullivan, NH 03445
F.D.: 847-9020

Chief Dan Ruggles
Sunapee Fire Department
P.O. Box 15
Sunapee, NH 03782
F.D.: 763-5770

Chief John Berglunc
Surry Fire Department
Rt 12A, Box 444
Surry, NH 03431
F.D.: 357-4123
FAX: 352-1942

Chief Darrel Palmer
Sutton Fire Department
Box 75
No. Sutton, NH 03260
F.D.: 927-4740

Chief Lee Dunham
Swanzy Fire Department
P.O. Box 124
E. Swanzy, NH 03446
F.D.: 352-4574
FAX: 352-6250

Chief David A. Bowles
Tamworth Fire Department
132 Chinook Trail
Wonalancet, NH 03897
F.D.: 323-8874

Chief Timothy P. Fiske
Temple Fire Department
P.O. Box 80
Temple, NH 03084
F.D.: 878-1972
FAX: 878-5067

Chief Robert R. Petrin
Tilton/Northfield F.D.
149 Park Street
Tilton, NH 03276
F.D.: 286-4781 or
Fax: 286-4767 (call first)

Chief John C. Callahan, Jr.
Troy Fire Department
P.O. Box 659
Troy, NH 03465
F.D.: 242-7759

Chief J. William Dawson, Jr.
Tuftonboro Fire Department
P.O. Box 437
Melvin Village, NH 03850
F.D.: 569-3381

Chief Marc Brodeur
Twin Mountain F.D.
Box 13
Carroll, NH 03595
F.D.: 846-5545

Chief Bruce E. Baker
Unity Fire Department
P.O. Box 477
Claremont, NH 03743
F.D.: 543-3838
FAX: 543-5901

Chief Todd Nason
Wakefield Fire Department
2017 Wakefield Rd.
Sanbornville, NH 03872
F.D.: 522-8336

Chief Harold Boynton
Walpole Fire Department
PO Box 243
Walpole, NH 03608
F.D.: 756-3621

Chief Richard Brown
Warner Fire Department
PO Box 265
Warner, NH 03278-0265
F.D.: 456-2222

Chief David F. Riel
Warren Vol. Fire Dept
P.O. Box 66
Warren, NH 03279-0066
F.D.: 764-9604

Chief Robert Wright
Washington Fire Department
P.O. Box 61
Washington, NH 03280
F.D.: 495-3133

Chief Bruce M. Andrew
Waterville Valley F.D.
Tripoli Road
Waterville Valley, NH 03215
F.D.: 236-4730

Chief Ray Eaton
Weare Fire Department
40 Bog Hill Road
PO Box 190
Weare, NH 03281
F.D.: 529-2352
FAX:529-4554

Chief Paul W. Welcome
Webster Fire Department
1215 Battle Street
Webster, NH 03303
F.D.: 648-2500

Chief Roy H. Ames, Jr.
Wentworth Fire Department
Box 61
Wentworth, NH 03282
F.D.: 764-9411

Chief Brad Eldridge
West Ossipee Fire Department
PO Box 142
W. Ossipee, NH 03890
F.D.: 539-6906
FAX: 539-6906

Chief Henry Prehemo
West Stewartstown F.D.
West Stewartstown NH 03597
F.D.: 266-3422

Chief Harry E. Nelson
Westmoreland Fire Department
P.O. Box 975
Westmoreland, NH 03467
F.D.: 399-4471

Chief Alan Smith
Whitefield Fire Department
3 Jefferson Road
Whitefield, NH 03598
F.D.: 837-2655

Chief Richard E. Lee
Wilmot Fire Department
Box 105
Wilmot, NH 03287
F.D.: 526-4524

Chief Ray Dick
Wilton Fire Department
P.O. Box 83
Wilton, NH 03086
F.D.: 654-6758
FAX:654-5530

Chief Richard LaPointe, Sr.
Winchester Fire Department
P.O. Box 25
Winchester, NH 03470
F.D.: 239-6691

Chief Steve Fruchtman
Windham Fire Department
3 North Lowell Road
PO Box 120
Windham, NH 03087-120
F.D.: 434-4907
FAX: 425-6582

Chief Richard W. Gray
Winnisquam Fire Department
P.O. Box 192
Winnisquam, NH 03289
F.D.: 524-4350

Chief Ben Bean
Wolfeboro Fire Department
Public Safety Building
251 South Main Street
Wolfeboro, NH 03894
F.D.: 569-1400

Chief William Mellett
Woodstock Fire Department
Box 347
No. Woodstock, NH 03262
F.D.: 745-8752
FAX:745-2393

Chief Brad Kennedy
Woodsville Fire Department
Elm Street
Woodsville, NH 03785
F.D.: 747-3311
Work: 747-3759

NEW JERSEY

01011001 - Absecon Fire Dept
Stanley E Kolbe Sr - 6096415114
401 New Jersey Av
Absecon NJ 08201

01020000 - Atlantic City Fire Dept
Benjamin Brenner - 6093475590
1301 Bacharach Blvd - Ste 406
Atlantic City NJ 08401

01024001 - Ang Fire Dept
William Loder - 6096456237
400 Langley Rd
Egg Harbor Twp NJ 08234

01031001 - Brigantine Fire Dept
Stanley Cwiklinski - 6092662814
1417 W Brigantine Av
Brigantine NJ 08203

01041000 - Landisville Vol Fire Co
Inc #1
Enrico Coraluzzo - 8566971710
PO Box 305 - Harding Hwy
Landisville NJ 08326

01042001 - Minotola Fire Co
Jeffrey Pace - 8566972626
Box 176 Wheat Rd
Minotola NJ 08341

01051000 - Buena Vista Fire Dist #1
Carlo J Merighi Jr - 8566970997
PO Box 356
Richland NJ 08350-0356

01052000 - East Vineland Fire Co #2
Ronald Rugger - 8566925690
5073 Landis Av
East Vineland NJ 08360

01053000 - Newtownville Fire Co
Gene Sykes - 6095674439
PO Box 248
Newtonville NJ 08346

01054000 - Milmay Vol Fire Co
Eric R Hensel - 8566916767
PO Box 90 - Broad St
Milmay NJ 08340

01055000 - Collings Lakes Fire Dept
William Donnelly - 6095619614
600 Cains Mill Rd
Collings Lakes NJ 08094

01071000 - Egg Harbor City Fire
Dept
Russell Fenton - 6099650094
631 Philadelphia Av
Egg Harbor City NJ 08215

01081000 - Cardiff Vol Fire Co
William E Danz Jr - 6096416917
6609 Black Horse Pike
Egg Harbor Twp NJ 08234

01082000 - Bargaintown Vol Fire Co
#2
Anthony Canale - 6099264070
3515 Bargaintown Rd
Egg Harbor Twp NJ 08234

01083000 - Scullville Fire Co #3
Wallace Shields - 6099272588
1708 Somers Point Rd
Egg Harbor Twp NJ 08234

01084000 - Farmington Vol Fire Co
#4
James Garth Sr - 6099264070
301 Maple Av
Egg Harbor Twp NJ 08234

01085000 - W Atlantic City Fire Co
#5
-
7004 Black Horse Pk
W Atlantic City NJ 08232

01085000 - West Atlantic City Vol
Fire Co
Wally Bakely Jr - 6099264070
7004 Black Horse Pike
West Atlantic City NJ 08232

01091001 - Estell Manor Vol Fire Co
John C Wagner - 6094762144
124 Cape May Av - Box 50
Estell Manor NJ 08319

01101000 - Folsom Vol Fire Co
Larry Smith - 6095613555
1335 Mays Landing Rd
Folsom NJ 08037

01111000 - Oceanville Vol Fire Co #1
-
5 New York Rd
Oceanville NJ 08231

01112001 - Germania Vol Fire Co #2
Daryll Miller - 6099652022
PO Box 731
Cologne NJ 08213

01113000 - Pomona Vol Fire Assn #3
Charles W Mettill - 6099652489
Pomona Rd & Rt 30 - Box 30
Pomona NJ 08240

01114000 - Bayview Fire Co #4
Richard Smith - 6096520589
PO Box 546
Absecon NJ 08201

01115000 - South Egg Harbor Vol
Fire Co
Howard Berchtold Jr - 6099651180
545 Rt 50 & Empire St
S Egg Harbor NJ 08215

01121000 - Reliance Hose Co #1
Eustace Eggie III - 6092260251
6081 Reliance Av
Mays Landing NJ 08330

01121000 - Mays Landing Fire Dept
Eustace Eggie III - 6096251628
6108 Reliance Av
Mays Landing NJ 08330

01122000 - Mizpah Vol Fire Co
Jay M Davenport - 6094762898
6478 Dehirsh Av - Box 429
Mizpah NJ 08342-0429

01123001 - Laureldale Fire/Rescue
Co
Ted Jones - 6099653101
2657 Rte 50
Mays Landing NJ 08330

01124000 - Weymouth Vol Fire Co
John Carrigan - 6096252944
7372 Black Horse Pike
Mays Landing NJ 08330

01125000 - Cologne Vol Fire Co
Daivd Eckner - 6096254453
2870 Cologne Av
Mays Landing NJ 08330

01151000 - Longport Vol Fire Dept
Levon Clayton - 6098229578
2301 Atlantic Av
Longport NJ 08403

01172000 - Nesco Vol Fire Co
Carmen Merlino Jr - 6095616791
3521 Nesco Rd
Hammonton NJ 08037

01181000 - Northfield Fire Dept
Henry Martinelli Jr - 6096412832
1600 Shore Rd
Northfield NJ 08225

01211000 - Somers Point City Fire
Dept
Richard P Rest Jr - 6099279586
1 W New Jersey Av
Somers Point NJ 08244

01232000 - Dorothy Vol Fire Co
Ellwood Seelman - 6094762205
70 Tuckahoe Rd - Box 227
Dorothy NJ 08317

02020000 - Alpine Fire Dept
Frank J Richenbaugh - 2017688828
PO Box 93
Alpine NJ 07620

02050000 - Carlstadt Fire Dept
Robert Ruff Jr - 2014603943
500 Madison St
Carlstadt NJ 07072

02080000 - Cresskill Fire Dept
Glenn Petillo - 2015680030
67 Madison Av
Cresskill NJ 07626

02110000 - Elmwood Park Fire Dept
Kenneth S Pressler - 2017963939
182 Market St
Elmwood Park NJ 07407

01131000 - Hammonton Fire
Department
Jack Donio - 6095674300
100 Central Av
Hammonton NJ 08037

01161000 - Margate City Fire Dept
John F Kelly - 6098225562
1 S Washington Av
Margate City NJ 08402

01173000 - Weekstown Vol Fire Co
Robert Cirillo - 6099651040
5733 Pleasant Mills Rd
Egg Harbor City NJ 08215

01191000 - Pleasantville Fire Dept
L J Borden - 6094843667
1 N 1st St
Pleasantville NJ 08232

01221000 - Ventnor City Fire Dept
Daniel J Cahill - 6098237942
20 N New Haven Av
Ventnor NJ 08406

01901000 - South Jersey Transit
Authority
Bernard W Ney - 6094855498
106 Atlantic City Int Airport
Egg Harbor Twp NJ 08234

02030000 - Bergenfield Boro Fire
Dept
Charles Hartung - 2013874055
198 N Washington Av
Bergenfield NJ 07621

02060000 - Cliffside Park Fire Dept
Frank Poerio - 2019450205
525 Palisade Av
Cliffside Park NJ 07010

02090000 - Demerest Boro Fire Dept
Michael R Kane - 2012680338
25 Park St
Demarest NJ 07627

02120000 - East Rutherford Fire Dept
Raymond Parrish - 2019333444
PO Box 52
East Rutherford NJ 07073

01141000 - Linwood Fire Dept
Charles B Doughty - 6099276611
750 Lincoln Av
Linwood NJ 08221

01171000 - Elwood Vol Fire Co
Gary Franklin - 6095610064
Union Av
Elwood NJ 08217

01174000 - Sweetwater Vol Fire Co
Gary Franklin - 6095610064
2330 Elwood Rd
Hammonton NJ 08037

01201000 - Port Republic Vol Fire Co
John Yochim - 6096529411
116 Blakes Ln
Port Republic NJ 08241

01231000 - Belcoville Fire Dept
- 6096251087
1201 Loretta Av
Belcoville NJ 08330

02010000 - Allendale Fire Dept
David Baez - 2019347015
PO Box 44
Allendale NJ 07401

02040000 - Bogota Fire Dept
Louis W Kern - 2013427480
375 Larch Av
Bogota NJ 07603

02070000 - Knickerbocker Hook &
Ladder
Kurt Vreeland - 2019541248
100 Ruckman Rd
Closter NJ 07624

02100000 - Dumont Fire Dept
Raymond J Murray - 2013875042
50 Washington Av
Dumont NJ 07628

02130000 - Edgewater Fire Dept
Samuel M Denorchia - 2019431700
916 River Rd
Edgewater NJ 07020

02140000 - Emerson Fire Dept
Michael Cimino - 2012612242
PO Box 205
Emerson NJ 07630

02150000 - Englewood Fire Dept
Robert Moran - 2015686305
11 William St
Englewood NJ 07631

02160000 - Englewood Cliffs Fire
Dept
Thomas Manolio - 2015695252
10 Kahn Terr
Englewood Cliffs NJ 07632

02170000 - Fair Lawn Fire Dept
James R Tyminski - 2017945321
8-01 Fairlawn Av
Fair Lawn NJ 07410

02180000 - Fairview Vol Fire Dept
Dennis Licameli - 2019433300
59 Anderson Av
Fairview NJ 07022

02190000 - Fort Lee Fire Dept
Gary Krautmann - 2015923584
309 Main St
Fort Lee NJ 07024

02200000 - Franklin Lakes Boro Fire
Dept
John Keene - 2018915736
PO Box 199
Franklin Lakes NJ 07417

02210000 - Garfield City Fire Dept
Peter J Amadio - 9734784224
111 Outwater Ln
Garfield NJ 07026

02220000 - Glen Rock Fire Dept
Jim Saxton - 2016703988
Harding Plz
Glen Rock NJ 07452

02230000 - Hackensack Fire Dept
Richard Johnson - 2016463942
205 State St
Hackensack NJ 07601

02240000 - Harrington Park Fire Dept
Douglas Roem - 2017680417
13 Kline St
Harrington Park NJ 07640

02250000 - Hasbrouck Heights Fire
Dept
Vincent Monahan - 2012900082
248 Hamilton Av
Hasbrouck Heights NJ 07604

02260000 - Haworth Fire Dept
Barry F Connell - 2013844785
300 Haworth Av
Haworth NJ 07641

02270000 - Hillsdale Vol Fire Dept
Kimberly J Jampton-Saul -
2017972660
380 Hillsdale Av
Hillsdale NJ 07642

02280000 - Ho Ho Kus Fire Dept
Jeff Pattman - 2014444888
52 Sheridan Av
Ho Ho Kus NJ 07423

02290000 - Leonia Boro Fire Dept
Chief John L Peters - 2015925796
312 Broad Av
Leonia NJ 07605

02300000 - Little Ferry Boro Fire
Dept
Ronald Anzalone - 2016419234
215-217 Liberty St
Little Ferry NJ 07643

02310000 - Lodi Boro Fire Dept
Philip Albert Jr - 9733654005
1 Memorial Dr
Lodi NJ 07644

02320000 - Lyndhurst Fire Dept
Robert Ferrara - 2018042441
367 Valley Brook Av
Lyndhurst NJ 07071

02330000 - Mahwah Fire Dept
Gordon D McIntire - 2015295757
PO Box 733
300 B Rt 17 South

02340001 - Maywood Fire Dept
John Gargagliano - 2018452922
15 Park Av
Maywood NJ 07607

02350000 - Midland Park Fire Dept
John Gibbons - 2014442393
280 Godwin Av
Midland Park NJ 07432

02360000 - Montvale Boro Fire Dept
Michael J Barnes - 2013914240
Box 206 - 35 W Grand Av
Montvale NJ 07645

02370000 - Moonachie Boro Fire
Dept
Richard Behrens - 2016412097
70 Moonachie Rd
Moonachie NJ 07074

02380001 - New Milford Fire Co #1
Alan Silverman - 2019677067
930 River Rd
New Milford NJ 07646

02390000 - North Arlington Fire Dept
Robert Melafchik - 2019555690
3 Legion Pl - Box 7118
North Arlington NJ 07031

02400000 - Northvale Fire Dept
Joe DeSena - 2017683927
116 Paris Av
Northvale NJ 07647

02410000 - Norwood Fire Dept
Robert J Abbott - 2017677200
602 Broadway
Norwood NJ 07648

02420000 - Oakland Boro Vol Fire
Dept
Roy Bauberger - 2013375691
25 Yawpo Av
Oakland NJ 07436

02430000 - Old Tappen Boro Fire Co
#1
Brendan Wolf - 2017229248
227 Old Tappan Rd
Old Tappen NJ 07675

02440000 - Oradell Vol Fire Dept
James Maxson - 2012615455
335 Kinderkamack Rd
Oradell NJ 07649

02450000 - Palisade Park Fire Dept
Michael Vietri - 2015854130
275 Broad Av
Palisades Park NJ 07650

02460000 - Paramus Fire Dept
Sean M Benson - 2012652100
1 Jockish Sq
Paramus NJ 07652

02470000 - Park Ridge Vol Fire Dept
William A Hahn - 2013915400
55 Park Av
Park Ridge NJ 07656

02480000 - Ramsey Boro Fire Dept
Pierre D Gauthier - 2018253400
Island Av
Ramsey NJ 07446

02490000 - Ridgefield Fire Dept
Joseph D Cajzer - 2014456008
604 Broad Av
Ridgefield NJ 07657

02500000 - Ridgefield Pk Village Fire
Dep
Michael J Alberque - 2016411430
50 Main St
Ridgefield Park NJ 07660

02510000 - Ridgewood Fire Dept
James A Bombace - 2014444224
201 E Glen Av
Ridgewood NJ 07450

02520000 - River Edge Vol Fire Dept
Frank Pugliese - 2015997333
705 Kinderkamack Rd
River Edge NJ 07661

02530000 - River Vale Twp Fire Dept
Gregory Goodell - 2013587753
330 Rivervale Rd
River Vale NJ 07675

02540000 - Rochelle Park Twp Fire
Dept
Sal Antista - 2015870526
151 W Passaic St
Rochelle Park NJ 07662

02550000 - Rockleigh Fire Dept
Ernest April - 2017688091
26 Rockleigh Rd
Rockleigh NJ 07647

02560000 - Rutherford Fire Dept
Ray Moe - 2014603011
176 Park Av
Rutherford NJ 07070

02570000 - Saddlebrook Twp Fire
Dept
Samuel Giovia Jr - 2015870845
93 Market St
Saddlebrook NJ 07663

02580000 - Saddle River Fire Dept
Brian Yates - 2013272609
100 E Allendale Rd
Saddle River NJ 07458

02590000 - So Hackensack Twp Fire
Dept
Fred Hegner - 2014401815
227 Phillips Ave
South Hackensack NJ 07606

02600000 - Teaneck Fire Dept
William G Norton - 2018372085
1231 Teaneck Rd
Teaneck NJ 07666

02610000 - Tenafly Fire Dept
Richard Philpott - 2015689269
100 Riveredge Rd
Tenafly NJ 07670

02630000 - Upper Saddle River Fire
Dept
Stephen G Pink - 2013270285
376 W Saddle River Rd
Upper Saddle River NJ 07458

02640000 - Waldwick Boro Fire Dept
David Alvarez - 2016525300
15A E Prospect St
Waldwick NJ 07463

02650000 - Wallington Boro Fire
Dept
Donald Kaczor - 9737792757
24 Union Blvd
Wallington NJ 07057

02660000 - Twp of Washington Fire
Dept
Jeffrey W Tammen - 2016660750
350 Hudson Av
Washington NJ 07675

02670000 - Westwood Vol Fire Dept
Richard Woods - 2016640526
101 Washington Av
Westwood NJ 07675

02680000 - Woodcliff Lake Fire Dept
Charles Sackermann - 2013919566
180 Pascack Rd
Woodcliff Lake NJ 07675

02690000 - Wood-Ridge Fire Dept
Damian A Cauceglia - 2019392387
85 Humboldt St
Wood-Ridge NJ 07075

02700000 - Wyckoff Twp Vol Fire
Dept
Rick Alnor - 2018911100
Scott Plz
Wyckoff NJ 07481

02800000 - Palisades Int Park Comm
- 2017681360
Alpine Ferry Rd
Alpine NJ 07620

03101000 - Maple Shade Fire Dept
Clifford Leary - 8567791335
53 So Maple Av
Maple Shade NJ 08052

03111000 - Delanco Fire Dept
Keith D Mohrmann - 8567640951
1800 Burlington Av - Box 5021
Delanco NJ 08075

03120000 - Beverly Fire Dept
Alfred E Desjardins - 6097479205
PO Box 392
Beverly NJ 08010

03131000 - Lumberton Fire Dept
Dean C Rossi - 6092671133
PO Box 1903
Lumberton NJ 08048

03161000 - Willingboro Vol Fire Co
#1
Troy A Bishop - 6098717476
398 Charleston Rd
Willingboro NJ 08046

03171000 - Vincent Fire Co
Scott Easlick - 6098593200
PO Box 2389
Vincentown NJ 08088

03172000 - Hampton Lakes Vol Co
#1
Philip McElroy - 6098592600
74 Holly Blvd - Box 2057
Southampton NJ 08088

03181000 - Browns Mills Fire Dept
Craig L Augustoni - 6098930044
PO Box 46
Browns Mills NJ 08015

03183000 - Country Lakes Vol Fire
Co
Roy E Prouty - 6098933047
PO Box 518 - Firehouse Ln
Browns Mills NJ 08015

03184000 - Presidential Lakes Fire &
Res
Thomas Maahs - 6098939024
PO Box 248
New Lisbon NJ 08064

03185000 - Magnolia Rd Fire Co #2
Richard haines - 6098942010
319 Magnolia Rd
Pemberton NJ 08068

03191000 - Good Will Fire Co #1
Donald L Bada - 6098942168
64 Hanover St
Pemberton NJ 08068

03200000 - Cinnaminson Fire Dept
#1
Ira Schonfeld - 8568295220
1725 Cinnaminson Av
Cinnaminson NJ 08077

03200002 - Cinnaminson Fire Co #2
- 6098298060
1900 Taylors Ln
Cinnaminson NJ 08077

03200003 - Cinnaminson Fire Dept
- 6098295220
1621 Riverton Rd
Cinnaminson NJ 08077

03211000 - Juliustown Vol Fire Co
JohnM Trout - 6098942600
Box 156 - 420 Lewistown Rd
Juluistown NJ 08042

03212000 - Jacksonville Fire Co
- 6092611139
1793 Jacksonville Jobstown Rd
Bordentown NJ 08505

03213000 - Springfield Twp Fire Co
Daniel Nelson - 6097237444
PO Box 23
Jobstown NJ 08041

03220000 - Evesham Fire-Rescue
Thaddeus Lowden - 8569832750
984 Tuckerton Rd - Box 276
Marlton NJ 08053

03231001 - Delran Fire Dept #1
Joseph Bennett Sr - 8564615474
900 Chester Av - Box 1007
Delran NJ 08075

03231002 - Delran Fire Dept #2
- 6094615474
PO Box 1007
Delran NJ 08075

03241000 - Riverton Fire Dept
Scott Read - 8568292080
505 Howard St
Riverton NJ 08077

03250000 - Medford Twp Fire
Division
Craig W Brittingham - 6099533291
91 Union St
Medford NJ 08055

03260001 - Chesterfield Hose Co
- 6092981024
Rt 528
Trenton NJ 08620

03261000 - Union Fire Co #1
Drew Borgstrom - 6092986413
Box 261 - New St
Crosswicks NJ 08515

03262000 - Chesterfield Twp Fire
Dist #2
David Zavocky - 6092986371
300 Bordentown-Chesterfield Rd
Trenton NJ 08620

03272000 - Westampton Twp Fire
Dept
Richard Parks - 6092672041
780 Woodlane Rd
Westampton Twp NJ 08060

03281000 - Indian Mills Vol Fire Co
John H Smith Jr - 6092681114
48 Willow Grove Rd
Shamong NJ 08088

03291000 - Chatsworth Fire Co
David Plasse Sr - 6097261516
Main St & Lake Rd - Box 419
Chatsworth NJ 08019

03292000 - Lebanon Lakes Vol Fire
Co
Thomas O Thoth - 6098938177
PO Box 587
Chatsworth NJ 08019

03293000 - New Lisbon Dev Ctr Co
#1
- 6097261000
State Hwy 72
New Lisbon NJ 08064

03300000 - Burlington Twp Fire Dept
#1
Jim Libertore - 6092395849
851 Old York Rd - Box F
Burlington NJ 08016

03311000 - Moorestown Fire Dept
Dist #1
William D Constastine Jr -
6092344193
PO Box 367

03313000 - Lenola Vol Fire Co #1
William Ruggiano - 8562359022
229 N Lenola Rd
Moorestown NJ 08057

03331000 - Franklin Fire Co #1
Sean Gable - 6092985325
PO Box 229
Columbus NJ 08022

03360002 - Fellowship Fire Co
- 6092346053
3824 Church Rd
Mt Laurel NJ 08054

03381000 - Cookstown Vol Fire Co
#1
Wayne E Wharton Sr - 6097583434
PO Box 159
Cookstown NJ 08511

03400000 - Florence Twp Fire Dept
Edward Kensler jr - 6094991393
25 w 3rd st
Florence NJ 08518

03411000 - Wrightstown Vol Fire Co
#1
James Ingling - 6097238411
Box 245 - W Main St
Wrightstown NJ 08562

03441000 - Fieldsboro Memorial Fire
Co
- 6092986711
102nd St
Bordentown NJ 08505

03461001 - Jacobstown Vol Fire Co
David Gindlesperger - 6097588177
41 Schoolhouse Rd
North Hanover NJ 08562

03500002 - Union Fire Co
-
PO Box 65
Mt Holly NJ 08060

03600000 - Bordentown City Fire
Dept
- 6092984761
PO Box 663
Bordentown NJ 08505

03321001 - Bordentown Twp Fire
Dist #1
Ray Fackenthall - 6092980013
PO Box 11372
Yardville NJ 08620

03341000 - Easthampton Twp Fire
Brent E Burns - 6092619493
PO Box 748
Mt Holly NJ 08060

03360003 - Mt Laurel Fire Dept
William D Dukes Sr - 8562346053
69 Elbo Ln
Mt Laurel NJ 08054

03383000 - Maguire AFB Fire Dept
- 6097242451
1708 Fire Ln
McGuire AFB NJ 08641

03402001 - Florence Twp Fire Co #1
- 6094993515
25 W 3rd St
Florence NJ 08518

03421000 - New Gretna Fire Co
- 6092964999
N Maple St - Box 32
New Gretna NJ 08224

03451000 - Green Bank Vol Fire Co
Leonard Forand Jr - 6099654743
1683 Rte 542
Egg Harbor NJ 08215

03500000 - Mt Holly Fire Dist #1
Kevin Killeen - 6092617233
PO Box 741
Mt Holly NJ 08060

03500003 - Relief Fire Co
-
17 Pine St
Mt Holly NJ 08060

03601000 - Consolidated Fire Assn
John J Walls - 6092984761
Crosswick St - Box 47
Bordentown NJ 08505

03322002 - Bordentown Twp Fire
Dist #2
William Hartman - 6092984128
PO Box 510
Bordentown NJ 08505

03360001 - Masonville Fire Co #1
- 6092346053
105 Masonville Centeron Rd
Mt Laurel NJ 08054

03371000 - Medford Lakes Fire Dept
Clarence B Wingert Jr - 6096548898
Cabin Circle Dr
Medford Lakes NJ 08055

03391000 - Hainesport Vol Fire Co
#1
William F Wiley - 6092612141
106 Broad St Box 245
Hainesport NJ 08036

03403003 - Roebling Fire Co #3
- 6094990594
7th & Main St
Roebling NJ 08554

03431000 - Medford Farms Vol Fire
Co
Albert Freeman - 6092681020
76 Hawkins Rd
Tabernacle NJ 08088

03452000 - Lower Bank Vol Fire Co
Warren J Homiller - 6099653469
2039 River Rd
Egg Harbor NJ 08215

03500001 - Good Intent Fire Co
-
PO Box 74
Mt Holly NJ 08060

03500004 - Mt Holly Fire Dist #1
Kevin Killeen - 6092617233
PO Box 741
Mt Holly NJ 08060

03602000 - Hope Hose Humane Co
#1
Steven C Scholey - 6092980450
Box 666 - 150 W Burlington St
Bordentown NJ 08505

03701000 - Riverside Fire Co #1
LONNIE WINKELSPECHT JR -
6094619779
PO Box 1
Riverside NJ 08075

03801000 - Palmyra Fire Dept
Jules R Dore - 8567860290
115 W Broad St
Palmyra NJ 08065

03900006 - City of Burlington Fire
Dept
Michael Adams - 6093860060
437 High St
Burlington NJ 08016

03999000 - Burlington County Fire
Marshal
Bob Rose - 6097027156
53 Academy Dr - Box 6000
Mt Holly NJ 08060

04011001 - Audubon Boro Fire Co #1
Paul E Hartstein - 8565478220
221 W Merchant St
Audubon NJ 08106

04021000 - Haddon Heights Fire
Dept
Harry A Scharle - 8565467135
Rear 608 Station Av
Haddon Heights NJ 08035

04030000 - Bellmawr Fire Dept
Jim Burleigh - 8569330400
29 Lewis Av
Bellmawr NJ 08031

04033000 - Bellmawr Park Vol Fire
Co
Harry J Moore Sr - 8569317151
12 Essex Av
Bellmawr NJ 08031

04040000 - Mt Ephraim Fire
Department
James Sylvester - 8569311546
121 S Black Horse Pike
Mt Ephraim NJ 08059

04051000 - Gloucester City Fire Dept
William J Glassman - 8564560231
1 North King St
Gloucester City NJ 08030

04075000 - Runnemede Fire Dept
Alfred Loverdi - 8569394390
26 E Second Av - Box 193
Runnemede NJ 08078

04081000 - Glendora Vol Fire Co
Michael Ricciardelli - 8569396252
22 8th Av
Glendora NJ 08029

04082000 - Chews Landing Fire Dept
Joseph A Riechert Jr - 8562275907
43 Somerdale RD
Blackwood NJ 08012

04083000 - Blenheim Fire Co #1
Gary D Smith - 8562278077
Box 1233 - 34 Almonesson Rd
Blenheim NJ 08012

04084000 - Blackwood Fire Co
John D Vannoni - 8562277037
PO Box 306
Blackwood NJ 08012

04085000 - Gloucester Twp Fire Dist
#5
William Larsen - 8562280678
1781 Sicklerville Rd
Gloucester Twp NJ 08081

04086000 - Erial Fire Dept
William Duespohl - 8564350700
1946 Willimstown Rd
Erial NJ 08081

04091000 - Barrington Fire Co #1
Wayne Roberoth - 8565467555
PO Box 205
Barrington NJ 08007

04100000 - City of Camden Fire Dept
Joseph Marini - 8567577511
4 North 3rd St
Camden NJ 08101

04110000 - Pennsauken Fire Dept
Joe Hoffman - 8566631208
511 Union av
Pennsauken NJ 08110

04129000 - Niagara Fire Co
Enrico T Caruso Jr - 8566622474
22 E Park Av
Merchantville NJ 08109

04130000 - Cherry Hill Fire Dist #13
Gerald Grover - 8567959805
301 Burntmill Rd
Cherry Hill NJ 08003

04141000 - Haddon Fire Co #1
Josphe A Riggs - 8564294308
PO Box 345
Haddonfield NJ 08033

04151000 - Haddon Fire Dist #1
Preston G Morgan Jr - 8568541455
120 Haddon Av
Westmont NJ 08108

04152000 - West Collingswood Hgt
Fire Dep
Robert Krupinski Sr - 8564561520
152 Nicholson Rd
Haddon Twp NJ 08059-2021

04161000 - Collingswood Fire Dept
Michael A Hall - 8568541043
20 W Collings Av
Collingswood NJ 08108

04173000 - Woodlynne Fire Co #1
Michael P Hallahan - 8569628227
200 Cooper Av
Woodlynne NJ 08107

04183000 - Oaklyn Fire Dept
Fredrick Bartling - 8568581826
20 W Clinton Av
Oaklyn NJ 08107

04193000 - Audubon Park Fire Dept
David P laird - 8565466134
18 Road C
Audubon Park NJ 08106

04211000 - Berlin Boro Fire Co
Paul J Miller - 8567677777
59 S Rt 30
Berlin NJ 08009

04222000 - West Berlin Fire-Rescue
Joseph M Jackson Jr - 8567671939
186 Haddon Av
West Berlin NJ 08091

04230000 - Waterford Twp Fire Dept
James J Jankowski - 8567675353
2208 Atco Av
Atco NJ 08004

04233000 - Loudon Vol Fire Co
Chief Jenkowski - 8567670680
2208 Atco Av
Atco NJ 08004

04234000 - Waterford Fire Co
Rich Ostermueller Sr - 8567688571
PO Box 374
Waterford NJ 08089

04241000 - Chesilhurst Vol Fire Co
#1
Robert R Barney Sr - 8567681574
PO Box 338
Waterford NJ 08089

04251002 - Winslow Fire Co
Joseph Brigandi Jr - 8565610696
Hay & Hall Sts - Box 66
Winslow NJ 08095

04253000 - Cedar Brook Vol Fire Co
- 8567671002
Cedar Brook-New Brooklyn Rd
Cedar Brook NJ 08018

04253001 - Winslow Twp Fire Dist #1
- 6095614225
9 Cedar Brook-New Brooklyn Rd
Sicklerville NJ 08081-3704

04254000 - Tansboro Fire Co #1
- 8567671002
Atco Post Office Box 382
Atco NJ 08004

04256000 - Albion Vol Fire Co
- 8567675280
Cross Keys Rd & Oakland Av
Albion NJ 08009

04257000 - Sicklerville Fire Co
John D Force - 8567289608
520 Church Rd
Sicklerville NJ 08081

04258000 - Waterford Vol Fire Co
- 8567679799
Southard Av
Waterford NJ 08089

04259000 - Elm Vol Fire Dept
Anthony J Donio - 8565671196
569 Whitehorse Pk
Elm NJ 08037

04261000 - Ancora Fire Dept
Garry Jackson - 6095677250
202 Spring Garden Rd
Ancora NJ 08037

04272000 - Lawnside Fire Co #1
Michael L Harper - 8565736210
4 Douglas Av
Lawnside NJ 08045

04281000 - Camden County Fire
Dept
John P Glasbrenner - 6093746188
Woodbury-Turnersville Rd
Blackwood NJ 08012

04291000 - Magnolia Boro Fire Co
Gary I Riebel Sr - 8567835818
116 W Evesham Av
Magnolia NJ 08049

04344000 - Brooklawn Boro Fire Co
Bill Kochersperger - 8564564373
Horton & S Wilson Av
Brooklawn NJ 08030

04602000 - Laurel Springs Fire Dept
John C Fried - 8567843182
723 W Atlantic Av
Laurel Springs NJ 08021

04611000 - Clementon Fire Dept
Lou Duffy - 8567830284
101 Gibbsboro Rd
Clementon NJ 08021

04620000 - Pine Hill Fire Dept
Richard Wright - 8567843994
PO Box 1084
Pine Hill NJ 08021

04631000 - Lindenwold Boro Fire Co
#1
- 6096278544
517 Linden Av
Lindenwold NJ 08021

04632000 - Lindenwold Fire Co #2
Raymond McManus - 8563460935
801 Scott Av
Clementon NJ 08021

04633001 - Lindenwold Fire Co #3
Frank Weindel - 6097844366
2201 Bangor Av
Lindenwold NJ 08021

04641000 - Stratford Fire Dept
Stephen V Gagliardi - 8567831649
311 E Laurel Rd
Stratford NJ 08084

04651000 - Somerdale Boro Fire Co
#1
- 6097834444
22 Whitehorse Pike
Somerdale NJ 08083

04652000 - Somerdale Fire Dept
Manes R Mohan Sr - 8566271432
101 Park Av
Somerdale NJ 08083

04663001 - Voorhees Fire Dist
Donald B Maxfield - 8567836630
423 Cooper Rd
Voorhees NJ 08043

04681000 - Gibbsboro Fire Co #1
James Johnston - 8564359626
PO Box 1
Gibbsboro NJ 08026

04691000 - Hi-Nella Fire Co #1
Brian Cunningham - 8567836555
102 Wykagyl Rd
Hi-Nella NJ 08083-2817

05001000 - Ocean City Fire Dept
Dep Chief Joseph S Foglio -
6095259185
550 Asbury Av
Ocean City NJ 08226

05004000 - Wildwood Crest Fire Co
#1
Jack Holland - 6097293031
7100 Pacific Av
Wildwood Crest NJ 08260

05010000 - Sea Isle City Fire Dept
John Mazurie - 6092631166
233 JFK Blvd - Box 9
Sea Isle City NJ 08243

05015000 - Marmora Volunteer Fire
Co
Jay Newman - 6093903555
40 Tuckahoe Rd - Box 127
Marmora NJ 08223

05021000 - West Wildwood Vol Fire
Co
Ronald Harwood - 6095224845
701 W Glenwood Av - Box 644
West Wildwood NJ 08260-0644

05059000 - Coast Guard Fire Dept
J Barr - 6098986950
1 Monroe Av
Cape May NJ 08204

05062000 - Erma Vol Fire Co
Kurt K Hughes - 6098869600
415 Breakwater Rd
Erma NJ 08204

05072000 - Rio Grande Fire Co
James Belles - 6098861422
1120 Rt 47 - Box 672
Rio Grande NJ 08242

05161000 - Woodbine Vol Fire Co
Clarence Ryan - 6098610845
PO Box 449
Woodbine NJ 08270

05164000 - Belleplain Vol Fire Co
Donald Repici Jr - 6096282270
PO Box 503
Woodbine NJ 08270

05002000 - North Wildwood City Fire
Dept
Thomas E McGarry - 6095225743
1409 Central Av
North Wildwood NJ 08260

05005000 - Cape May Fire Dept
Bruce Bieber - 6098849512
643 Washington St
Cape May NJ 08204

05011000 - Avalon Boro Vol Fire
Dept
- 6099673411
Dune Av - box 311
Avalon NJ 08202

05017000 - Ocean View Vol Fire Co
Inc
Joseph J Gurdgiel Jr - 6096243078
PO Box 508
Ocean View NJ 08230

05057000 - West Cape May Vol Fire
Co
Charles R McPharson Jr -
6098843436
732 Broadway - Box 533

05060000 - Villas Vol Fire Co Inc
Howard Bainey - 6098861611
PO Box 99
Villas NJ 08251-0099

05063000 - Cape May County Airport
Kurt K Hughes - 6098891703
1108 Lexington Av Bldg #3
Rio Grande NJ 08242

05073000 - Green Creek Vol Fire Co
David A Zeiss - 6098863427
Bayshore Rd - Box 195
Green Creek NJ 08219

05162000 - Dennis Twp Vol Fire Co
Bruce Knoll - 6098615708
721 Petersburg Rd
Dennisville NJ 08270

06011000 - Vineland Fire Dept
Ronald Martinelli - 8566912480
110 N 4th St
Vineland NJ 08360-1508

05003000 - City of Wildwood Fire
Dept
Conrad Johnson Jr - 6095221110
4400 New Jersey Av
Wildwood NJ 08260

05009000 - Strathmere Vol Fire Co
Bruce W Riordan - 6092633235
PO Box 71
Strathmere NJ 08242

05013001 - Stone Harbor Vol Fire
Co #1
Roger Stanford - 6093684091
PO Box 539
Stone Harbor NJ 08247

05019000 - Seaville Vol Fire Rescue
E Robert Spiegel - 6096240122
PO Box 507
Seaville NJ 08230

05058000 - Cape May Point Vol Fire
Co #1
Bob Shepanski - 6098848365
412 Yale Av - Box 291
Cape May Point NJ 08212

05061000 - Town Bank Vol Fire Co
Art Treon - 6098865511
PO Box 796
North Cape May NJ 08204

05071000 - Middle Twp Vol Fire Co
#1
Calvin L Back Sr - 6094658710
10 S Boyd St - Box 21
Cape May Courthouse NJ 08210

05074000 - Goshen Vol Fire Co
Robert H Myers Jr - 6094658714
PO Box 205
Goshen NJ 08218

05163000 - Tuckahoe Vol Fire Co
William R Chatten - 6096282857
2170 Rt 50 - Box 246
Tuckahoe NJ 08250

06020000 - Commercial Twp Fire
Dist #1
John T Hoffman - 8567851100
6858 Brown St - Box 115
Port Norris NJ 08349

06023000 - Maurice River Fire Dist
#4
Chet Watson - 8563274122
PO Box 823
Millville NJ 08332

06130000 - Laurel Lake Vol Fire Co
Tim Clement - 8567852865
PO Box 349
Millville NJ 08332

06160000 - Fairfield Vol Fire Co #1
Steven M Bateman - 8564513676
43 Main St - Box 66
Fairton NJ 08320

06190000 - Newport Fire Dept
Charles Lupton - 8564474603
Hall St
Newport NJ 08345

06230000 - Cumberland Vol Fire
Co#4
Chester L Watson Sr - 6098255230
PO Box 390
Millville NJ 08332

06260000 - Leesburg Vol Fire Co #1
Lawrence R Ashton Jr - 8567850726
PO Box 158
Leesburg NJ 08327

06290000 - Rosenhayn Vol Fire Co
Mark Hassen - 8564511391
PO Box 110
Rosenhayn NJ 08352

06320000 - Seabrook Fire & Rescue
H James Neher - 8564512937
90 Foster Rd
Seabrook NJ 08302

07010000 - Belleville Fire Dept
Robert Caruso - 9734503375
275 Franklin Av
Belleville NJ 07109

07040000 - Cedar Grove Twp Vol
Fire
Josph C Cirasa - 9732394100
525 Rt 23
Cedar Grove NJ 07009

06070000 - Bridgeton Fire Dept
David Schoch - 6094590091
168 Commerce St
Bridgeton NJ 08302

06140000 - Greenwich Fire Dept
Charles Powers - 6094556994
Ye Greate St - Box 261
Greenwich NJ 08323

06170000 - Cedarville Fire Dept
Bruce Conti Sr - 8564474911
PO Box 400
Cedarville NJ 008311

06200000 - Fortescue Fire Co #1
Clifford Higbee - 8564474762
PO Box 48 - 10 Vassar Av
Fortescue NJ 08321

06240000 - Delmont Vol Fire Dept
Dick Langlois - 6097850549
PO Box 115
Delmont NJ 08314

06270000 - Port Elizabeth Fire Dept
Aaron Snyder - 8568253185
PO Box 31
Port Elizabeth NJ 08848

06300000 - Millville Fire Dept
Kurt C Hess - 6093273534
420 Buck St
Millville NJ 08332

06330000 - Upper Deerfield Fire Co
#3
John T O'Neill Jr - 6094513811
PO Box 5037
Seabrook NJ 08302

07020000 - Bloomfield Fire Dept
Josph L Intile - 9736804153
375 Franklin St
Bloomfield NJ 07003

07050000 - East Orange Fire Dept
Leonard E McDaniel - 9732665500
468 Dr Martin Luther King Blvd
East Orange NJ 07018

06120000 - Mauricetown Fire Dept
Frederick A Hundt - 8567852867
PO Box 45
Mauricetown NJ 08329

06150000 - Fairfield Twp Fire Co #2
Wayne A Carter - 8564550555
1137 Bridgeton-Millville Pk
Bridgeton NJ 08302

06180000 - Dividing Creek Fire Co
John E Laws - 6097851717
PO Box 108
Dividing Creek NJ 08315

06210001 - Hopewell-Stow Creek
Fire Co
D Maxwell Dilks - 8564553091
PO Box 194
Shiloh NJ 08353

06250000 - Heislerville Vol Fire Co
Earl Wayne Whildin Sr - 8567851496
164 Main St - Box 71
Heislerville NJ 08324

06280000 - Carmel Vol Fire Co
Larry April - 8564511266
525 Irving Av
Millville NJ 08332

06310000 - Upper Deerfield Fire Co
#1
David Ackley - 8564518425
PO Box 20 - Deerfuekd St
Deerfield NJ 08313

06350000 - Shiloh Boro Fire Dept
Rich Paterson - 6094553973
PO Box 27
Shiloh NJ 08353

07030000 - Caldwell Vol Fire Dept
Gerald Greci - 9732261890
30 Roseland Av
Caldwell NJ 07006

07060000 - Essex Fells Fire Dept
Mark Wells - 9732263400
255 Roseland Av
Essex Fells NJ 07021

07070000 - Fairfield Fire Dept
Justin Lizza Sr - 9738822740
230 Fairfield Rd
Fairfield NJ 07004

07090000 - Irvington Fire Dept
Donald M Huber - 9733996567
Civic Square
Irvington NJ 07111

07100000 - Livingston Fire Dept
Craig D Dufford - 9739922373
62 South Livingston Av
Livingston NJ 07039

07110000 - Maplewood Fire Dept
Joseph Caruso - 9737626500
105 Dunnell Rd
Maplewood NJ 07040

07120000 - Millburn Twp Fire Dept
Kenneth C Sachse - 9735647035
459 Essex St
Millburn NJ 07041

07130000 - Monclair Fire Dept
Jarvis E Hawley - 9737445000
647 Bloomfield Av
Monclair NJ 07042

07140000 - Newark Fire Dept
Edward J Dunham - 9737337424
1010 18th Av
Newark NJ 07106

07150000 - North Caldwell Fire Dept
John A D'Ascensao - 9732260800
Gould Av
North Caldwell NJ 07006

07160000 - Nutley Fire Dept
Thomas A Peters - 9732844937
228 Chestnut St
Nutley NJ 07110

07170000 - City of Orange Twp
Frank Gallagher - 9732664222
419 Centrol Av
Orange NJ 07050

07180000 - Roseland Vol Fire Dept
William K Yates - 9732261126
300 Eagle Rock Av
Roseland NJ 07068

07190000 - South Orange Fire Dept
Jeffrey M Markey - 9737623200
56 Sloan St
South Orange NJ 07079

07200000 - Verona Boro Fire Dept
Larry Burdett - 9738571078
600 Bloomfield Av
Verona NJ 07044

07210000 - West Caldwell Twp Fire
Dept
Joseph J Theobald - 9732262300
30 Clinton Av
West Caldwell NJ 07006

07220000 - West Orange Fire Dept
John Ryan - 9733254175
415 Valley Rd
West Orange NJ 07052

08005000 - Woodbury Fire Dept
Andrew G Bain Jr - 8568450066
29 Delaware St
Woodbury NJ 08096

08006000 - Glassboro Fire Dept #1
Guy V Farrar - 8568815008
27 E High St
Glassboro NJ 08028

08007000 - Westville Fire Dept
Charles D Murtaugh - 8564569432
23 W Olive St
Westville NJ 08093

08013000 - Wenonah Fire Dept
Drew Sole - 8564685151
PO Box 127
Wenonah NJ 08090

08015001 - Woodbury Hgts Boro
Fire Dept
Edward D Hennisey - 8568535626
534 Elm Av
Woodbury Heights NJ 08097

08021000 - Gibbstown Vol Fire Co
James Schmidt - 6094236580
21 S Pearl Av
Gibbstown NJ 08027

08025000 - Woolwich Fire Dept
James Shew - 6094672195
517 Kings Hwy
Swedesboro NJ 08085

08028000 - Highland Chemical
Engine Co
Bruce K Scott - 8565890832
PO Box 20
Pitman NJ 08071

08028003 - Pitman Fire Department
D Clark Pierpont - 8565891112
110 S Broadway
Pitman NJ 08071

08030000 - Harrisonville Fire Co
- 8565890911
Main St
Harrisonville NJ 08093

08036000 - Harrisonville Fire Co
Robert Bowen - 8567691611
PO Box 8 - 30 Main St
Harrisonville NJ 08039

08041000 - Clayton Vol Fire Co #1
Chet Bregler - 8568813242
107 W High St
Clayton NJ 08312

08048000 - Newfield Boro Fire Dept
David R Cella - 8566974851
PO Box 610
Newfield NJ 08344

08061000 - Thorofare Fire Co
Gregory A Hurst - 8562247429
PO Box 63
Thorofare NJ 08086

08062000 - Verga Fire Co
- 8568482926
Crown Point & Hessian Av
Westville NJ 08093

08063000 - Colonial Manor Fire Assn
William Gigliotti - 8562510695
PO Box 753
Woodbury NJ 08096

08066000 - Green Fields Fire Co
- 8568452279
31 Budd Blvd
Woodbury NJ 08096

08068000 - National Park Boro Dept
#1
Dennis W Kappler - 8568454203
523 Hessian Av
National Park NJ 08063

08090001 - Deptford Fire Dept
Michael J Gallagher - 8568483098
1370 Delsea Dr - Box 5535
Deptford NJ 08096

08100000 - Washington Twp Fire
Dept
Everett John Hoffman - 8568634000
PO Box 653
Turnersville NJ 08012

08171000 - Paulsboro Boro Vol Fire
Co #1
Glenn D Roemmich - 8564231500
20 Swedesboro Av
Paulsboro NJ 08066

08172000 - Paulsboro Fire Dept #2
Glenn D Roemmich - 8564231500
1211 N Delaware St
Paulsboro NJ 08066

08181000 - Bridgeport Vol Fire Dept
Michael C Dombrosky - 8564679894
488 Steeman Av - Box 488
Bridgeport NJ 08014

08182000 - Repaupo Vol Fire Co
James Fisler Jr - 8564673664
PO Box 71 R R #8
Swedesboro NJ 08085

08191000 - East Greenwich Fire Dept
Mike Haines - 8564236916
5 W Cohawkin Rd - Box 265
Clarksboro NJ 08020

08192001 - Mt Royal Fire Co
William Bates - 8564236277
5 Mantua Rd
Mt Royal NJ 08061

08221000 - Barnsboro Vol Fire Co
Chuck Roback - 8564688629
PO Box 404
Sewell NJ 08080

08222000 - Mantua Vol Fire Co #1
Danny W Isaacs - 8564686319
Box 272 - 42 Main St
Mantua NJ 08051

08223000 - Centre City Vol Fire Co
John E Kraus III - 8564681333
PO Box 365
Mantua NJ 08051

08224000 - Sewell Mutual Fire Dept
#1
David R Block - 8564684142
PO Box 91
Sewell NJ 08080

08231000 - Harmony Vol Fire Dept
Hal Brown - 8564766266
4 S Main St
Mullica Hill NJ 08062

08232000 - Ewan Vol Fire Co
Jeffrey H Icier - 8564782261
PO Box 1
Ewan NJ 08025

08291000 - Williamstown Fire Dept
Co #1
Oliver Wm Gourley II - 8566294414
555 South Main St
Williamstown NJ 08094

08295000 - Cecil Fire Co #1 Inc
Stephen Murchake - 6096296477
295 Whitehall Rd
Williamstown NJ 08094

08391000 - Auro Vol Fire Co #1
Joe Marchei - 8568813268
611 Aura Rd
Glassboro NJ 08028

08392000 - Ferrell Vol Fire Co #1
- 8564782020
Rt 538
Monroeville NJ 08343

08393000 - Lawns Vol Fire Co #3
Earl Joe Lawrence - 8567710600
220 Stanger Av
Glassboro NJ 08028

08431000 - Franklinville Fire Co
Dana DeCevari - 8566943627
PO Box 74
Franklinville NJ 08322

08432000 - Janvier Vol Fire Co
Harry Fertig - 8566296826
PO Box 574
Franklinville NJ 08322

08433000 - Star Cross Vol Fire Co
Joe Petsch - 6096294915
2370 Stanton Av
Franklinville NJ 08322

08434000 - Malaga Vol Fire Co
John Borelli Jr - 8566949850
PO Box 434
Malaga NJ 08344

08435000 - Forest Grove Vol Fire Co
Ronald Allonardo - 8566974554
Forest Grove Bell Rd
Vineland NJ 08360

09001000 - Bayonne Fire Dept
Thomas Lynch - 2018586008
630 Ave C
Bayonne NJ 07002

09002000 - East Newark Boro Fire
Dept
Frank Evans - 9734812902
34 Sherman Av
East Newark NJ 07029

09004000 - Harrison Fire Dept
Louis Nazzaro - 9734830611
634 Sussex St
Harrison NJ 07029

09005000 - City of Hoboken
John J Cassess - 2014202259
201 Jefferson St
Hoboken NJ 07030

09006000 - Jersey City Fire Dept
Frederick G Eggers - 2015474247
465 Marin Blvd
Jersey City NJ 07302

09007000 - Kearny Fire Dept
Bart Bivans - 2019911402
109 Midland Av
Kearny NJ 07032

09009000 - Secaucus Fire Dept
- 8002068176
1203 Paterson Plan Rd
Secaucus NJ 07094

09010000 - Union City Fire Dept
- 2018644400
1600 New York Av
Union City NJ 07087

09013000 - North Hudson Reg FD
Robert Jones-OPS - 2016013542
6102 Tunnele Av
North Bergen NJ 07047

09900000 - Hudson County Fire Dept
- 2013193620
595 County Av
Secaucus NJ 07094

10110000 - Frenchtown Fire Dept
Gerald Hoffman - 9089964423
Union Fire Co #1 - 2nd St
Frenchtown NJ 08825

10120000 - Glen Gardner Fire Co #1
Paul W Drake - 9085372370
PO Box 251
Glen Gardner NJ 08826

10130000 - Hampton Boro Fire Co
Ed Kiley - 9085376870
PO Box 340
Hampton NJ 08827

10140000 - High Bridge Fire Dept
Brian J Labuta - 9086386383
PO Box 232
High Bridge NJ 08829

10150000 - Holland Twp Vol Fire Co
Phil Bronson - 9089952220
971 Milford Warren Glen Rd
Milford NJ 08848

10160000 - Kingwood Twp Vol Fire
Co
Jack Search - 9089964140
PO Box 99
Baptistown NJ 08803

10170000 - Lambertville Boro Fire
Dept #1
Ronald R Tillett Jr - 6093972676
PO Box 174
Lambertville NJ 08530

10180000 - Lebanon Fire Co
Mark Saharic - 9082362792
88 Main St - Box 145
Lebanon NJ 08833

10190000 - Lebanon Twp Vol Fire
Dept Inc
Gary Milkowski - 9086384550
532 West Hill Rd
Glen Gardner NJ 08826

10210000 - Raritan Twp Fire Co
Chris Miller - 9077826500
303 S Main St
Flemington NJ 08822

10220000 - Whitehouse Station Fire
Dept
Edward Favre - 9085346213
271 Main St - Box 215
Whitehouse Station NJ 08889

10230000 - Stockton Fire Co
Paul Steffanelli - 6093972144
9 Mill St - Box 47
Stockton NJ 08559

10240000 - Oldwick Fire Co
James W Conner Jr - 9085342884
PO Box 83
Oldwick NJ 08856

10250000 - Pattenburg Vol Fire Co
Dan VanFossen - 9087356053
PO Box 5363
Clinton NJ 08802

10260000 - West Amwell Twp Fire
Dept
- 6093973434
PO Box 379
Lambertville NJ 08530

10310000 - East Whitehouse Fire
Dept
- 9085342323
PO Box 151
Whitehouse NJ 08888

10320000 - Readington Vol Fire Co
Thomas Clark - 9085349112
6 Hillcrest Rd
Whitehouse Station NJ 08889

10330000 - Three Bridges Vol Fire
Co
David S Plennert - 9087888116
PO Box 127
Three Bridges NJ 08887

10430000 - Bloomsbury Hose Fire
Dept
Robert Edwards Jr - 9084764546
91 Brunswick Av - Box 411
Bloomsbury NJ 08804

10440000 - Califon Boro Fire Co
Lloyd Tiger - 9088329240
Main St - Box 178
Califon NJ 07830

10450000 - Clinton Twp Fire Dept
Stephen Feinberg - 9087358613
PO Box 5062
Clinton NJ 08809

10460000 - Annandale Hose Co #1
Steven Williams - 9087355214
PO Box 402
Annandale NJ 08801

10470000 - Sergeantsville Vol Fire
Co
Frank Venable - 6093973369
PO Box 87
Sergeantsville NJ 08857

10480000 - Amwell Valley Fire Co
Jeff Luster - 9087821436
PO Box 76
Ringoes NJ 08551

10490000 - Flemington Boro Fire
Dept
David Gilmartin - 6097028642
38 Park Av
Flemington NJ 08822

10910000 - Quakertown Fire Co
Charles Patkochis - 9087355220
PO Box 34
Pittstown NJ 08867

10920000 - Milford Boro Fire Co Inc
Eric Refalvy - 9089954087
PO Box 25
Milford NJ 08848

11012000 - Hamilton Twp Fire Dist #2
Michael Loh - 6095864095
2711 Nottingham Way
Hamilton NJ 08619

11013003 - Hamilton Fire Dist #3
David A Sabo - 6093921710
13 Rennie St
Hamilton NJ 08610

11014000 - Hamilton Twp Fire Dist #4
William J Kiernan Jr - 6095864041
11 Chinnick Av
Hamilton NJ 08619-3401

11015000 - DeCou Fire Co
Louis Crammer - 6098881277
61 Ruskin Av
Hamilton NJ 08610

11016000 - White House Fire Co #1
- 6095857383
19 Locust Av
Hamilton Twp NJ 08610

11017000 - Nottingham Vol Fire Co
Gary W Dempster - 6098909834
200 Mercer St
Hamilton Square NJ 08690-1406

11018008 - Colonial Vol Fire Co
Danny Birkenstock - 6095865454
801 Kuser Rd
Hamilton NJ 08619-4094

11019009 - Hamilton Twp Fire Dist #9
David Wilbur Jr - 6095855710
4201 Crosswicks Hamilton Sq Rd
Hamilton Twp NJ 08619

11021000 - Slackwood Vol Fire Co
Ken Johnson - 6093924018
21 Slack Av
Lawrenceville NJ 08648

11022000 - Lawrence Twp Fire Dept
- 6098830559
1252 Lawrence Rd
Lawrenceville NJ 08648

11023000 - Lawrenceville Fire Co
Robert Brackett - 6098960972
64 Phillips Av
Lawrenceville NJ 08648

11031001 - Prospect Hgts Vol Fire
Co #1
William G Erney Jr - 6095301122
1660 9th St
Ewing NJ 08638

11032000 - Pennington Road Fire Co
Don Youny - 6098829885
1666 Pennington Rd
Ewing NJ 08618

11033000 - West Trenton Vol Fire Co
David Schino - 6098830336
40 W Upper Ferry Rd
W Trenton NJ 08628

11034000 - Trenton-Mercer Airport
FD
James R West - 6098830994
Fire Station 34
West Trenton NJ 08628

11036000 - Trenton Psych Hosp Fire
Dept
- 6093964823
Sullivan Way
Trenton NJ 08618

11040000 - Washington Twp Fire
Dept
Allen Walker - 6092597814
1149 Rte 130
Robbinsville NJ 08691

11040004 - Washington Vol Firemen
Inc
H Allen Walker - 6092597814
1149 Rt 130
Robbinsville NJ 08691

11041001 - Hightstown Eng Co #1
John Archer - 6094481245
140 N Main St
Hightstown NJ 08520

11041004 - Hamilton Fire Co #4
John L Newbon Sr - 6095873895
1805 E State St
Hamilton NJ 08609

11042000 - East Windsor Fire Co #1
Kevin W Brink - 6094485487
51 One Mile Rd
East Windsor NJ 08520

11043000 - West Windsor Twp Vol
FC #1
- 6097993311
153 S Mill Rd
Princeton Junction NJ 08550

11044000 - Princeton Junction Fire
Dept
Dennis J Huber - 6097992112
PO Box 36
Princeton Junction NJ 08550

11046000 - East Windsor Vol Fire
Co #2
William Askenstedt - 6094435130
69 Twin River Dr - Box 714
East Windsor NJ 08520

11051000 - Pennington Boro Fire
Dept
Douglas Pinei - 6097370381
PO Box 141
Pennington NJ 08534

11052000 - Hopewell Boro Fire Dept
Joe Toth II - 6094660060
PO Box 215
Hopewell NJ 08525

11053000 - Hopewell Twp Fire Dist
#1
Jon Holcombe jr - 6097371213
201 Washington Crossing-Pennin
Titusville NJ 08560

11901000 - Naval Air Warfare Ctr FD
- 6095836630
22229 Elmer Rd Bldgd 2360
Patuxent River MD 20670

12003000 - Dunellen Fire Dept
William R Scott - 7329685653
355 North Av
Dunellen NJ 08812

12007000 - Highland Park Boro Fire
Dept
Jeffrey P Morris - 7325724323
220 S 5th Av
Highland Park NJ 08904

12012000 - Milltown Boro Fire Dept
Joseph Carasso - 7328281100
39 Washington Av
Milltown NJ 08850

12016000 - Perth Amboy Fire Dept
Lawrence J Cattano Jr - 7328261112
376 High St
Perth Amboy NJ 08861

12022000 - South Plainfield Vol Fire
Co
Joseph Abbruzzese - 9087564761
123 Maple Av
South Plainfield NJ 07080

12042000 - E Brunswick Twp Ind
Fire Co
Arthur J LeBuis Jr - 7322542418
216 Joseph St
East Brunswick NJ 08816

12109000 - Laurence Harbor Fire Co
Daniel M Garrity - 7325662211
PO Box 1088
Laurence Harbor NJ 08879

12117000 - New Market Fire Co
- 7327520207
801 S Washington Av
Piscataway NJ 08854

11061000 - Princeton Boro Fire Dept
- 6094977622
Witherspoon St
Princeton NJ 08542

12001000 - Carteret Fire Dept
Brian O'Connor - 7325418000
240 Roosevelt Av
Carteret NJ 07008

12005000 - Edison Division of Fire
G Robert Campbell - 7322487567
100 Municipal Blvd
Edison NJ 08817

12008000 - Jamesburg Boro Vol Fire
Co
James Penrock - 7325212451
82 W Railroad Av
Jamesburg NJ 08831

12014000 - New Brunswick Fire Dept
Robert E mcLaughlin - 7327455167
93 Joyce Kilmer Av
New Brunswick NJ 08901

12018000 - Plainsboro Fire Co
Roy Wagner - 6097990492
405 Plainsboro Rd - Box 206
Plainsboro NJ 08536

12023000 - South River Fire Dept
Ronald E Ransius - 7322381961
PO Box 214
South River NJ 08882

12066000 - Princeton Plasma
Physics Lab
James McGuire - 6092432536
PO Box 451
Princeton NJ 08543

12109001 - Laurence Harbor Fire
Dept
Wilhelm Kienhofer - 7322900838
1088 Laurence Harbor Rd
Laurence Harbor NJ 08879

12121000 - Kendall Park Fire Dept
Darby O'Brien - 7322970388
PO Box 41
Kendall Park NJ 08824

11070000 - Trenton Fire Dept
Dennis M Keenan - 6099894038
244 Perry St
Trenton NJ 08618

12002000 - Cranbury Twp Fire Dept
Walter G Rodefelf - 6093950633
2 S Main St
Cranbury NJ 08512

12006000 - Helmetta Boro Fire Dept
Rafael Dolce - 7325211534
62 Main ST
Helmetta NJ 08828

12011000 - Middlesex Fire
Department
Jeff DeMassari - 7329687481
1200 Mountain Av
Middlesex NJ 08846

12015001 - North Brunswick Vol Co
#1
Leo Whalen - 7322206622
600 Cranbury Crossroad
North Brunswick NJ 08902

12019000 - Sayreville Fire Dept
Michael Bailey - 7327274444
167 Main St
Sayreville NJ 08872

12024000 - Spotswood Fire Dept
Robert Drake - 7322513460
PO Box 104
Spotswood NJ 08884

12100000 - Metuchen Fire Dept
Jqmes Graziano - 7327671147
PO Box 42
Metuchen NJ 08840

12113000 - Monroe Twp Fire Dept
Joe Sensale - 7322512122
24 Harrison Av
Spotswood NJ 08884

12125000 - Woodbridge Fire Dept
John Scarpa - 7326347516
418 School St
Woodbridge NJ 07095

12200000 - South Amboy Fire Dept
Larry Parsons - 7327277434
140 N Broadway
South Amboy NJ 08879

12209000 - Cheesequake Vol Fire Co
Shawn Barrett - 7327272511
205 B Hwy 34
Matawan NJ 07747

12213002 - Applegarth Fire Dept #2
Thomas F Byrne - 6094485555
130 Applegarth Rd
Monroe Twp NJ 08831

12217000 - North Stelton Vol Fire Co
Drew Calro - 7329855555
70 Haines Av
Piscataway NJ 08854

12221000 - Monmouth Junction Vol
Fire
Robert Grennen - 7323292001
PO Box 22
Monmouth Junction NJ 08852

12225000 - Port Reading Fire Dept
Pat Renaldi - 7326360894
916 West Av - Box 207
Port Reading NJ 07064

12251000 - Colonia Chemical Hook
& Ladder
John Melasippo - 7323886666
250 Inman Av
Colonia NJ 07067

12258000 - Hopelawn Engine Co #1
Wayne Peterson - 7324420171
127 Loretta St
Hopelawn NJ 08861

12258001 - Hopelawn Engine Co #1
Robert M Wisneski - 7324420171
127 Loretta St
Hopelawn NJ 08861

12304003 - Brookview Vol Fire Co #3
Kevin M Keane - 7322381966
PO Box 344
East Brunswick NJ 08816

12309000 - So Old Bridge Vol Fire
Dept
Thomas J Behnke - 7326794320
PO Box 426
Old Bridge NJ 08857

12313000 - Central Monroe Fire
Dept #3
James J Beebe - 7325213498
359 Schoolhouse Rd
Jamesburg NJ 08831

12317000 - Arbor Hose Co #1
Mike Campbell - 7329686366
1780 W 7th St
Piscataway NJ 08854

12321000 - Kingston Vol Fire Co #1
George T Luck Jr - 6099241181
PO Box 222
Kingston NJ 08528-0222

12325000 - Iselin Hook & Ladder #11
Stephen Mellett - 7322830803
20 Auth Av
Iselin NJ 08830

12409004 - Madison Park Fire Dist
#4
Nicholas Guigno - 7327271143
3011 Cheesequake Rd
Parlin NJ 08859

12425000 - Keasbey Fire Dept
Donald J Trout - 7327384343
Smith St - Box 108
Keasbey NJ 08832

12517000 - Holmes Marshall Vol Fire
Co
Douglas Hough - 7324638088
5300 Deborah Dr
Piscataway NJ 08854

12525005 - Avenel Fire Dist #5
Walter Hanks - 7326362358
PO Box 125
Avenel NJ 07001

12617000 - Possumtown Vol Fire Co
#2
Paul Snyder - 9734696887
85 Stratton St South
Piscataway NJ 08854

12725007 - Fords Fire Co #7
Brian P Henry - 7327387000
667 King George Rd
Fords NJ 08863

12925009 - Iselin Vol Fire Co #1
Glen A Sheaffer - 7322833636
1222 Green St
Iselin NJ 08840

13010000 - Allenhurst Fire Dept
Frank Manfredi - 7325317239
318 Hume St
Allenhurst NJ 07711

13020000 - Hope Fire Co #1
Fred Taylor - 7322597200
Box 82 Rt 526
Allentown NJ 08501

13030000 - Asbury Park Fire Dept
Terrance Weldon - 7327747400
800 Main St
Asbury Park NJ 07712

13035000 - Wayside Fire Co
- 7324934466
900 Greengrove Rd
Wayside NJ 07712

13036000 - Tinton Falls Dist #1
Dave Ciani - 7323808644
PO Box 458
Tinton Falls NJ 07724

13037000 - Pinebrook Fire Co
- 7325441015
70 Hamilton
Eatontown NJ 07724

13038000 - North Side Fire Co
- 7325424422
35 Springdale
Tinton Falls NJ 07724

13038004 - Northside Engine Co #4
Albert G Neis - 7328428009
35 Springdale Av
Tinton Falls NJ 07724

13040000 - Colts Neck Vol Fire Dept
Mike Piotrowski - 7324310040
PO Box 172
Colts Neck NJ 07722

13041000 - West Keansburg Fire Co
- 7327879612
91 8th St
West Keansburg NJ 07734

13042000 - Hazlet Twp Fire Co #1
Anthony Ciavarra - 7322641552
PO Box 5055
Hazlet NJ 07730

13042001 - North Centerville Vol Fire
Co1
Les Pearleman - 7322649404
PO Box 207
Hazlet NJ 07730

13050000 - Atlantic Highlands Fire
Dept
Scott Melsk - 7322912002
10 E Highland Av
Atlantic Highlands NJ 07716

13060000 - Avon By The Sea Fire
Dept
Al Virgilio - 7325024510
301 Main St
Avon NJ 07717

13070000 - Belmar Boro Fire Dept
Alfred Hazel - 7326811176
601 Main St
Belmar NJ 07719

13080000 - Bradley Beach Vol Fire
Dept
Walter Wilson - 7327762402
701 Main St
Bradley Beach NJ 07720

13090000 - Brielle Fire Co #1
Timothy Shaak - 7325285856
PO Box 83
Brielle NJ 08730

13100002 - Deal Fire Co #2
Louis J Celmer - 7325311994
110 Brighton Av
Deal NJ 07743

13110001 - Eatontown Fire Dept
Joe Miller - 7323897650
47 Broad St
Eatontown NJ 07724

13115000 - Freehold Boro Fire Dept
William Itinger - 7324620164
49 W Main St
Freehold NJ 07728

13120001 - Englishtown Fire Dept
Michael Baker - 7324462449
PO Box 1
Englishtown NJ 07726

13130000 - Fair Haven Boro Fire
Dept
John W Felsmann - 7327470991
635 River & Battin Rd
Fair Haven NJ 07704

13140000 - Farmingdale Fire Dept #1
Kevin M Pressey - 7329384785
PO Box 132
Farmingdale NJ 07727

13150000 - Freehold Fire Dept
- 7324620164
49 W Main St
Freehold NJ 07728

13160000 - East Freehold Fire Co
Evan Berman - 7324310774
PO Box 932
Freehold NJ 07728

13161000 - Independent Fire Co #1
Larry Story - 7324613662
PO Box 6903
Freehold NJ 07728

13170000 - Highlands Fire
Department
Kevin O'Donnell - 7328721155
171 Bay Av
Highlands NJ 07732

13181000 - Holmdel Fire Co #1
Ronald Pontrelli - 7329467936
PO Box 3
Holmdel NJ 07733

13191000 - Squankum Fire Co
Daniel Capper - 7329382995
PO Box 668
Farmingdale NJ 07727

13192000 - Howell Twp Co #1
George Gravatt Jr - 7325771781
PO Box 125
Adelphia NJ 07710-0125

13193001 - Southard Fire Dept
Scott Ryan - 7323643399
PO Box 2
Howell NJ 07731

13194002 - Ramtown-Howell Fire Co
#2
Jospeh F Gilsenan - 7324580222
88 Ramtown-Greenville Rd
Howell NJ 07731

13195000 - Freewood Acres Fire Co
Owrwe Jyookwe - 7323636641
17 E 5th St
Howell NJ 07731

13210000 - Keansburg Fire Dept
Andrew Murray - 7327870215
29 Church St
Keansburg NJ 07774

13220000 - Keyport Fire Dept
Anthony Vecchio - 7322640988
18-20 Main St
Keyport NJ 07735

13230000 - Little Silver Fire Dept
Nicholas Hubbard - 7328422400
480 Prospect Av
Little Silver NJ 07739

13250000 - Long Branch Fire Dept
William J Johnson - 7325715660
344 Broadway
Long Branch NJ 07740

13260000 - Manalapan Twp Fire Co
#1
John J Marini - 7327800817
5 Sweetmans In
Manalapan NJ 07726

13260000 - Gordons Corner Fire Co
Ian Guerrino - 7325362881
683 Tennent Rd
Manalapan NJ 07726

13282000 - Robertsville Fire Co #1
Edward Ungrady Jr - 7329722725
Rt 520 - box 94
Morganville NJ 07751

13301000 - Aberdeen Twp
Hose/Chem #1
John Mocchi III - 7325664172
490 Lloyd Rd
Aberdeen NJ 07747

13320000 - Millstone Twp Fire Co
Edward Reed - 6092592560
PO Box 2
Clarksburg NJ 08510

13341000 - Ocean Grove Fire Dept
Ernest Kelshaw - 7327740306
PO Box 36
Ocean Grove NJ 07756

13372000 - Wanamassa Fire Co #1
Paul Matyas - 7329881434
1401 Wickapecko Dr
Ocean NJ 07712

13410000 - Roosevelt Vol Fire Dept
Kim Dexheimer - 7324480539
PO Box 490
Roosevelt NJ 08555

13440000 - Sea Girt Fire Co #1
Albert P Ratz Jr - 7324495752
Blvd & 4th Av - Box 296
Sea Girt NJ 08750

13480000 - Spring Lake Boro Fire
Dept
Bill Newman - 7324490800
Warren & Fifth Avs
Spring Lake NJ 07762

13522000 - Glendola Fire Co #1
Donald M Colarusso - 7326816435
3404 Belmar Blve - Box 1165
Wall NJ 07719

13270000 - Manasquan Fire Dept
John Neilsen - 7322230929
PO Box 567
Manasquan NJ 08736

13283000 - Morganville Vol Fire
Co#1
Robert Tansey - 7325919810
PO Box 85
Morganville NJ 07751

13302001 - Cliffwood Vol #1
Andy J Bores - 7325662074
PO Box 469
Cliffwood NJ 07721

13330000 - Monmouth Beach Fire
Dept
James Blake - 7322292330
24 Beach Rd
Monmouth Beach NJ 07750

13350000 - Neptune City Fire Dept
Jack Rose - 7329889096
PO Box 41
Neptune City NJ 07753

13380000 - Oceanport Fire Dept
Steve Widmaier - 7322228221
222 Monmouth Blvd
Oceanport NJ 07757

13420000 - Rumson Boro Fire Dept
Tom Blumel - 7323450120
140 E River Rd
Rumson NJ 07760

13450001 - Shrewsbury Hose Co #1
David Reed - 7328428515
PO Box 7239
Shrewsbury NJ 07702-0114

13490000 - Independent Fire Co #1
Richard Hurley - 7324495535
700 6th Av
Spring Lake Heights NJ 07732

13523000 - South Wall Fire Co #3
Michael Acampora - 7326818651
PO Box 53
Belmar NJ 07719

13281000 - Marlboro Vol Fire Co
Joseph Chaplinski - 7324629804
PO Box 65
Marlboro NJ 07746

13290000 - Matawan Boro Vol Fire
Dept
Robert L Ziegler - 7325660621
150 Main St
Matawan NJ 07747

13310000 - Middletown Twp Fire
Dept
James Naclerid - 7326152273
900 Leonardville Rd
Leonardo NJ 07737

13340000 - Neptune Twp Fire Dept
Carl Brandimarte - 7329889096
106 W Sylvania Av
Neptune NJ 07753

13371000 - Twp of Ocean Fire Dist
#1
Robert Williams - 7322298059
PO Box 173
Oakhurst NJ 07755

13400000 - Red Bank Fire Dept
James T Welsh III - 7325302748
90 Monmouth St
Red Bank NJ 07701

13430000 - Sea Bright Boro Fire Dept
Aaron Rock - 7325139413
PO Box 3052
Sea Bright NJ 07760

13470000 - South Belmar Fire Co #1
David Keyes - 7326818342
1730 Main St - Box 569
South Belmar NJ 07719

13500000 - Union Beach Boro Fire
Dept
William Gilkinson - 7322647575
650 Poole Av
Union Beach NJ 07735

13523000 - South Wall Fire Rescue
Richard Conte - 7322233178
2605 Atlantic Av
Manasquan NJ 08736

13530000 - West Long Branch Fire Dept
Michael Ciaglia - 7322291756
95 Popular Av
Long Branch NJ 07764

13901000 - Fort Monmouth Fire Dept
- 7325323495
Fire Headquarters - Building 2
Fort Monmouth NJ 07703

14010000 - Town of Boonton Fire Dept
Joseph Whritenour - 9733340114
100 Washington St
Boonton NJ 07005

14020000 - Boonton Twp Fire Dept
Bill Klingener - 9734024012
155 Powerville Rd
Boonton NJ 07005

14030000 - Butler Fire Dept
Daniel Canty - 9738380551
26 Carey Av
Butler NJ 07405

14034000 - Fairmount Fire Co #1
Jim Taylor - 9738763387
PO Box 8
Long Valley NJ 07853

14040000 - Chatham Boro Fire Dept
- 9736359090
1 Firehouse Plz
Chatham NJ 07928

14041001 - Green Village Vol Fire Dept
George S Stiner Jr - 9733777073
529 Green Village Rd
Green Village NJ 07935

14050000 - Chatham Twp Vol Fire Dept
James R Condu - 9736358061
PO Box 895
Chatham NJ 07928

14060000 - Chester Vol Fire Co #1
George Somody - 9088795512
PO Box 506
Chester NJ 07930

14080000 - Denville Vol Fire Dept
Thomas Beatty - 9736270720
2 Indian Rd
Denville NJ 07834

14080000 - Denville Vol Fire Dept
thomas Beatty - 9736270720
2 Indian Rd
Denville NJ 07834

14090000 - Dover Fire Dept
Richard Cole - 9733660828
PO Box 389
Dove NJ 07802

14099000 - Morristown Aircraft Rescue
- 9734551953
813 Airport Rd
Morristown NJ 07960

14100000 - East Hanover Fire Dept
George H Busold - 9738876854
323 Ridgedale Av - Box 34
East Hanover NJ 07936

14110000 - Florham Park Vol Fire Dept
Robret A Young - 9733773508
315 Brooklake Rd
Florham Park NJ 07932

14120000 - Hanover Fire Dist #3
James C Davidson - 9732675659
PO Box 511
Cedar Knolls NJ 07927

14122000 - Whippany Fire Dept
Michael J Krygoski - 9738873906
440 Rte 10
Whippany NJ 07981

14130000 - New Vernon Vol Fire Dept
James Fennimore - 9735381277
Village Rd - Box 143
New Vernon NJ 07976

14140000 - Jefferson Twp Fire Co #2
Chris Hammett - 9736970038
1033 Weldon Rd
Lake Hopatcong NJ 07849

14150000 - Kinnelon Vol Fire Co
Kieth Pavlak - 9734922234
103 Kiel Av
Kinnelon NJ 07405

14160000 - Lincoln Park Boro Fire Dept
Dan Moeller - 9736946100
34 Chapel Hill Rd
Lincoln Park NJ 07035

14170000 - Madison Fire Dept
Doug Atchison - 9735953021
50 Kings Rd
Madison NJ 07940

14180000 - Mendham Boro Fire Dept
William Grier - 9735437039
24 E Main St - Box 356
Mendham NJ 07945

14190000 - Brookside Twp Fire Dept
Robert Pierson - 9735434555
PO Box 520
Brookside NJ 07926

14191000 - Mendham Twp Fire Dept
- 9735434763
Ralston Engine #1 - Box 24
Mendham NJ 07945

14200000 - Mine Hill Fire Department
Kenneth E Thompson - 9733662882
230 Rt 46
Mine Hill NJ 07803

14210000 - Pine Brook Vol Fire Dept
Robert G Schmitt - 9732275504
47 Bloomfield Av
Pine Brook NJ 07058

14211000 - Towaco Vol Fire Dept
Kenneth E Breeman - 9733344639
PO Box 353
Towaco NJ 07082

14212000 - Montville Fire Department
John Osborne - 9733342266
108 Main Rd
Montville NJ 07045

14220000 - Morris Twp Fire Dept
Craig Goss - 9733267435
PO Box 7603
Convent Station NJ 07961

14230000 - Morris Plains Fire Dept
Mike Geary - 9735382224
531 Speedwell Av
Morris Plains NJ 07950

14240000 - Morristown Twp Fire Dept
David Barter - 9732926610
161 Speedwell Av
Morristown NJ 07960

14250001 - Mountain Lakes Fire Dept
Joseph J Schoen Jr - 9733941094
400 Boulevard
Mountain Lakes NJ 07046

14260000 - Mt Arlington Fire Dept
Robert Stone - 9737701924
PO Box 182
Mt Arlington NJ 07856

14270000 - Flanders Fire & Rescue
Fred DeToro Jr - 9735847805
27 Main St
Flander NJ 07836

14271000 - Budd Lake Fire Dept
Gary Wagner - 9736918770
378 Rte 46
Budd Lake NJ 07828

14280000 - Netcong Fire Dept
Elmer Still - 9733470252
40 Maple Av
Netcong NJ 07857

14291000 - Parsippany Troy Hills
George Smith - 9736277453
PO Box 234
Mt Tabor NJ 07873

14292000 - Rainbow Lakes Vol Dist
#2
Matt Degrosky - 9736270184
1 Rainbow Trail
Denville NJ 07834

14293000 - Lake Parsippany Vol Co
#3
Chauncey A Bett Jr - 9738879071
PO Box 92
Parsippany NJ 07054

14294001 - Lake Hiawatha Vol Fire
Dept
Richard Bifano - 9733349560
PO Box 115
Lake Hiawatha NJ 07034

14295005 - Parsippany Troy Hills
Dept #5
David Cavaliere - 9732272242
PO Box 151
Parsippany NJ 07054

14296006 - Parsippany Troy Hill Dist
#6
Joseph P Serrecchia - 9733344540
60 Littleton Rd
Parsippany NJ 07054

14300000 - Millington Vol Fire Co
Gene Meeks - 9086475882
1891 Long Hill Rd
Millington NJ 07946

14301000 - Stirling Vol Fire Co #1
Alex Popolo - 9086472669
321 Somerset St
Stirling NJ 07980

14310001 - Pequannock Twp Fire
Dept #1
Bryan Daley - 9738358878
PO Box 203
Pompton Plains NJ 07444

14310002 - Pequannock Twp Fire
Co #2
Hank Reeves - 2018468000
PO Box 217
Pequannock NJ 07444

14320000 - Randolph Twp Fire Dept
Marty Reynolds - 9739897098
502 Millbrook Av
Randolph NJ 07869

14330000 - Riverdale Fire Dept
Pat Cleary - 9738311584
56 Post Ln
Rivedale NJ 07457

14340000 - Rockaway Boro Fire Dept
Brian Smith - 9736251075
1 E Main St
Rockaway NJ 07866

14350000 - Rockaway Twp Fire Dept
Robert Wotanowski - 9739832865
65 Mt Hope Rd
Rockaway NJ 07866

14360000 - Roxbury Twp Fire Dept
John Hayes - 9734482000
1715 Rt 46
Ledgewood NJ 07852

14370000 - Victory Gardens Fire
Dept
David Stalter - 9733667539
425 Washington Av
Dover NJ 07801

14380000 - Long Valley Vol Fire Co
Peter Griese - 9738763325
Fairview Av - Box 234
Long Valley NJ 07853

14381000 - Schooley's Mountain Fire
Co
Michael DeNardis - 9088520857
231 Schooleys Mountain Rd
Schooleys Mountain NJ 07870

14390000 - Wharton Fire Dept
Christopher J Elio - 9733662467
10 Roberts St
Wharton NJ 07885

14400000 - Greystone Park Fire Dept
Ronald Puco - 9732924100
10 O'Hanlon Dr
Greystone NJ 07950

14900000 - Picatinny Arsenal Fire
Dept
John C Doll - 9737244949
US Army TACOM-ARDEL
Picatinny Arsenal NJ 07906

15006000 - Lakewood Fire Dept
Richard Shearman - 7323645151
316 River Av
Lakewood NJ 08701

15011000 - Barnegat Fire Co #1
Edward L Richard - 6096983980
PO Box 539
Barnegat NJ 08005

15012000 - Pinewood Estates Fire
Dept
James H Quinn - 6096984168
99 Rt 72
Barnegat NJ 08015

15013000 - Barnegat Light Vol Fire
Co
Kenneth B Hollander - 6094941280
W 10th & Central Av - Box 633
Barnegat Light NJ 08006

15015000 - Beach Haven Vol Fire
Co #1
Thomas Medel - 6094926007
PO Box 1032
Beach Haven NJ 08008

15016000 - Beachwood Vol Fire Co
#1
Thomas Miserendino - 7323490014
745 Beachwood Blvd
Beachwood NJ 08722

15017000 - Bayville Vol Fire Co
Dennis Laurrigh - 7322690440
PO Box 69
Bayville NJ 08721

15018000 - Manitou Park Vol Fire Co
James Parker Sr - 7323415950
PO Box 592
Toms River NJ 08753

15020000 - Pinewald Pioneer Vol
Fire Co
George A Dohn - 7322695826
PO Box 195
Bayville NJ 08721-0195

15020001 - Bay Head Fire Co #1
John Griggs - 7328997708
Box 111 - 81 Bridge Av
Bay Head NJ 08742

15021000 - Twp of Brick Fire Dist #1
James Riccio - 7322629210
PO Box 4128
Brick NJ 08723

15022000 - Pioneer Hose Co #1
Brian J Beeg - 7329207297
PO Box 4098
Brick NJ 08723

15023000 - Brick Twp Fire Dist #2
Shawn Viscardi - 7324585066
PO Box 66
Brick NJ 08723

15024000 - Herbertsville Fire Co
Alexander Stalfa - 7324587660
601 Herbertsville Rd
Bricktown NJ 08724

15025000 - Dover Twp Fire Dept
Chief John F Lightbody - 7322405753
33 Washington St
Toms River NJ 08753

15025001 - Toms River Fire Co #1
John M Budenas - 7323410144
PO Box 1035
Toms River NJ 08754

15025002 - Toms River Fire Co #2
John Novak - 7323414441
45 W Water ST
Toms River NJ 08753

15025003 - Ocean Beach Vol Fire
Co #3
James J McIntyre - 7327937601
40 Kittiwake Av
Lavallette NJ 08735

15025004 - East Dover Fire Co #4
Douglas Foley - 7322701122
629 Fischer Blvd
Toms River NJ 08754

15025005 - Silverton Vol Fire Co
Thomas W Morris - 7322551122
15 Kettle Creek Rd
Toms River NJ 08753

15025006 - Pleasant Plains Vol Fire
Dept
John Hafner - 7323490808
PO Box 65
Toms River NJ 08754

15026002 - Toms River Fire Co #2
Alan Wilkins - 7323491345
45 W Water St
Toms River NJ 08753

15030002 - Manchester Vol Fire Co
#1
Joe Howell Jr - 7322403880
545 Commonwelath Blvd
Toms River NJ 08757

15033000 - Whiting Vol Fire Co #1
- 7323504646
120 Lacey Rd - Box 93
Whiting NJ 08759

15034000 - Ridgeway Vol Fire Co #1
Lou Prosperi - 7326575858
Box 142 - 2848 Ridgeway Rd
Lakehurst NJ 08733

15035000 - Mantoloking Fire Co #1
George A Downes - 7328996565
PO Box 213
Mantoloking NJ 08738

15036000 - Waretown Vol Fire Co #1
Larry G Leonard - 6096933600
117 Wells Mill Rd - Box 517
Waretown NJ 08758

15037000 - Ocean Gate Vol Fire Co
Geoffrey W Barger - 7322860359
PO Box 613
Ocean Gate NJ 08740

15038000 - Pine Beach Fire Dept
Jay Sonnefeld - 7323495639
PO Box 386
Pine Beach NJ 08741

15039000 - New Egypt Fire Co #1
Kent Amburgey - 6097582350
PO Box 177
New Egypt NJ 08533

15040000 - Point Pleasant Boro Co
#1
William Stevenson - 7328929187
Box 532 - 1 Memorial Dr
Point Pleasant NJ 08742

15042000 - Ocean Fire Co #1
Thomas Vogel - 7328929426
PO Box 1765
Point Pleasant Beach

15043002 - Pt Pleasant Beach Fire
Co #2
Darrin Smith - 7328921127
PO Box 1350
Point Pleasant Beach NJ 08743

15044000 - Seaside Heights Fire
Dept
Reece Fisher - 7327930445
Box 386 - 116 Sherman Av
Seaside Heights NJ 08751

15045000 - Seaside Park Vol Fire
Dept
Ronald Redy - 7327938000
PO Box 201
Seaside Park NJ 08752

15046000 - Ship Bottom Vol Fire Co
Joe Geary - 6094942561
PO Box 185
Ship Bottom NJ 08008

15047001 - Stafford Twp Fire Co #1
Bob McClung - 6095979157
PO Box 171
Manahawkin NJ 08050

15048000 - Warren Grove Fire Co
Bill Lohr - 6096984454
1475 Rt 539
Warren Grove NJ 08005

15049000 - Surf City Vol Fire Co #1
Peter Hartney - 6094946127
713 Long Beach Blvd
Surf City NJ 08008

15050000 - Tuckerton Fire Co #1 Inc
Thomas C McAndrew - 6092964546
111 North Green St
Tuckerton NJ 08087

15051000 - High Point Vol Fire Co
Stan Madsen - 6094949169
PO Box 3044
Harvey Cedars NJ 08008

15052000 - Eagleswood Fire Co
Paul J Dalton - 7322965151
Box 337 - 219 Railroad Av
West Creek NJ 08092

15053000 - Island Heights Vol Fire
Co
James T Stendardo - 7323294683
PO Box 316
Island Heights NJ 08732

15054000 - Jackson Mills Vol Fire Co
Peter C Weinrich - 7329281128
465 N County Line Rd
Jackson NJ 08527

15055000 - Jackson Twp Vol Fire Co
#3
Jeff Barnard - 7329281666
200 Kierych Memorial Dr
Jackson NJ 08527

15056000 - Cassville Vol Fire Co #1
Wallace W Jamison - 7329289100
785 Miller Av
Jackson NJ 08527

15057000 - Whitesville Vol Fire Co
#1
Glenn Blasi - 7323632595
81 South Hope Chapel Rd
Jackson NJ 08527

15059000 - Bamber Lakes Fire Dept
Roy N Johnsen - 6096935700
2630 W Lacey Rd
Forked River NJ 08731

15060000 - Forked River Fire Dept
Dennis Barcolow - 6096932182
PO Box 1160
Forked River NJ 08731

15061000 - Lanoka Harbor Fire Dept
Kevin M Perrone - 6096934998
PO Box 8
Lanoka Harbor NJ 08734

15062002 - Lakehurst Fire Dept
Robert J Morris - 7326574141
5 Union Av
Lakehurst NJ 08733

15069000 - Lavallette Fire Co #1
Arthur Reece - 7327936900
PO Box 267
Lavallette NJ 08735

15070000 - Parkertown Fire Co
George Garbaravage - 6092962800
830 Railroad Dr
Little Egg Harbor NJ 08087

15071000 - West Tuckerton Fire Co
- 7322964992
505 Rt 9 & Gifford Ln
Tuckerton NJ 08087

15072000 - Little Egg Harbor Fire
Dist #2
Tony Kluver - 6097137200
827B Radio Rd
Little Egg Harbor NJ 08087

16010000 - Bloomingdale Fire Dept
Duane Muldoon - 9738381373
97 Hamburg Tpke
Bloomingdale NJ 07403

16020000 - Clifton Fire Dept
John E Dubravsky - 9734705801
900 Clifton Av
Clifton NJ 07013

16030001 - Haledon Fire Departmer
William Stols - 9735950273
407 Belmont Av
Haledon NJ 07508

16040000 - Hawthorne Fire Dept
Victor Tamburro - 9734235550
445 Lafayette Av
Hawthorne NJ 07506

16050000 - Little Falls Fire Dept
Edmund Pompono - 9732560301
17 Paterson Av
Little Falls NJ 07424-1529

16060000 - North Haledon Vol Fire
Dept
Timothy Lalley - 9734277793
103 Overlook Av
North Haledon NJ 07508

16070000 - Passaic Fire Dept
Louis Imperato - 9733655685
11 Hope Av
Passaic NJ 07055

16080000 - Paterson Fire Dept
James K Pasquariello - 9738816714
850 Madison Av
Paterson NJ 07501

16090000 - Pompton Lakes Fire Dept
Albert Evangelista - 9738350072
1 Passaic Av
Pompton Lakes NJ 07442

16100000 - Prospect Park Fire Dept
George Decker - 9737907979
106 Brown Av
Prospect Park NJ 07508

16110001 - Erskine Lakes Vol Co #1
Tim Bautz - 9739626131
70 Mohawk Trail
Ringwood NJ 07456

16111000 - Ringwood Vol Fire Co #1
Wendel J Pfefferkorn - 9738358642
169 Stonetown Rd
Ringwood NJ 07456

16112000 - Haledon Skyline Lakes
Fire
Thomas Raymond - 9738354797
67 Edgewood Rd
Ringwood NJ 07456

16120 - Totowa Fire Dept
Allen Del Vecchio - 9737903700
537 Totowa Rd
Totowa NJ 07512

16130000 - Wanaque Boro Vol Fire
Dept
John Roberto - 9738355600
579 Ringwood Av
Wanaque NJ 07465

16140000 - Twp of Wayne Fire Dept
Mark Mc Grath - 9736335626
475 Valley Rd
Wayne NJ 07470

16141000 - Community Fire Co #1
- 9736940600
Parish Dr
Wayne NJ 07470

16142000 - Wayne Fire Dept #2
- 9736940101
Rt 23
Wayne NJ 07470

16144000 - Preakness Fire Co #4
- 9736940600
1739 Rutzer Rd
Wayne NJ 07470

16145000 - Packnack Lake Fire Co
#5
- 9736940600
5 Lake Drive West
Wayne NJ 07470

16150000 - West Milford Twp Fire
Dept
Timothy Steable - 9737282840
1480 Union Valley Rd
West Milford NJ 07480

16151000 - Apschawa Fire Co #1
Chris Struble - 9736972099
1480 Union Valley Rd
West Milford NJ 07480

16152002 - Community Fire Co #2
Michael Cadou -
1480 Union Valley Rd
West Milford NJ 07480

16153000 - Greenwood Forest Fire
Co #3
Edward Steines - 9737287322
1480 Union Valley Rd
West Milford NJ 07481

16154000 - Macopin Fire Co #4
- 9736976625
PO Box 647
West Milford NJ 07480

16155005 - Upper Greenwood Lake
Co 5
Stan Fry - 9738537200
Warwick Tpk
Hewitt NJ 07421

16156006 - West Milford Fire Co #6
Edwain Aldrich - 9737282840
PO Box 341
West Milford NJ 07480

17010000 - Alloway Twp Fire Co
Robert W Bowling - 8569356651
17 E Main St - Box 644
Alloway NJ 08001

17020000 - Elmer Fire Dept
Thomas D Crim - 8563582759
PO Box 459
Elmer NJ 08314

17030000 - Elsinboro Fire Co
Walter J Cooper - 8562930052
35 Delaware Av
Salem NJ 08079

17040000 - Lower Alloways Creek
Fire/Res
Robert M Hill - 6099351844
PO Box 197
Hancocks Bridge NJ 08038

17051000 - Pennsville Fire/Rescue
#1
Kevin Couperthwait - 6096787004
91 First St
Pennsville NJ 08070

17052000 - Deepwater Fire Co
Jeffrey S Hoffman - 8566786053
PO Box 309
Deepwater NJ 08023

17060000 - Mannington Fire Co #1
Walter J Cooper - 8569350052
175 Rte 45
Salem NJ 08079

17071000 - Logan Vol Fire Co
- 8562992280
39 S Railroad Av
Pedricktown NJ 08067

17072000 - Auburn Vol Fire Co
Steven G Powell - 8562993385
76 Main St
Auburn NJ 08085

17080000 - Penns Grove Liberty #1
Joseph A Grasso - 6092995587
PO Box 183
Penns Grove NJ 08069

17101000 - Centerton Fire Co
William Rumpff - 8563582411
64 Dealtown Rd
Pittsgrove NJ 08318

17101001 - Willow Grove Vol Fire Co
Louis Hutchinsen - 8566962270
879 Willow Grove Rd
Pittsgrove NJ 08318

17102000 - Norma-Alliance Fire &
Rescue
Louis J Vasile - 8566929576
PO Box 201 - 160 Almond Rd
Norma NJ 08347

17110000 - Quinton Fire Co
Patrick K Foster - 6099356637
PO Box 8
Quinton NJ 08072

17121000 - Salem City Fire Dept
Dwayne Donelson - 8569355489
17 New Market St
Salem NJ 08079

17130000 - Carneys Point Fire &
Rescue
Ed Micallef - 8562992275
258 D St
Carneys Point NJ 08069

17141000 - Daretown Fire Co
Mike Blum - 8563581614
25 Woodstown Daretown Rd
Elmer NJ 08318

17150000 - Reliance Fire Co
Harry Vanaman - 6097692029
25 Broad St
Woodstown NJ 08098

18010000 - Union Hook & Ladder Co
- 9082341179
Dumond Rd - Box 431
Far Hills NJ 07931

18011000 - Pottersville Vol Fire Co
Lewis Moore Jr - 9084392544
PO Box 98
Pottersville NJ 07979

18020000 - Basking Ridge Fire #1
Robert Houljhan - 9087663147
PO Box 326
Basking Ridge NJ 07920

18021000 - Liberty Corner Fire Co
Kenneth M White - 9086473530
95 Church St
Liberty Corner NJ 07938

18030000 - Bernardsville Fire Co #1
Randy Steinkopf - 9087666625
PO Box 745
Bernardsville NJ 07934

18040000 - Bound Brook Fire Dept
Richard S colombaroni - 7326893732
230 Hamilton St
Bound Brook NJ 08805

18050000 - Neshanic Vol Fire Co
Darcy C Marshall - 9083694800
Maple Av
Neshanic Station NJ 08853

18051000 - North Branch Vol Fire Co
John Corbo - 9087252305
1169 Rte 28
North Branch NJ 08876

18052000 - Country Hill Fire Co
Herb Randolph - 9083694161
PO Box 751
Somerville NJ 08876

18060000 - Bradley Gardens Vol
Fire Co
Ronald Hazen - 9087221250
24 Old York Rd
Bridgewater NJ 08807

18063000 - Finderne Fire Dept
- 7328050350
672 E Main ST
Bridgewater NJ 08807

18064000 - Green Knoll Vol Fire Co
- 9087074128
Foothill Rd
Bridgewater NJ 08807

18065000 - Martinsville Vol Fire Dept
William Eaton - 7384691955
Washington Rd - Box 202
Martinsville NJ 08836

18080000 - Millestone Valley Fire Co
Steve Fromosky - 7328733800
PO Box 2221
East Millstone NJ 08875

18081000 - Somerset Vol
Fire/Rescue #1
Charles A Maria - 7328462266
14 Hollywood Av
Somerset NJ 08873

18082000 - Elizabeth Av Vol Fire Co
Fred Zaetz - 7322565272
2 Wiley Dr
Somerset NJ 08873

18083000 - East Franklin Twp Fire
Co
Peter F Maroon - 7322470820
121 Pine Grove Av
Somerset NJ 08875

18084000 - Community Vol Fire Co
#1
Richard Ries - 7322464822
Box 117 - 710 Hamilton St
Somerset NJ 08875

18085000 - Franklin Park Fire Co #2
Andrew Berardo - 7322973138
2 Claremont Rd - Box 74
Franklin Park NJ 08823

18087000 - Little Rocky Hill Fire Dept
Michael Hutchinson - 7322970478
4348 Rte 27
Princeton NJ 08540

18088000 - Middlebush Vol Fire Dept
J Gary Howarth - 7328732399
PO Box 6687
Somerset NJ 08875

18089000 - Griggstown Vol Fire Co
- 9083593802
Canal Rd
Princeton NJ 08540

18102000 - Hillsborough Fire Co #2
Nicholas E Speciale - 9083595530
PO Box 6147
Hillsborough Twp NJ 08844

18130000 - Montgomery Fire Co #1
Richard Karsay - 9083596511
PO Box 199
Belle Mead NJ 08502

18150000 - Peapack Gladstone Fire
Co
Douglas Fagan - 9082341643
6 Dewey Av - Box 615
Gladstone NJ 07934

18180000 - Somerville Fire Dept
Patrick Weston - 9087259437
25 West End Av - Box 399
Somerville NJ 08876

18210000 - Watchung Chem Eng Co
Charles Gunther - 9087566288
15 Mountain Blvd
Watchung NJ 07060

19031000 - Frankford Twp Fire Dept
Charles Konecke - 9739485891
PO Box 419
Augusta NJ 07826

19060000 - Franklin Fire Dept
Dennis Hamington - 9738276650
137 Buckwheat Rd
Franklin NJ 07416

19100000 - Hampton Twp Vol Fire
Dept
John Klein - 9733835570
1 Municipal Complex Rd
Newton NJ 07860

19140000 - Montague Vol Fire Dept
David Coss - 9732938375
PO Box 1726
Montague NJ 07827

18090000 - Green Brook Vol Fire
Dept
Geno Panella - 7329680121
115 Green Brook Rd
Green Brook NJ 08812

18103003 - Hillsborough Vol Fire Co
#3
Bob Brock - 9083593333
324 Woods Rd
Belle Mead NJ 08844

18131000 - Montgomery Fire Co #2
Constance E Kelly - 6094663926
Rt 267
Blawenburg NJ 08504

18160000 - Raritan Fire Dept
Donald Di Palma Jr - 9087078540
611 N Thompson Av
Raritan NJ 08869

18190000 - South Bound Brook Co
#1
Michael Kelly - 7326279577
PO Box 464
South Bound Brook NJ 08880

18901000 - V A Medical Center
Gary Greves - 9086470180
151 Knellcroft Rd
Lyons NJ 07939

19032000 - Branchville Hose Co #1
Allen M Wood - 9739483259
Railroad Av - Box 2425
Branchville NJ 07826

19080000 - Green Twp Vol Fire Dept
Dennis Walker - 9733834334
243 Kennedy Rd
Greendell NJ 07839

19110000 - Hardyston Twp Fire Dept
Ed Stuckey - 9736976114
PO Box 333
Stockholm NJ 07460

19151000 - Newton Fire Dept
Roger White - 9733830300
PO Box 182
Newton NJ 07860

18101000 - Hillsborough Vol Fire Co
#1
Matt De Cicco - 9083696357
PO Box 111
Flagtown NJ 08844

18110000 - Manville Fire Dept
Vincent Albanese - 9087251900
325 N Main St
Manville NJ 08835

18140000 - North Plainfield Fire Dept
Peter Sylvester - 9087692935
8 Lincoln Pl
North Plainfield NJ 07060

18170000 - Rocky Hill Hook &
Ladder #1
Alan Querec - 9089242852
PO Box 327
Rocky Hill NJ 08553

18200000 - Warren Twp Vol Fire
Dept
Alfred Shjarback - 9087538000
46 Mountain Blvd
Warren Twp NJ 07059

19010000 - Andover Borough Fire Co
Harry Greenhalgh - 9737865120
PO Box 625
Andover NJ 07821

19033000 - Sandyston Twp Fire Dept
Alan Delea - 9739483520
PO Box 195
Layton NJ 07857-0195

19090000 - Hamburg Boro Fire Dept
Ronald Garrett - 9738275577
PO Box 262
Hamburg NJ 07419

19130000 - Lafayette Twp Fire Dept
John Blackford - 9733830661
PO Box 164
Lafayette NJ 07848

19152000 - Stillwater Twp Fire Dept
James M Pavone - 9733831329
PO Box 111
Stillwater NJ 07875

19153000 - Swartwood Vol Fire
Dept
Brian Hendershot - 9733835450
PO Box 18
Swartwood NJ 07877

19154000 - Fredon Vol Fire Co
- 9738939424
443 A Rte 94
Newton NJ 07860

19155000 - Andover Twp Fire Dept
Daniel Crater - 9733834431
625 Limecrest Rd
Newton NJ 07860

19160000 - Ogdensburg Fire Dept
Minard Houghtaling - 9733273860
1 Firehouse Ln
Ogdensburg NJ 07439

19180000 - Sparta Twp Fire Dept
William Blessing - 9737295080
Box 121
Sparta NJ 07871

19191000 - Byram Twp Fire Dept
Greg Matthews - 9733472662
PO Box 361
Andover NJ 07821

19192000 - Stanhope Boro Fire Dept
Jeffrey J Jozowski - 9733475017
28 Main St - Box 476
Stanhope NJ 07874

19193000 - Hopatcong Fire Dept
William Sutphon Jr - 9737701200
111 River Styx Rd
Hopatcong NJ 07843

19211000 - Pochuck Valley Fire Dept
James P Sheridan - 9738756233
13 Lake Walkkill Rd
Sussex NJ 07461

19211000 - Pochuck Valley Fire Dept
James P Sheridan - 9738756233
13 Lake Walkkill Rd
Sussex NJ 07461

19212000 - Wantage Fire Dept
William Gebhard - 9738759033
888 Rt 23 North
Wantage NJ 07461

19214000 - Sussex Fire Dept
Floyd Southard Jr - 9738756848
25 Loomis Av
Sussex NJ 07461

19222000 - Highland Lakes Fire Dept
Brian Lynch - 9737649385
PO Box 151
Highland Lakes NJ 07422

19223000 - Mc Afee Vol Fire Co
Bill George - 9738274477
Jct Rts 94 & 517
Mc Afee NJ 07248

19230000 - Walpack Twp Vol Fire
Dept
Jock Maurus - 9088419584
Main St
Walpack NJ 07881

20001000 - Berkeley Hgts Fire Dept
Chuck McLuskey - 9084640800
411 Hamilton Av
Berkeley Heights NJ 07922

20002000 - Clark Vol Fire Dept
Richard Brattole - 7323811150
430 Westfield Av
Clark NJ 07066

20003000 - Cranford Fire Dept
Leonard R Dolan III - 9082766203
7 Springfield Av
Cranford NJ 07016

20004001 - Elizabeth Fire Dept
Louis E Kelley - 9088202806
316 Irvington Av
Elizabeth NJ 07208

20005000 - Fanwood Fire Dept
John Piccola - 9073727020
75 N Martine Av
Fanwood NJ 07023

20006001 - Garwood Fire Dept
Michael McCarthy - 9087898877
415 South Av
Garwood NJ 07027

20007000 - Hillside Fire Dept
Frank W Caswell Sr - 9083521700
395 Hollywood Av
Hillside NJ 07205

20008000 - Kenilworth Fire Dept
Lou Giordino - 9082768935
491 Washington Av
Kenilworth NJ 07033

20009000 - Linden Fire Dept
William J Konecny Jr - 9082983800
1205 E Elizabeth Av
Linden NJ 07036

20010000 - Mountainside Fire Dept
Marc Franciosa - 9082331047
210 New Providence Rd
Mountainside NJ 07092

20011000 - New Providence Fire
Dept
Ralph Parlapinaio - 9084648920
175 Floral Av
New Providence NJ 07974

20012000 - Plainfield Fire Division
John E Rieck - 9087533430
315 Central Av
Plainfield NJ 07060

20013000 - Rahway Fire Dept
Edward Fritz - 7328272131
1300 Main St
Rahway NJ 07065

20014000 - Roselle Fire Dept
Robert F Hill - 9082458600
725 Chestnut St
Roselle NJ 07203

20015000 - Roselle Park Fire Dept
Robert Knapp - 9082452300
110 E Westfield Av
Roselle Park NJ 07662

20016000 - Scotch Plains Fire Dept
Jonathan P Ellis - 9083226866
430 Senger Pl
Scotch Plains NJ 07076

20017000 - Springfield Fire Dept
William Gras - 9739122265
100 Mountain Av
Springfield NJ 07081

20018000 - Summit Fire Dept
Christopher J Cotter - 9082771033
396 Broad St
Summit NJ 07901

20019000 - Twp of Union Fire Dept
Frederic A Fretz - 9078515420
1 Bond Dr
Union NJ 07083

20020000 - Westfield Fire Dept
John Castellano - 9087894130
405 North Ave W
Westfield NJ 07090

20021000 - Winfield Fire Dept
John Paschal - 9084862880
12 Gulfstream Av
Winfield NJ 07036

21010000 - Allamuchy Twp Fire Dept
Richard Bird - 9088501850
PO Box 69
Allamuchy NJ 07820

21020000 - Alpha Vol Fire Co
Ed Hanics - 9084542878
1109 Lee Av
Alpha NJ 08865

21031000 - Mt Lake Fire Co
Mike Inscho - 9084754400
99 Tamarack Rd
Belvidere NJ 07823

21032000 - Good Will Fire Co #1
Travis Coopersmith - 9084754040
689 Water St
Belvidere NJ 07823

21040000 - Blairstown Hose Co #1
Carl Stoddart - 9083628527
PO Box 239
Blairstown NJ 07825

21051000 - Franklin Twp Fire Co
Thomas Janecko - 9088591702
PO Box 43
Broadway NJ 08808

21058000 - Asbury Fire Co #1
Otis J Cole Jr - 9089374177
410 Old Main St - Box 87
Asbury NJ 08802-0087

21072000 - Stewartsville Vol Fire Co
Joseph Mecsey III - 9084548654
321 A Greenwich St
Stewartsville NJ 08886

21081000 - Hackettstown Fire Dept
Charles Scott Tillou - 9088523130
110 Moore St
Hackettstown NJ 07840

21082000 - Tri County Fire Co
John Hague - 9088135105
1720 Rt 57
Hackettstown NJ 07840

21110000 - Hope Twp Vol Fire Dept
Kevin Trumppore - 9084595803
PO Box 170
Hope NJ 07844

21120000 - Independence Vol Fire Co
Jim Smith - 9086374300
PO box 103
Great Meadows NJ 07838

21130000 - Knowlton Twp
Fire/Rescue #1
Dave Sprague - 9094754268
PO Box 231
Delaware NJ 07833

21150000 - Lopatcong Fire Dept
Kevin C Maguire - 9088593355
232 S Third St
Phillipsburg NJ 08865

21160000 - Mansfield Twp Fire Co
Michael Clancy - 9086895285
PO Box 52
Port Murry NJ 07865

21171000 - Mt Bethel Vol Fire Co
- 9086376233
342 Ames Chapel Rd
Oxford NJ 07865

21172000 - Oxford Vol Fire Dept
Dale A Bulmer - 9084532550
14 Wall St - Box 417
Oxford NJ 07863

21191000 - Phillipsburg Fire Dept
Richard A Hay - 9084545500
675 Corliss Av
Phillipsburg NJ 08865

21194000 - Harmony Twp Vol Fire
Dept
Wesley D Garrison - 9088593634
440 Brainards Rd
Phillipsburg NJ 08865

21200000 - Huntington Vol Fire Co
#1
James A Trincheria - 9084546121
1 Maple Av
Phillipsburg NJ 08865

21210000 - Washington Boro Fire
Dept
Charles Alleger - 9086899798
100 Belvidere Av
Washington NJ 07882

21221000 - Washington Twp Vol Fire
Dept
Mark Merrill - 9084534930
PO Box 307
Washington NJ 07882

21222000 - Butler Park Vol Fire Co
George Efinger - 9086893919
17 River Rd
Washington NJ 07882

RHODE ISLAND

P/N/C	Title	Last Name	First Name	Address 1	Address 2	City	State
Combo	Chief	Comire	Marcel	Albion Fire Dist.	38 School Street, PO Box 579	Albion	RI
Vol	Chief	Mruk	Stanley J.	Anthony Fire Dist.	571 Washington Street	Coventry	RI
Combo	Chief	Williams	Michael	Ashaway Fire Dist.	PO Box 44	Ashaway	RI
Vol	Chief	Henson	Roger R.	Barrington Fire Dept.	3 Rumetick Road 100 Federal Rd.	Barrington	RI
Combo	Chief	Littlefield	Kirk	New Shoreham Fire Dept.	PO Box 220	Block Island	RI
Combo	Chief	Sullivan	Robert	Bradford Fire District	PO Box 206	Bradford	RI
Combo	Chief	Sylvania	David	Bristol Fire Dept.	PO Box 775	Bristol	RI
Combo	Chief	Selzer	Robert W.	Central Coventry Fire Dist.	2847 Flat River Road	Coventry	RI
Paid	Chief	Coutu	Rane R.	Central Falls Fire Dept.	150 Illinois Street	Central Falls	RI
Vol	Chief	Burdick	Thomas	Charlestown Fire Dist.	PO Box 327	Charlestown	RI
Vol	Chief	Coon	Gene	Charlestown/Richmond Fire Dept.	PO Box 271	Shannock	RI
Vol	Chief	Dauphinais	Robert	Chepachet Fire Dist.	1170 Putnam Pike	Chepachet	RI
Vol	Chief	Blaetmore	Ray	Chopmist Hill Fire Dept.	1362 Chopmist Hill Road	North Scituate	RI
Paid	Chief	Warren	Robert	Cranston Fire Dept.	301 Pontiac Avenue	Cranston	RI
Vol	Chief	Rathbone	Donald H.	Cross Mills Fire Dept.	PO Box 398	Charlestown	RI
Combo	Chief	Garon	Robert J.	Cumberland Fire Dist.	1025 Mendon Road	Cumberland	RI
Combo	Chief	Swiech	Kenneth	Cumberland Hill Fire Dist.	3502 Mendon Road	Cumberland	RI
Vol	Chief	Murphy	Lance	Dunns Corner Fire Dept.	1 Langworthy Road	Westerly	RI
Combo	Chief	Brennan	Sean O.	East Greenwich Fire Dist.	284 Main Street	East Greenwich	RI
Paid	Chief	Ressette	Gerald A.	East Providence Fire Dept.	913 Broadway	East Providence	RI
Vol	Chief	Franklin	Robert C.	Exeter Fire Dept. 2	365 Nooseneck Hill Road	Exeter	RI
Vol	Chief	Taylor	Donald H.	Exeter #1 Vol. Fire Dept.	305 Ten Rod Road	Exeter	RI
Vol	Chief	Shippie	Harold	Foster Center Vol. Fire Co.	PO Box 63	Foster	RI
Combo	Chief	Pearson	Stuart	Harmony Fire Dist.	PO Box 360 - 194 Putnam Pike	Harmony	RI
Combo	Chief	Fontaine	William	Harris Fire Dept.	701 Main Street	Coventry	RI
Vol	Chief	St. Pierre	Mark	Harrisville Hose Co. #1	201 School Street	Harrisville	RI
Vol	Chief	Parkinson	Richard	Hianland Fire Co. Sta. 1	210 Plain Road	West Greenwich	RI
Vol	Chief	Campbell	Donald S.	Hope Jackson Fire Dept.	117 Main Street, PO Box 201	Hope	RI
Combo	Chief	Stanley	Frederick	Hope Valley/Wyoming Fire Dist.	PO Box 25, 996 Main Street	Hope Valley	RI
Combo	Chief	Brown	Frank M.	Hopkins Hill Fire Dept.	1 Bestwick Trail	Coventry	RI
Vol	Chief	Christman	Arthur	Jamesstown Fire Dept.	50 Narragansett Avenue	Jamesstown	RI
Vol	Chief	Cipriano	Victor H.	Johnston Fire Dept.	1520 Atwood Avenue	Johnston	RI
Vol	Chief	Barrington	Nathan	Kingston Fire District	PO Box 284, 35 Bills Road	Kingston	RI
Vol	Chief	Henry	Mark	Lake Mishnock Vol. Fire Co.	166 Michnock Road	West Greenwich	RI
Vol	Chief	Sylvester	Frank M.	Limerock Fire Dist.	1085 Great Road	Lincoln	RI
Combo	Chief	Faria	John	Little Compton Fire Dept.	60 Simmons Road	Little Compton	RI

(401) 253 6902
 401-361-6511
 401-417-7205
 401-461-4161

Combo	Chief	Griffin	Timothy	Lonsdale Fire Dist.	PO Box 263, 224 Front Street	Lincoln	Ri
Vol	Chief	Akers	James G.	Manville Fire Dist.	112 Old Main Street	Manville	Ri
Vol	Chief	Carlisle	David J.	Middletown Fire Dept.	239 Wyatt Road	Middletown	Ri
Vol	Chief	Stedman	Harold W.	Misquamicut Fire Dept.	65 Crandall Avenue	Westerly	Ri
Vol	Chief	Dexter	Harold	Moosup Valley Fire Co.	15 A Barbs Hill Road	Foster	Ri
Paid	Chief	Miller	Leo	Narragansett Fire/Rescue	40 Caswell Street	Narragansett	Ri
Paid	Chief	Melville	Robert P.	Nasonville Fire Dept.	2577 Victory Highway	Harrisville	Ri
Combo	Chief	Marx	Gregory K.	Newport Fire Dept.	21 West Marlborough St.	Newport	Ri
Paid	Chief	Gendreau	Rene	North Cumberland Fire Dist.	50 Arnold Mills Road	Cumberland	Ri
Paid	Chief	Walsh	Roger R.	North Kingstown Fire Dept.	8150 Post Road	North Kingstown	Ri
Paid	Chief	Catanzaro	Steven J.	North Providence Fire Dept.	1967 Mineral Spring Avenue	North Providence	Ri
Combo	Chief	Sprague	Todd F.	North Scituate Fire Dept.	PO Box 357	North Scituate	Ri
Vol	Chief	Beausoleil	E. Craig	North Smithfield Fire Dept.	675 St. Paul Street	North Smithfield	Ri
Vol	Chief	Bertholic	Edward J.	Oakland/Mapleville Fire Dept.	PO Box 187	Mapleville	Ri
Paid	Chief	Shaw	David	Pascoag Fire Dept.	105 Pascoag Main Street	Pascoag	Ri
Paid	Chief	Condon	James	Pawtucket Fire Dept.	155 Roosevelt Avenue	Pawtucket	Ri
Vol	Chief	Warner	Robert F.	Portsmouth Fire Dept.	2300 East Main Street	Portsmouth	Ri
Combo	Chief	Marcello	Thomas	Pottersville Fire Dept.	953 Tunk Hill Road	Foster	Ri
Paid	Chief	Jilison	Joel	Primrose Fire Dept.	1470 Providence Pike	North Smithfield	Ri
Vol	Chief	Rattigan	James	Providence Fire Dept.	209 Fountain Street	Providence	Ri
Paid	Chief	Gempp	Thomas	Prudence Island Vol. Fire Dept.	PO Box 305	Prudence Island	Ri
Vol	Chief	Nunes	Stephen J.	Quinnville Fire Dist.	PO Box 186, 861 Lower River Road	Lincoln	Ri
Paid	Chief	Segec	Walter	RANAG/Quonset State Airport	11 Airport Drive	North Kingstown	Ri
Combo	Chief	Barber	Scott	Richmond-Carolina Fire Dist.	PO Box 91	Carolina	Ri
Combo	Chief	Almond	David	Saylesville/Fairlawn Fire Dist.	PO Box 1	Lincoln	Ri
Combo	Chief	Venables	Kenneth	Smithfield Fire Dept.	607 Putnam Pike	Smithfield	Ri
Combo	Chief	Brayton	Gordon	South Foster Fire Co.	5 A Round hill Road	Foster	Ri
Combo	Chief	Healy	Paul	TF Green Airport Fire Dept.	271 Cedar Swamp Road	Warwick	Ri
Combo	Chief	Bennett	Robert	Tiogua Fire Dept.	240 Arnold Road	Coventry	Ri
Combo	Chief	Bettencourt	Bruce	Tiverton Fire/Rescue	85 Main Road	Tiverton	Ri
Vol	Chief	Boisvert	Andre	Union Fire District	589A Kingstwn Rd - PO Box 327	Wakefield	Ri
Paid	Chief	McGovern	Francis L.	URI - Dept. of Safety & Risk Mgmt.	12 West Alumni Avenue	Kingston	Ri
Combo	Chief	Cimino	Ernest P.	Valley Falls Fire Dist.	555 High Street	Cumberland	Ri
Vol	Chief	Bishop	Robert A.	Wallum Lake Fire Dept.	PO Box 354	Pascoag	Ri
Paid	Chief	Gallinelli	Alexander	Warren Fire Dept.	514 Main Street	Warren	Ri
Combo	Chief	Rowan	Thomas	Warwick Fire Dept.	140 Veterans Memorial Drive	Warwick	Ri
Combo	Chief	Hoxsie	Brian	Washington Fire/Rescue	2 Station Street	Coventry	Ri

Vol	Chief	Gaccione	Vincent G.	Watch Hill Fire Dept.	222 Watch Hill Road	Watch Hill	RI
	Chief	Goodnough	Larry	West Gloucester Fire Dist.	2410 Putnam Pike	Chepachet	RI
Vcl	Chief	Hoxsie	Edwin	West Greenwich Vol. Fire Co. #1	830 Nooseneck Hill Road	West Greenwich	RI
	Chief	Rita	Richard J.	West Warwick Fire Dept.	1176 Main Street	West Warwick	RI
Vol	Chief	Misto	Joseph A.	Westerly Fire Dept.	7 Union Street	Westerly	RI
	Chief	Haynes	Thomas	Western Coventry Fire Dept.	PO Box 5121	Greene	RI
Vol	Chief	Renaud	Henry A.	Woonsocket Fire Dept.	5 Cumberland Hill Road	Woonsocket	RI
Paid	Chief	College	Bryant	Dept. of Public Safety	1150 Douglas Pike	Smithfield	RI
	Chief	Rebello	Milton	Naval Station Newport	1931 Peary Street, Fire Hdq.	Newport	RI

VERMONT

T H E S T A T E O F V E R M O N T
 D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
 D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
 ALPHABETICALLY BY DEPARTMENT
 FOR ALL AREAS

 NAME & ADDRESS

NAME & ADDRESS

DUBOIS, BERNARD
 ADDISON FIRE DEPT
 RD 1 BOX 452-1
 VERGENNES, VT 05491
 759-2163

STRATTON MTN FIRE DEPT
 5 BRAZERS WAY
 S LONDONDERRY, VT 05155
 874-4040

BAKER, RICHARD
 ALBURG VOL FIRE DEPT
 P O BOX 191
 ALBURG, VT 05440
 796-3468

CHAFFEE, MICHAEL
 ALBANY VOL FIRE DEPT
 P O BOX 164
 ALBANY, VT 05820
 755-6157

TAYLOR, FRANCIS
 ATHENS FIRE DEPT
 RD 3
 CHESTER, VT 05143
 369-2515

SPAULDING, D.
 ASCUTNEY FIRE DEPT
 P.O. BOX 91
 ASCUTNEY, VT 05030
 674-6328

MILLS, SCOTT
 BARNARD VOL FIRE DEPT
 BARNARD, VT 05031
 234-5263

COSGROVE, TODD
 BAKERSFIELD FIRE DEPT
 BOX 12 MAIN ST
 BAKERSFIELD, VT 05441
 827-6111

BRENT, DOUGLAS
 BARRE CITY FIRE DEPT
 8 SO MAIN ST
 BARRE CITY, VT 05641
 476-0254

MORSE, RON
 BARNET FIRE DEPT
 160 CHURCH ST
 BARNET, VT 05821
 633-4000

DAMON, HOWARD
 BARTON FIRE DEPT
 HIGHLAND AVE
 BARTON, VT 05822
 525-3474

WINTERS, JON
 BARRE TOWN FIRE DEPT
 P.O. BOX 24
 E BARRE, VT 05649
 479-9331

JEFFREY, DENNIS
 BELLOWS FALLS FIRE DEPT
 RD 1 BOX 181
 BELLOWS FALLS, VT 05101
 463-3514

YOUNG, STEVE
 BEECHER FALLS FIRE DEPT
 P.O. BOX 326
 BEECHER FALLS, VT 05902
 266-8812

T H E S T A T E O F V E R M O N T
D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
ALPHABETICALLY BY DEPARTMENT
FOR ALL AREAS

NAME & ADDRESS

NAME & ADDRESS

WESTON, WILLIAM
BELLOWS FALLS FIRE DEPT
170 ROCKINGHAM ST
BELLOWS FALLS, VT 05101
463-4343

WESTIN WILLIAM, WILLIAM FALLS
BELLOWS FALLS FIRE DEPT
170 ROCKINGHAM STREET
BELLOWS FALLS, VT 05101
463-4343

GAUTHIER, JEFF
BENNINGTON FIRE DEPT
P O BOX 469
BENNINGTON, VT 05201
802-442-1051

WESTON, WILLIAM
BELLOWS FALLS FIRE DEPT.
170 ROCKINGHAM ST
BELLOWS FALLS, VT 05101

WHITE, DAVID
BENSON FIRE DEPT
BOX 294
BENSON, VT 05731
537-3791

SWEET, WALT
BENNINGTON RURAL FIRE DEPT
P.O. BOX 768
BENNINGTON, VT 05201
442-8487

SIMON, ROBERT
BERLIN FIRE DEPT
338 PAINE TURNPIKE NORTH
MONTPELIER, VT 05602
223-5531

ARCHAMBAULT, ROBERT
BERKSHIRE VOL FIRE DEPT
P O BOX 177
ENOSBURG FALLS, VT 05450
933-4550

PERRY III, GARY
BRADFORD FIRE DEPT
BOX 302
BRADFORD, VT 05033
222-4787

DEAN, ROBERT
BETHEL FIRE DEPT
CHRISTAN HILL RD BOX 472
BETHEL, VT 05032
234-9851

EMERY, DAVID
BRATTLEBORO FIRE DEPT
103 ELLIOT ST
BRATTLEBORO, VT 05301
254-4831

KILPECK, ROBERT
BRANDON FIRE DEPT
29 WALNUT ST
BRANDON, VT 05733
247-3646

AUDET, ERNEST
BRIDPORT FIRE DEPT
RD#1 1440
BRIDPORT, VT 05734
758-2683

VANEK, JR, RAY
BRIDGEWATER FIRE DEPT
P.O. BOX 163
BRIDGEWATER CORNERS, VT 05035
672-3466

T H E S T A T E O F V E R M O N T
 D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
 D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
 ALPHABETICALLY BY DEPARTMENT
 FOR ALL AREAS

 NAME & ADDRESS

NAME & ADDRESS

BOUVIER, MARK
 BRISTOL FIRE DEPT
 10 FITCH AVENUE
 BRISTOL, VT 05443
 453-2345

WORTH, JAMES
 BRIGHTON FIRE DEPT
 BOX 369
 ISLAND POND, VT 05846
 723-6043

BENSON, JOHN
 BROOKFIELD VOL FIRE DEPT
 BROOKFIELD, VT 05036
 276-3001

CARBINO, FRANCIS
 BROAD BROOK FIRE DEPT
 RD 2
 S ROYALTON, VT 05068
 763-8197

CONTOIS, DAYTON
 BURLINGTON FIRE DEPT
 136 SO WINOOSKI AVE
 BURLINGTON, VT 05401
 658-7661

SPACKMAN, MICHAEL
 BROWNSVILLE FIRE DEPT
 HCR 71 BOX 21
 BROWNSVILLE, VT 05037

CARY, ALAN
 CAMBRIDGE FIRE DEPT
 P O BOX 517
 JEFFERSONVILLE, VT 05464
 849-6012

BOTHFIELD JR., WALTER
 CABOT FIRE DEPT
 828 BOTHFIELD HILL RD
 CABOT, VT 05647

FITZGIBBONS, RAYMOND
 CAVENDISH VOL FIRE DEPT
 P O BOX 453
 CAVENDISH, VT 05142
 226-7288

MULHOLLAND, C. WILLIAM
 CASTLETON FIRE DEPT
 BOX 74
 CASTLETON, VT 05735
 468-5743

HOSFORD, GARY
 CHARLESTON FIRE DEPT
 E CHARLESTON, VT 05833

LANG, GEORGE H
 CHAMPION FIRE COMPANY #5
 P O BOX 5
 S LONDONDERRY, VT 05155
 824-3242

GOODRICH, ARTHUR
 CHELSEA FIRE DEPT
 PO BOX 264
 CHELSEA, VT 05038

TERRIEN, GARY
 CHARLOTTE FIRE DEPT
 P.O. BOX 80
 CHARLOTTE, VT 05445
 425-2421

T H E S T A T E O F V E R M O N T
D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
D I V I S I O N O F F I R E P R E V E N T I O N

L I S T O F F I R E C H I E F S
A L P H A B E T I C A L L Y B Y D E P A R T M E N T
F O R A L L A R E A S

NAME & ADDRESS

NAME & ADDRESS

VOITY, THOMAS
CHITTENDEN FIRE DEPT
BOX 224 CHITTENDEN RD
CHITTENDEN, VT 05737
483-6310

GOODELL, HARRY
CHESTER
P.O. BOX 370
CHESTER, VT 05143
875-3173

CHMIELESKI, MICHAEL
COLCHESTER FIRE DEPT
28 VILLAGE DRIVE
COLCHESTER, VT 05446

TODD, JAMES
CLARENDON
P.O. BOX 168
CLARENDON, VT 05759
775-0615

FISHER, RICHARD H.
CONCORD VOL. FIRE DEPT
P.O. BOX 113
CONCORD, VT 05824
695-8866

BROSSEAU, RONALD
COMMERCIAL IND ELECTRIC INC
P.O. BOX 845
WILLISTON, VT 05495
658-1337

GUTZMAN, WALTER
CRAFTSBURY VOL FIRE DEPT
CRAFTSBURY, VT 05826
586-2541

RILEY, LEIGHTON
CORNWALL FIRE DEPT
RR 4
MIDDLEBURY, VT 05753
462-2466

GADAPEE, HOWARD
DANVILLE FIRE DEPT
P.O. BOX 220
DANVILLE, VT 05828
748-2127

DAVISON JR., WENDALL
DANBY VOL FIRE DEPT
MT TABOR, VT 05739
293-5335

ELLAM, CRAIG
DERBY LINE FIRE DEPT
P O BOX 205 BOX 205
DERBY LINE, VT 05830
873-6015

DAVIS, TIMOTHY
DAVISCO
P.O. BOX 45
FOREST DALE, VT 05745
287-4214

CROFT, RODNEY
E BARNET FIRE DEPT
S ROYALTON, VT 05068
763-7074

ONEIL III, JAMES
DORSET FIRE DEPT
P.O. BOX 341
DORSET, VT 05251
325-3290

T H E S T A T E O F V E R M O N T
 D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
 D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
 ALPHABETICALLY BY DEPARTMENT
 FOR ALL AREAS

 NAME & ADDRESS

NAME & ADDRESS

PIERSON, WADE
 E CORINTH FIRE DEPT
 BOX 1027
 E CORINTH, VT 05040

GREER, BRIAN
 E BURKE FIRE DEPT
 E BURKE, VT 05832
 626-9816

HORNIGAN, PAT
 E DOVER FIRE DEPT
 P O BOX 45
 E DOVER, VT 05341
 348-6600

BEEBE, DAVID
 E DORSET FIRE DEPT
 BOX 34
 E DORSET, VT 05253
 362-3069

BRAZIER, TOM
 E MONTPELIER FIRE DEPT
 P.O. BOX 146
 E MONTPELIER, VT 05666
 223-5586

BLAKE, JACK
 E FAIRFIELD FIRE DEPT
 E FAIRFIELD, VT 05448
 827-3894

FIRE CHIEF
 E RANDOLPH FIRE DEPT
 P.O. BOX 311
 E RANDOLPH, VT 05041
 728-3758

MOTT, CLARENCE
 E POWNAL FIRE DEPT
 RR3 BOX 4498
 BENNINGTON, VT 05201
 442-4910

WARREN, DON
 ELMORE FIRE DEPT
 PO BOX 176
 ELMORE, VT 05657
 888-5822

SEWARD, LOWELL
 E WALLINGFORD FIRE DEPT
 E WALLINGFORD, VT 05742
 259-2277

MILLER, STEVEN
 ESSEX JCT FIRE DEPT
 P.O. BOX 5314
 ESSEX JCT, VT 05452
 878-6944

WRIGHT, TERRY L
 ENOSBURG FALLS FIRE DEPT
 P.O. BOX 521
 ENOSBURG FALLS, VT 05450
 933-2371

MOULTON, DUANE
 ETHAN ALLEN FIRE BRIGADE
 BOX 100-B
 ISLAND POND, VT 05846
 723-4326

ST PETER, BRUCE
 ESSEX TOWN FIRE DEPT
 81 MAIN ST
 ESSEX JCT, VT 05452
 878-5284

T H E S T A T E O F V E R M O N T
D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
ALPHABETICALLY BY DEPARTMENT
FOR ALL AREAS

NAME & ADDRESS

NAME & ADDRESS

FIELD, JAMES
FAIRFAX FIRE DEPT
1-102 GOODALL STREET
FAIRFAX, VT 05454
524-3340

HOWARD JR., DONALD J.
FAIR HAVEN VOL FIRE DEPT
2 FIRST AVENUE
FAIR HAVEN, VT 05743
265-8076

BOWLES, DAVE
FERRISBURG FIRE DEPT
BOX 190 HOLLOW RD
FERRISBURG, VT 05456
877-3355

COREY, LYNDON
FAIRFIELD FIRE DEPT
BOX 88
FAIRFIELD, VT 05455
827-3809

BRONSON, TOM
GEORGIA FIRE DEPT
RD 3 BOX 4963
MILTON, VT 05468
524-9021

BARNUM, BRIAN
FRANKLIN FIRE DEPT
FRANKLIN, VT 05457
285-2145

MACK, STANLEY
GRAFTON FIRE DEPT
BOX 121
GRAFTON, VT 05146
843-2266

BROOKS, ALTON
GLOVER FIRE DEPT
MAIN ST
GLOVER, VT 05839
525-3095

CHAMPAGNE JR., WILLIAM
GRAND ISLE FIRE DEPT
P.O. BOX 50
GRAND ISLE, VT 05458
372-4531

BUNNELL, REGINALD
GRANBY FIRE DEPT
P.O. BOX 26
GRANBY, VT 05840
328-2976

BROCHU SR., DAVID
GREENSBORO FIRE DEPT
P.O. BOX 83
GREENSBORO, VT 05841
472-5711

MISHKITT, MELVIN
GRANVILLE FIRE DEPT
GRANVILLE, VT 05747
767-3266

CLARK, MICHAEL
GUILFORD
GUILFORD CENTER RD
BRATTLEBORO, VT 05301
254-9738

SMITH, BRENT
GROTON FIRE DEPT
P.O. BOX 53
GROTON, VT 05046
584-3154

T H E S T A T E O F V E R M O N T
D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
ALPHABETICALLY BY DEPARTMENT
FOR ALL AREAS

NAME & ADDRESS

NAME & ADDRESS

KINSLEY, WILLIAM
HANCOCK FIRE DEPT
BOX 116
HANCOCK, VT 05748
767-3985

COURSER, WAYNE
HALIFAX FIRE DEPT
PO BOX 8-W
W HALIFAX, VT 05358

WOOD JR, JOHN
HARTFORD FIRE DEPT
812 VA CUT-OFF RD
WHITE RIVER JCT, VT 05001
295-3232

GILCRIS, ERWIN
HARDWICK FIRE DEPT
RR1 BOX 1097
HARDWICK, VT 05843
472-5943

SMITH, MICHAEL
HIGHGATE FIRE DEPT
P.O. BOX 326 ROUTE 78
HIGHGATE CENTER, VT 05459

PIPPIN, RANDY S
HARTLAND VOL FIRE DEPT
P.O. BOX 341
HARTLAND, VT 05048
436-2269

GIBBS, DWAYNE
HUBBARDTON VOL FIRE DEPT
BOMOSEEN, VT 05732
468-2284

GIROUX, BERNARD
HINESBURG FIRE DEPT
RR1 BOX 983
HINESBURG, VT 05461
482-2350

WEBSTER SR, EDWIN
HYDE PARK FIRE DEPT
329 NOYES FARM RD
HYDE PARK, VT 05655
888-2357

JEFFREY, TATE
HUNTINGTON FIRE DEPT
4930 MAIN ROAD
HUNTINGTON, VT 05462

JOHNSON, ROBERT
IRA FIRE DEPT
RFD1 BOX 3465
IRA, VT 05777
235-2247

SEVERANCE, DAVID
IBM FIRE BRIGADE
1000 RIVER RD BLDG 900A
ESSEX JCT, VT 05452
879-2400

JARVIS, GARY
ISLE LAMOTTE FIRE DEPT
BOX 88
ISLE LA MOTTE, VT 05463

WELLS, RANDY
IRASBURG FIRE DEPT
BOX 75
IRASBURG, VT 05845
754-6429

T H E S T A T E O F V E R M O N T
D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
ALPHABETICALLY BY DEPARTMENT
FOR ALL AREAS

NAME & ADDRESS

NAME & ADDRESS

JAMES, DOUGLAS R
JAY VOL FIRE DEPT
P O BOX 116
JAY, VT 05859
988-4706

BARKER, STEWART
JAMAICA VOL FIRE & RESCUE
P O BOX 2857
JAMAICA, VT 05343
874-4515

DEVENOW, JOE
LABOR & INDUSTRY
MONTPELIER, VT 05620

SMITH, GORDON
JOHNSON FIRE DEPT
PEARL ST
JOHNSON, VT 05656
635-7550

SICOTTE, MARC
LOWELL FIRE DEPT
P O BOX 234 2534 VT RTE 100
LOWELL, VT 05847
744-2446

COUSINO, JEFF
LINCOLN FIRE COMPANY
30 GROVE HILL RD
LINCOLN, VT 05443
453-3419

BROWN, WILLIAM
LUNENBURG CO B FIRE DEPT
BOX 168 GILMAN
GILMAN, VT 05904
892-5332

KOLENDA, PETER
LUDLOW FIRE DEPT
P O BOX 355
LUDLOW, VT 05149
228-8188

HOPKINS, GREGORY
LYNDONVILLE FIRE DEPT
GROVE ST P O BOX 126
LYNDONVILLE, VT 05851
626-5555

THOMAS, BRUCE
LUNENBURG FIRE DEPT
LUNENBURG, VT 05906
892-6632

THOMPSON, CHARLES
MANCHESTER FIRE DEPT
BOX 612
MANCHESTER CENTER, VT 05255
362-3472

YOUNG, ROBERT
MALLETT'S BAY FIRE DEPT
P.O. BOX 4
COLCHESTER, VT 05446
862-4415

MACLAY, TOM
MARSHFIELD FIRE DEPT
122 SCHOOL STREET, RM 1
MARSHFIELD, VT 05658
426-3265

GORDON, ANTHONY
MARLBORO FIRE DEPT
MARLBORO, VT 05344
254-2495

T H E S T A T E O F V E R M O N T
D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
ALPHABETICALLY BY DEPARTMENT
FOR ALL AREAS

NAME & ADDRESS

NAME & ADDRESS

MCPMAHON, MARTY
MIDDLESEX FIRE DEPT
RFD 3 BOX 410
MONTPELIER, VT 05602

COLE, RICHARD A.
MIDDLEBURY FIRE DEPT
5 SEYMOUR STREET
MIDDLEBURY, VT 05753
388-4381

CARY, RANDY
MILTON FIRE DEPT
20 KIENLE RD
MILTON, VT 05468
893-2563

PARKER, NORMAN
MIDDLETOWN SPRINGS FIRE DEPT
NORTH ST
MIDDLETOWN SPRINGS, VT 05757
235-2336

SCOTT, DEAN
MONTGOMERY FIRE DEPT
RR1 BOX 890
MONTGOMERY CENTER, VT 05471
326-4396

NORRIS, RICHARD
MONKTON FIRE DEPT
RD 2 BOX 60
NEW HAVEN, VT 05472
453-3793

EASTMAN, ARNOLD
MORETOWN FIRE DEPT
MORETOWN, VT 05660

LEWIS, NORMAN
MONTPELIER FIRE DEPT
61 MAIN ST
MONTPELIER, VT 05602
229-4913

GARROW, RUSS
MT HOLLY FIRE DEPT
P.O. BOX 114
MT HOLLY, VT 05758
259-3167

REEVE, WALLACE
MORRISVILLE FIRE DEPT
P O BOX 748
MORRISVILLE, VT 05661
888-3574

LOCKE, BRIAN
N HARTLAND FIRE DEPT
P.O. BOX 12
N HARTLAND, VT 05052

ELWELL, WILLAM
N BENNINGTON FIRE DEPT
SAGE RD
N BENNINGTON, VT 05257
442-7213

LOCKE, MARVIN
N HYDE PARK FIRE DEPT
P.O. BOX 159
N HYDE PARK, VT 05665
635-2646

MURDOCK, PETER
N HERO VOL FIRE DEPT
P O BOX 132
N HERO, VT 05474

T H E S T A T E O F V E R M O N T
D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
ALPHABETICALLY BY DEPARTMENT
FOR ALL AREAS

NAME & ADDRESS

NAME & ADDRESS

METCALF, DWAYNE
N POWNAL FIRE DEPT
P.O. BOX 174
N POWNAL, VT 05260

PERRON JR, FRANK
N POMFRET FIRE DEPT
P.O. BOX 304
N POMFRET, VT 05053
457-3402

FORD, JAMES
NEW HAVEN FIRE DEPT
BOX 44
NEW HAVEN, VT 05472
388-6363

LAWLEY, TODD
NEW BROOK FIRE DEPT
P.O. BOX 77
NEWFANE, VT 05345
365-4754

RENFREW, JOHN
NEWBURY FIRE DEPT
BOX 234
NEWBURY, VT 05051
866-5583

TROMBLY, DAN
NEWARK FIRE DEPT
BOX 32-A
W BURKE, VT 05871
467-8856

BEAUMIER, MICHAEL
NEWPORT CTR FIRE DEPT
MAIN ST
NEWPORT CENTER, VT 05857
334-5108

PARENTEAU, LEO
NEWPORT CITY FIRE DEPT
227 UNION STREET
NEWPORT, VT 05855
334-8023

LYON, WILLIAM
NORTHFIELD FIRE DEPT
51 SOUTH MAIN STREET
NORTHFIELD, VT 05663
802-485-6121

HANSEN, HAROLD
NO TROY FIRE DEPT
PO BOX 368
N TROY, VT 05859
988-4376

ROWELL, SETH
ORLEANS FIRE DEPT
102 MAIN STREET
ORLEANS, VT 05860
754-9481

FRASER, JACK
NORWICH FIRE DEPT
P.O. BOX 376
NORWICH, VT 05055
649-1147

ARLINGTON FIRE DEPARTMENT, ATT
P.O. BOX 264
E ARLINGTON, VT 05252
802-375-6432

HALL, LOUIS
ORWELL FIRE DEPT
177 ROUTE 73
ORWELL, VT 05760
948-2095

T H E S T A T E O F V E R M O N T
D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
D I V I S I O N O F F I R E P R E V E N T I O N

L I S T O F F I R E C H I E F S
A L P H A B E T I C A L L Y B Y D E P A R T M E N T
F O R A L L A R E A S

NAME & ADDRESS

NAME & ADDRESS

ANDRUS, JAMES
PAWLET FIRE DEPT
P.O. BOX 183
PAWLET, VT 05761
325-3428

WHITINGHAM FIRE DEPT
P.O. BOX 368
JACKSONVILLE, VT 05342
368-7612

BLACK, CHARLES
PERU FIRE DEPT
P.O. BOX 132
PERU, VT 05152
824-6793

BERWICK, JEFF
PEACHAM FIRE DEPT
BOX 112
PEACHAM, VT 05862
592-3497

MERRILL, KEN
PITTSFIELD FIRE DEPT
P.O. BOX 636
PITTSFIELD, VT 05762
746-8945

POMETROY, JESSE
PHOENIX FIRE CO #6
LONDONDERRY, VT 05148
824-5489

GRAVES, GARY
PLAINFIELD FIRE DEPT
PLAINFIELD, VT 05667

HOOKER, THOMAS
PITTSFORD FIRE DEPT
P.O. BOX 208
PITTSFORD, VT 05763
483-2281

WILLIAMS, LARRY
POULTNEY FIRE DEPT
263 BEAMAN STREET
POULTNEY, VT 05764
287-9462

MARTIN, DONALD
PLYMOUTH FIRE DEPT
HCR 70 BOX 103
PLYMOUTH, VT 05056
673-3659

ODELL, DAVID
POWNALE FIRE DEPT
DEPOT ST
POWNALE, VT 05261
823-5134

GEORGE, KENNETH
POWNALE CTR FIRE DEPT
P.O. BOX 251
POWNALE, VT 05261
823-5183

WESTON, WILLIAM
PUTNEY FIRE DEPT
MAIN ST
PUTNEY, VT 05346
387-4178

BURNS, JOHN C.
PROCTOR FIRE DEPT
MAIN ST
PROCTOR, VT 05765
459-2823

T H E S T A T E O F V E R M O N T
 D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
 D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
 ALPHABETICALLY BY DEPARTMENT
 FOR ALL AREAS

 NAME & ADDRESS

NAME & ADDRESS

THURSTON, LARRY
 RANDOLPH FIRE DEPT
 20 PEARL ST
 RANDOLPH, VT 05060
 728-5405

FLOYD, ALBERT
 RANDOLPH CTR FIRE DEPT
 P.O. BOX 215
 RANDOLPH CENTER, VT 05061
 728-5333

MARCHEGANI, CARL
 READSBORO FIRE DEPT
 7698 VT ROUTE 100
 READSBORO, VT 05350
 423-7033

SANDERSON, HOWARD
 READING FIRE DEPT
 BOX 63
 READING, VT 05062
 484-7440

LEVESQUE, THOMAS
 RICHMOND FIRE DEPT
 P O BOX 29, 357 E MAIN ST
 RICHMOND, VT 05477
 434-2128

MARTIN, PAUL
 RICHFORD FIRE DEPT
 RICHFORD TOWN OFFICE
 RICHFORD, VT 05476
 848-3746

SEVERY, TERRY
 ROCHESTER FIRE DEPT
 RR2
 ROCHESTER, VT 05767
 767-3394

HANSON, TIM
 RIPTON FIRE DEPT
 BOX 10
 RIPTON, VT 05766
 388-2546

VERNON FIRE DEPT
 RR 2 BOX 525
 VERNON, VT 05354
 254-2279

BAKER, CLARENCE
 ROXBURY FIRE DEPT
 BOX 54 WARREN MTN RD
 ROXBURY, VT 05669
 485-8881

LANCOUR, GERALD N
 RUTLAND CITY FIRE DEPT
 104 CENTER ST
 RUTLAND CITY, VT 05701
 773-1812

WILSON III, JAY
 RUPERT FIRE DEPT
 BOX 68
 W RUPERT, VT 05776
 394-7748

PERKINS, GENE
 RYEGATE FIRE DEPT
 BOX 102
 E RYEGATE, VT 05042
 584-3611

SCHLACHTER, ROBERT
 RUTLAND TOWN FIRE DEPT
 P.O. BOX 243
 CENTER RUTLAND, VT 05736
 773-3175

T H E S T A T E O F V E R M O N T
 D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
 D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
 ALPHABETICALLY BY DEPARTMENT
 FOR ALL AREAS

 NAME & ADDRESS

NAME & ADDRESS

STEVE, JONES
 S NEWFANE/WILLIAMSVILLE FIRE D
 24 DOVER RD PO BOX 92
 WILLIAMSVILLE, VT 05362
 348-7800

MAXHAM, CHIEF, ARTHUR J.
 S HERO VOL FIRE DEPT
 P.O. BOX 112
 S HERO, VT 05486
 372-5666

JOHNSON, DALE
 S WOODSTOCK FIRE DEPT
 BOX 41
 S WOODSTOCK, VT 05071
 459-1560

WHITNEY, PAUL
 S ROYALTON FIRE DEPT
 BOX 204
 S ROYALTON, VT 05068
 763-8823

SMITH, ARTHUR
 SAXTONS RIVER FIRE DEPT
 P.O. BOX 81 44 MAIN ST
 SAXTONS RIVER, VT 05154
 869-2307

CASAVANT, WILLIAM
 SALISBURY FIRE DEPT
 463 SMEAD RD
 SALISBURY, VT 05769
 352-4298

POTTER, DAVID
 SHARON FIRE DEPT
 R1 BOX 28
 SHARON, VT 05065
 763-7150

WADE SR, BRIAN
 SHAFTSBURY FIRE DEPT
 P.O. BOX 378
 SHAFTSBURY, VT 05262
 442-4965

WOOSTER, CRAIG
 SHELBURNE FIRE DEPT
 P O BOX 911 5380 SHELBURNE RD
 SHELBURNE, VT 05482
 985-2366

NEWLAND, DENNIS
 SHEFFIELD/WHEELOCK FIRE DEPT
 P.O. BOX 539
 SHEFFIELD, VT 05866

ARNEBOLD, ROBERT
 SHERBURNE FIRE DEPT
 P.O. BOX 99
 KILLINGTON, VT 05751
 773-3231

COOK, THEODORE
 SHELDON FIRE DEPT
 RFD 1 BOX 3180
 SHELDON, VT 05483
 933-2112

SNARSKI, ROBERT
 SHREWSBURY FIRE DEPT
 P.O. BOX 315
 CUTTINGSVILLE, VT 05738
 492-3505

DOUGLAS, ROBERT
 SHOREHAM FIRE DEPT
 53 FIREHOUSE ROAD
 SHOREHAM, VT 05770
 897-5043

T H E S T A T E O F V E R M O N T
 D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
 D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
 ALPHABETICALLY BY DEPARTMENT
 FOR ALL AREAS

 NAME & ADDRESS

NAME & ADDRESS

LAMPHERE, ERNEST
 SPRINGFIELD FIRE DEPT
 77 HARTNESS AVE
 SPRINGFIELD, VT 05156
 885-4546

ONEIL, MICHAEL
 SO BURLINGTON FIRE DEPARTMENT
 575 DORSET ST
 S BURLINGTON, VT 05403
 846-4110

CROSS JR., HAROLD
 ST ALBANS TOWN FIRE DEPT
 P O BOX 37
 ST ALBANS BAY, VT 05481
 524-2132

CROSS, HAROLD
 ST ALBANS TOWN FIRE DEPT
 P O BOX 37
 ST ALBANS BAY, VT 05481
 524-5921

SOONS, PETER
 ST MICHAELS FIRE DEPT
 WINOOSKI PARK
 COLCHESTER, VT 05439
 893-6348

RUGGLES, TROY
 ST JOHNSBURY FIRE DEPT
 1187 MAIN ST
 ST JOHNSBURY, VT 05819
 748-8925

ETHIER, LEO
 STAMFORD FIRE DEPT
 142 STEBBINS LANE
 STAMFORD, VT 05352
 694-1451

PALMER, GARY
 ST. ALBANS CITY FIRE DEPT
 P.O. BOX 867
 ST ALBANS, VT 05478
 802-524-2132

BROWN, DAVID
 STOCKBRIDGE FIRE DEPT
 BOX 19 RT 100
 STOCKBRIDGE, VT 05772
 746-8931

ESTEY, FENWICK
 STARKSBORO FIRE DEPT
 BOX 55
 STARKSBORO, VT 05487
 453-2058

BUSHWAY, ROBERT
 STRAFFORD FIRE DEPT
 S STRAFFORD, VT 05070
 765-4473

MANSFIELD, WENDALL M
 STOWE FIRE DEPT
 PO BOX 1132
 STOWE, VT 05672
 253-4540

PROUTY, PETER
 SWANTON FIRE DEPT
 P.O. BOX 279 120 FIRST ST
 SWANTON, VT 05488
 868-3561

SEYMOUR, LARRY
 SUTTON FIRE DEPT
 RFD BOX 97-B
 SUTTON, VT 05867
 467-8335

THE STATE OF VERMONT
DEPARTMENT OF LABOR AND INDUSTRY
DIVISION OF FIRE PREVENTION

LIST OF FIRE CHIEFS
ALPHABETICALLY BY DEPARTMENT
FOR ALL AREAS

NAME & ADDRESS

NAME & ADDRESS

MOORE, TIM
THETFORD FIRE DEPT
P O BOX 330 2829 RT 113
THETFORD CENTER, VT 05075
785-2412

MAXHAM, JONATHAN
TEGO FIRE DEPT
BOX 40
S POMFRET, VT 05067
457-1267

BROWN, EDGAR
TOWNSHEND FIRE DEPT
P.O. BOX 237
TOWNSHEND, VT 05353
365-7711

MORRIS, LEONARD
TINMOUTH FIRE DEPT
BOX 190
WALLINGFORD, VT 05773
293-5263

MORIN, ROGER
TROY FIRE DEPT
BOX 51
TROY, VT 05868
744-2748

DOWNING, EDGAR
TRI-VILLAGE
15 POWDER SPRING RD
E TOPSHAM, VT 05076
439-5880

CLARK, RANDY E
UNDERHILL/JERICHO FIRE DEPT
BOX 150
UNDERHILL, VT 05489
899-3897

FIELD, BRENDA
TUNBRIDGE FIRE DEPT
BOX 145-F
TUNBRIDGE, VT 05077
889-5548

WARD, STEPHEN
VERSHIRE FIRE DEPT
RR 1 BOX 146
VERSHIRE, VT 05079
655-2238

JACKMAN, RALPH
VERGENNES FIRE DEPT
50 GREEN ST P O BOX 110
VERGENNES, VT 05491
877-2661

MULHALL, JOHN
W DOVER FIRE DEPT
BOX 561
W DOVER, VT 05356
348-7963

MANZ, W. DAN
VT DEPT HEALTH
P.O. BOX 70
BURLINGTON, VT 05402
863-7310

EASTMAN, ERVINE
W FAIRLEE FIRE DEPT
BOX 615
W FAIRLEE, VT 05083
333-4674

EMERY, WAYNE
W DUMMERSTON FIRE DEPT
BOX 40
W DUMMERSTON, VT 05357
254-8708

T H E S T A T E O F V E R M O N T
 D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
 D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
 ALPHABETICALLY BY DEPARTMENT
 FOR ALL AREAS

 NAME & ADDRESS

NAME & ADDRESS

MERRILL, DOUGLAS
 W NEWBURY FIRE DEPT
 RFD 151-B
 NEWBURY, VT 05051
 866-5575

FUCILE, THOMAS
 W HAVEN FIRE DEPT
 MAIN RD
 W HAVEN, VT 05743
 265-8630

SKAZA, JOSEPH
 W RUTLAND FIRE DEPT
 P.O. BOX 206
 W RUTLAND, VT 05777
 438-5229

TAYLOR JR, RONALD D
 W PAWLET FIRE DEPT
 2806 VT RT 153
 W PAWLET, VT 05775
 645-0276

SPACKMAN, MICHAEL
 W WINDSOR FIRE DEPT
 P.O. BOX 85
 BROWNSVILLE, VT 05037
 484-5044

GROVER, CLARENCE
 W WEATHERSFIELD FIRE DEPT
 PLAINS ROAD
 PERKINSVILLE, VT 05151
 263-5531

BISSELL, CHRIS
 WALDEN FIRE DEPT
 RFD
 W DANVILLE, VT 05873
 563-2393

PALMER, DELBERT
 WAITSFIELD FIRE DEPT
 MAPLE AVENUE
 WAITSFIELD, VT 05673
 496-3675

ARMS, ROBERT
 WARDSBORO FIRE DEPT
 P.O. BOX 151
 WARDSBORO, VT 05355
 896-6070

ALLEN, WARREN
 WALLINGFORD FIRE DEPT
 P.O. BOX 280
 WALLINGFORD, VT 05773
 446-2384

ROUSH, HARRY
 WASHINGTON FIRE DEPT
 P.O. BOX 133
 WASHINGTON, VT 05675
 883-5503

HARTSHORN, ALAN
 WARREN FIRE DEPT
 P.O. BOX 18, 351 MAIN ST
 WARREN, VT 05674
 496-2945

LAROCK, MICHAEL D
 WATERBURY VILLAGE FIRE DEPT
 P.O. BOX 9 51 S MAIN ST
 WATERBURY, VT 05676
 244-6641

THURSTON, SIDNEY
 WATERBURY CTR FIRE DEPT
 RFD 1 BOX 360
 WATERBURY CENTER, VT 05677
 244-6668

T H E S T A T E O F V E R M O N T
 D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
 D I V I S I O N O F F I R E P R E V E N T I O N

LIST OF FIRE CHIEFS
 ALPHABETICALLY BY DEPARTMENT
 FOR ALL AREAS

 NAME & ADDRESS

 NAME & ADDRESS

SHELDON, MICHAEL
 WELLS FIRE DEPT
 P.O. BOX 157
 WELLS, VT 05774
 645-9910

KEACH, MICHAEL
 WATERFORD FIRE DEPT
 P O BOX 90
 LOWER WATERFORD, VT 05848
 751-2023

VILLENEUVE, JOHN
 WEST BURKE FIRE DEPT
 P O BOX 66
 W BURKE, VT 05871
 467-3535

MORIN, JEFF
 WELLS RIVER FIRE DEPT
 BOX 221
 WELLS RIVER, VT 05081
 747-2442

BAZIN, REAL
 WESTMINSTER VOL FIRE DEPT
 P O BOX 98
 WESTMINSTER, VT 05158
 722-3336

HATHAWAY, ED
 WESTFORD FIRE DEPT
 P.O BOX 54
 WESTFORD, VT 05494
 849-2327

MILLER, NATHAN
 WEYBRIDGE FIRE DEPT
 RFD 1 BOX 197
 WEYBRIDGE, VT 05753
 388-7055

NUNNIKHOVEN, DAVID
 WESTON FIRE DEPARTMENT
 P.O. BOX 52
 WESTON, VT 05161
 824-3826

EATON, EDWARD
 WILLIAMSTOWN FIRE DEPT
 P O BOX 318 155 DEPOT ST
 WILLIAMSTOWN, VT 05679
 433-5097

BIRCHMORE, CLARENCE
 WHITING FIRE DEPT
 165 NEEDHAM RD
 WHITING, VT 05778
 623-8581

JOHNSON, BRIAN
 WILMINGTON FIRE DEPT
 P O BOX 217
 WILMINGTON, VT 05363
 464-8022

MORTON, JR, KENNETH
 WILLISTON FIRE DEPT
 7900 WILLISTON ROAD
 WILLISTON, VT 05495
 878-5121

GAGE, LEWIS
 WINDSOR FIRE DEPT
 147 MAIN ST
 WINDSOR, VT 05089
 674-2113

RAWSON, ROBERT
 WINDHAM FIRE DEPT
 RFD 1
 CHESTER, VT 05143
 265-4443

T H E S T A T E O F V E R M O N T
 D E P A R T M E N T O F L A B O R A N D I N D U S T R Y
 D I V I S I O N O F F I R E P R E V E N T I O N

L I S T O F F I R E C H I E F S
 A L P H A B E T I C A L L Y B Y D E P A R T M E N T
 F O R A L L A R E A S

 N A M E & A D D R E S S

N A M E & A D D R E S S

BERGERON, DAVID
 WINOOSK FIRE DEPT
 27 WEST ALLEN STREET
 WINOOSKI, VT 05404
 655-7825

AVISON, STEVE
 WINHALL FIRE DEPT
 BOX 141
 BONDVILLE, VT 05340
 297-2727

HUOPPI, DANA
 WOODBURY FIRE DEPT
 PO BOX 23
 WOODBURY, VT 05681
 456-7061

ANDRUS, EVERETT
 WOLCOTT FIRE DEPT
 BOX 132
 WOLCOTT, VT 05680
 888-2707

GOVEA, ANTONIO
 WORCESTER FIRE DEPT
 RD 1 BOX 440
 WORCESTER, VT 05682

SUTHERLAND JR, L.D.
 WOODSTOCK FIRE DEPT
 HCR 68 BOX 215
 WOODSTOCK, VT 05091
 457-4791

 244 VERMONT FIRE OFFICERS
 F O R A R E A F I V E

ATTACHMENT D
EPA 1999 NEI DEFAULT OPEN BURNING
EMISSION ESTIMATES FOR OTC STATES

Table D-1. Waste Disposal, Treatment, and Recovery Open Burning Residential

FIPS STATE	FIPS COUNTY	FIPS COUNTY	SCC	VOC_ANN (Tons)	NOX_ANN (Tons)	CO_ANN (Tons)	SO2_ANN (Tons)	PM10_ANN (Tons)	PM2.5_ANN (Tons)	VOC_OSD (Tons)	NOX_OSD (Tons)	CO_OSD (Tons)	SO2_OSD (Tons)	PM10_OSD (Tons)	PM2.5_OSD (Tons)
09	Connecticut	001	Fairfield Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
09	Connecticut	003	Hartford Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
09	Connecticut	005	Litchfield Co	2610030000	231.356	46.271	655.507	7.712	293.050	268.372	0.629	0.126	1.781	0.021	0.796
09	Connecticut	007	Middlesex Co	2610030000	180.164	36.033	510.465	6.005	228.208	208.990	0.490	0.098	1.387	0.016	0.620
09	Connecticut	009	New Haven Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
09	Connecticut	011	New London Co	2610030000	210.657	42.131	596.862	7.022	266.833	244.362	0.572	0.114	1.622	0.019	0.725
09	Connecticut	013	Tolland Co	2610030000	192.623	38.525	545.764	6.421	243.989	223.442	0.523	0.105	1.483	0.017	0.663
09	Connecticut	015	Windham Co	2610030000	180.122	36.024	510.345	6.004	228.154	208.941	0.489	0.098	1.387	0.016	0.620
10	Delaware	001	Kent Co	2610030000	149.524	29.905	423.652	4.984	189.397	173.448	0.406	0.081	1.151	0.014	0.515
10	Delaware	003	New Castle Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	Delaware	005	Sussex Co	2610030000	302.167	60.433	856.140	10.072	382.745	350.514	0.821	0.164	2.326	0.027	1.040
11	DC	001	Washington	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	Maine	001	Androscoggin Co	2610030000	81.843	16.369	231.888	2.728	103.668	94.938	0.222	0.044	0.630	0.007	0.282
23	Maine	003	Aroostook Co	2610030000	110.682	22.136	313.600	3.689	140.198	128.391	0.301	0.060	0.852	0.010	0.381
23	Maine	005	Cumberland Co	2610030000	267.199	53.440	757.064	8.907	338.452	309.951	0.726	0.145	2.057	0.024	0.920
23	Maine	007	Franklin Co	2610030000	61.924	12.385	175.451	2.064	78.437	71.832	0.168	0.034	0.477	0.006	0.213
23	Maine	009	Hancock Co	2610030000	99.750	19.950	282.625	3.325	126.350	115.710	0.271	0.054	0.768	0.009	0.343
23	Maine	011	Kennebec Co	2610030000	140.822	28.164	398.997	4.694	178.375	163.354	0.383	0.077	1.084	0.013	0.485
23	Maine	013	Knox Co	2610030000	64.695	12.939	183.302	2.156	81.947	75.046	0.176	0.035	0.498	0.006	0.223
23	Maine	015	Lincoln Co	2610030000	80.319	16.064	227.569	2.677	101.737	93.170	0.218	0.044	0.618	0.007	0.276
23	Maine	017	Oxford Co	2610030000	114.651	22.930	324.845	3.822	145.225	132.995	0.312	0.062	0.883	0.010	0.395
23	Maine	019	Penobscot Co	2610030000	169.288	33.858	479.650	5.643	214.432	196.375	0.460	0.092	1.303	0.015	0.583
23	Maine	021	Piscataquis Co	2610030000	37.950	7.590	107.526	1.265	48.070	44.022	0.103	0.021	0.292	0.003	0.131
23	Maine	023	Sagadahoc Co	2610030000	47.753	9.551	135.300	1.592	60.487	55.393	0.130	0.026	0.368	0.004	0.164
23	Maine	025	Somerset Co	2610030000	89.726	17.945	254.223	2.991	113.653	104.082	0.244	0.049	0.691	0.008	0.309
23	Maine	027	Waldo Co	2610030000	75.595	15.119	214.185	2.520	95.753	87.690	0.205	0.041	0.582	0.007	0.260
23	Maine	029	Washington Co	2610030000	80.854	16.171	229.086	2.695	102.415	93.791	0.220	0.044	0.623	0.007	0.278
23	Maine	031	York Co	2610030000	224.604	44.921	636.377	7.487	284.498	260.540	0.610	0.122	1.729	0.020	0.773
24	Maryland	001	Allegany Co	2610030000	56.136	11.227	159.051	1.871	71.105	65.117	0.153	0.031	0.432	0.005	0.193
24	Maryland	003	Anne Arundel Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	005	Baltimore Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	009	Calvert Co	2610030000	165.841	33.168	469.884	5.528	210.066	192.376	0.451	0.090	1.277	0.015	0.571
24	Maryland	011	Caroline Co	2610030000	66.461	13.292	188.305	2.215	84.183	77.094	0.181	0.036	0.512	0.006	0.229
24	Maryland	013	Carroll Co	2610030000	264.249	52.850	748.705	8.808	334.715	306.529	0.718	0.144	2.035	0.024	0.910
24	Maryland	015	Cecil Co	2610030000	171.179	34.236	485.006	5.706	216.826	198.567	0.465	0.093	1.318	0.016	0.589
24	Maryland	017	Charles Co	2610030000	122.242	24.448	346.353	4.075	154.840	141.801	0.332	0.066	0.941	0.011	0.421
24	Maryland	019	Dorchester Co	2610030000	46.251	9.250	131.046	1.542	58.585	53.652	0.126	0.025	0.356	0.004	0.159
24	Maryland	021	Fredrick Co	2610030000	202.921	40.584	574.943	6.764	257.033	235.388	0.551	0.110	1.562	0.018	0.698
24	Maryland	023	Garrett Co	2610030000	73.887	14.777	209.348	2.463	93.591	85.709	0.201	0.040	0.569	0.007	0.254
24	Maryland	025	Harford Co	2610030000	165.914	33.183	470.089	5.530	210.157	192.460	0.451	0.090	1.277	0.015	0.571
24	Maryland	027	Howard Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	029	Kent Co	2610030000	37.217	7.443	105.447	1.241	47.141	43.171	0.101	0.020	0.287	0.003	0.128
24	Maryland	031	Montgomery Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	033	Prince Georges Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	035	Queen Annes Co	2610030000	102.295	20.459	289.834	3.410	129.573	118.662	0.278	0.056	0.788	0.009	0.352
24	Maryland	037	St. Mary's Co	2610030000	162.899	32.580	461.546	5.430	206.338	188.962	0.443	0.089	1.254	0.015	0.561
24	Maryland	039	Somerset Co	2610030000	53.448	10.690	151.437	1.782	67.701	62.000	0.145	0.029	0.412	0.005	0.184
24	Maryland	041	Talbot Co	2610030000	58.472	11.694	165.669	1.949	74.064	67.827	0.159	0.032	0.450	0.005	0.201
24	Maryland	043	Washington Co	2610030000	140.856	28.171	399.093	4.695	178.418	163.393	0.383	0.077	1.084	0.013	0.485
24	Maryland	045	Wicomico Co	2610030000	135.168	27.034	382.976	4.506	171.213	156.795	0.367	0.073	1.041	0.012	0.465
24	Maryland	047	Worcester Co	2610030000	59.949	11.990	169.857	1.998	75.936	69.541	0.163	0.033	0.462	0.005	0.206
24	Maryland	510	Baltimore	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	001	Barnstable Co	2610030000	205.306	41.061	581.701	6.844	260.055	238.155	0.558	0.112	1.581	0.019	0.707
25	Massachusetts	003	Berkshire Co	2610030000	127.643	25.529	361.655	4.255	161.681	148.066	0.347	0.069	0.983	0.012	0.439
25	Massachusetts	005	Bristol Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	007	Dukes Co	2610030000	35.318	7.064	100.069	1.177	44.737	40.969	0.096	0.019	0.272	0.003	0.122
25	Massachusetts	009	Essex Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	011	Franklin Co	2610030000	120.775	24.155	342.194	4.026	152.981	140.098	0.328	0.066	0.930	0.011	0.416
25	Massachusetts	013	Hampden Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	015	Hampshire Co	2610030000	124.767	24.953	353.507	4.159	158.038	144.730	0.339	0.068	0.961	0.011	0.429
25	Massachusetts	017	Middlesex Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	019	Nantucket Co	2610030000	9.914	1.983	28.090	0.330	12.558	11.500	0.027	0.005	0.076	0.001	0.034
25	Massachusetts	021	Norfolk Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	023	Plymouth Co	2610030000	462.824	92.565	1,311.334	15.427	586.244	536.876	0.252	0.053	0.663	0.042	1.593
25	Massachusetts	025	Suffolk Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	027	Worcester Co	2610030000	531.104	106.221	1,504.796	17.703	672.732	616.081	1.443	0.289	4.089	0.048	1.828
33	New Hampshire	001	Belknap Co	2610030000	89.191	17.838	252.707	2.973	112.975	103.461	0.242	0.048	0.687	0.008	0.307
33	New Hampshire	003	Carroll Co	2610030000	92.916	18.583	263.261	3.097	117.693	107.782	0.252	0.050	0.715	0.008	0.320
33	New Hampshire	005	Cheshire Co	2610030000	117.838	23.568	333.875	3.928	149.262	136.692	0.320	0.064	0.907	0.011	0.406
33	New Hampshire	007	Coos Co	2610030000	56.029	11.206	158.748	1.868	70.970	64.993	0.152	0.030	0.431	0.005	0.177
33	New Hampshire	009	Grafton Co	2610030000	125.880	25.176	356.659	4.196	159.448	146.020	0.342	0.068	0.969	0.011	0.433
33	New Hampshire	011	Hillsborough Co	2610030000	309.892	61.978	878.027	10.330	392.530	359.475	0.842	0.168	2.386	0.028	1.067
33	New Hampshire	013	Merrimack Co	2610030000	173.312	34.662	491.051	5.777	219.529	201.042	0.471	0.094	1.334	0.016	0.

Table D-1. Waste Disposal, Treatment, and Recovery Open Burning Residential

FIPS STATE	FIPS COUNTY	FIPS COUNTY	SCC	VOC_ANN (Tons)	NOX_ANN (Tons)	CO_ANN (Tons)	SO2_ANN (Tons)	PM10_ANN (Tons)	PM2.5_ANN (Tons)	VOC_OSD (Tons)	NOX_OSD (Tons)	CO_OSD (Tons)	SO2_OSD (Tons)	PM10_OSD (Tons)	PM2.5_OSD (Tons)
34	New Jersey	009	Cape May Co	2610030000	82.009	16.402	232.358	2.734	103.878	95.130	0.223	0.045	0.631	0.007	0.282
34	New Jersey	011	Cumberland Co	2610030000	91.284	18.257	258.638	3.043	115.626	105.889	0.248	0.050	0.703	0.008	0.314
34	New Jersey	013	Essex Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	015	Gloucester Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	017	Hudson Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	019	Hunterdon Co	2610030000	278.683	55.737	789.603	9.289	352.999	323.273	0.757	0.151	2.146	0.025	0.959
34	New Jersey	021	Mercer Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	023	Middlesex Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	025	Monmouth Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	027	Morris Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	029	Ocean Co	2610030000	254.949	50.990	722.356	8.498	322.936	295.741	0.693	0.139	1.963	0.023	0.878
34	New Jersey	031	Passaic Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	033	Salem Co	2610030000	71.422	14.284	202.364	2.381	90.468	82.850	0.039	0.039	0.550	0.006	0.246
34	New Jersey	035	Somerset Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	037	Sussex Co	2610030000	215.754	43.151	611.302	7.192	273.288	250.274	0.586	0.117	1.661	0.020	0.743
34	New Jersey	039	Union Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	041	Warren Co	2610030000	117.585	23.517	333.158	3.920	148.941	136.399	0.320	0.064	0.905	0.011	0.405
36	New York	001	Albany Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	003	Allegany Co	2610030000	102.411	20.482	290.164	3.414	129.720	118.796	0.056	0.078	0.009	0.353	0.323
36	New York	005	Bronx Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	007	Broome Co	2610030000	140.273	28.055	397.440	4.676	177.679	162.717	0.381	0.076	1.080	0.013	0.483
36	New York	009	Cattaraugus Co	2610030000	148.016	29.603	419.378	4.934	187.487	171.698	0.402	0.080	1.140	0.013	0.509
36	New York	011	Cayuga Co	2610030000	127.421	25.484	361.027	4.247	161.400	147.809	0.346	0.069	0.981	0.012	0.439
36	New York	013	Chautauqua Co	2610030000	164.481	32.896	466.029	5.483	208.342	190.798	0.447	0.089	1.266	0.015	0.566
36	New York	015	Chemung Co	2610030000	62.890	12.578	178.189	2.096	79.661	72.953	0.171	0.034	0.484	0.006	0.216
36	New York	017	Chenango Co	2610030000	108.734	21.747	308.081	3.624	137.730	126.132	0.295	0.059	0.837	0.010	0.374
36	New York	019	Clinton Co	2610030000	128.782	25.756	364.881	4.293	163.123	149.387	0.350	0.070	0.992	0.012	0.443
36	New York	021	Columbia Co	2610030000	138.171	27.634	391.483	4.606	175.016	160.278	0.375	0.075	1.064	0.013	0.476
36	New York	023	Cortland Co	2610030000	63.316	12.663	179.397	2.111	80.201	73.447	0.172	0.034	0.487	0.006	0.218
36	New York	025	Delaware Co	2610030000	89.118	17.824	252.500	2.971	112.882	103.376	0.242	0.048	0.686	0.008	0.307
36	New York	027	Dutchess Co	2610030000	293.542	58.708	831.701	9.785	371.819	340.508	0.798	0.160	2.260	0.027	1.010
36	New York	029	Erie Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	031	Essex Co	2610030000	83.795	16.759	237.420	2.793	106.141	97.203	0.228	0.046	0.645	0.008	0.288
36	New York	033	Franklin Co	2610030000	82.973	16.595	235.092	2.766	105.100	96.249	0.225	0.045	0.639	0.008	0.286
36	New York	035	Fulton Co	2610030000	69.834	13.967	197.862	2.328	88.456	81.007	0.190	0.038	0.538	0.006	0.240
36	New York	037	Genesee Co	2610030000	98.119	19.624	278.003	3.271	124.284	113.818	0.267	0.053	0.755	0.009	0.338
36	New York	039	Greene Co	2610030000	101.221	20.244	286.792	3.374	128.213	117.416	0.275	0.055	0.779	0.009	0.348
36	New York	041	Hamilton Co	2610030000	13.048	2.610	36.970	0.435	16.528	15.136	0.035	0.007	0.100	0.001	0.045
36	New York	043	Herkimer Co	2610030000	88.198	17.640	249.895	2.940	111.718	102.310	0.048	0.069	0.240	0.008	0.304
36	New York	045	Jefferson Co	2610030000	163.382	32.676	462.917	5.446	206.951	189.523	0.444	0.089	1.258	0.015	0.562
36	New York	047	Kings Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	049	Lewis Co	2610030000	59.306	11.861	168.033	1.977	75.121	68.795	0.161	0.032	0.457	0.005	0.204
36	New York	051	Livingston Co	2610030000	117.040	23.408	331.614	3.901	148.251	135.767	0.318	0.064	0.901	0.011	0.403
36	New York	053	Madison Co	2610030000	103.281	20.656	292.629	3.443	130.823	119.806	0.281	0.056	0.795	0.009	0.355
36	New York	055	Monroe Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	057	Montgomery Co	2610030000	76.181	15.236	215.847	2.539	96.496	88.370	0.207	0.041	0.587	0.007	0.262
36	New York	059	Nassau Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	061	New York Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	063	Niagara Co	2610030000	155.496	31.099	440.573	5.183	196.962	180.376	0.423	0.085	1.197	0.014	0.535
36	New York	065	Oneida Co	2610030000	202.271	40.454	573.102	6.742	256.210	234.635	0.550	0.110	1.557	0.018	0.696
36	New York	067	Onondaga Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	069	Ontario Co	2610030000	185.294	37.059	524.999	6.176	234.705	214.941	0.504	0.101	1.427	0.017	0.638
36	New York	071	Orange Co	2610030000	345.255	69.051	978.223	11.509	437.323	400.496	0.938	0.188	2.658	0.031	1.188
36	New York	073	Orleans Co	2610030000	79.224	15.845	224.468	2.641	100.350	91.900	0.215	0.043	0.610	0.007	0.273
36	New York	075	Oswego Co	2610030000	214.204	42.841	606.912	7.140	271.325	248.477	0.582	0.116	1.649	0.019	0.737
36	New York	077	Otsego Co	2610030000	117.246	23.449	332.198	3.908	148.512	136.006	0.319	0.064	0.903	0.011	0.404
36	New York	079	Putnam Co	2610030000	132.694	26.539	375.965	4.423	168.079	153.925	0.361	0.072	1.022	0.012	0.457
36	New York	081	Queens Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	083	Rensselaer Co	2610030000	151.697	30.339	429.808	5.057	192.150	175.969	0.412	0.082	1.168	0.014	0.522
36	New York	085	Richmond Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	087	Rockland Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	089	St. Lawrence Co	2610030000	165.977	33.195	470.270	5.533	210.238	192.534	0.451	0.090	1.278	0.015	0.571
36	New York	091	Saratoga Co	2610030000	252.945	50.589	716.677	8.431	320.397	293.416	0.687	0.137	1.947	0.023	0.871
36	New York	093	Schenectady Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	095	Schoharie Co	2610030000	67.246	13.449	190.529	2.242	85.178	78.005	0.183	0.037	0.518	0.006	0.231
36	New York	097	Schuyler Co	2610030000	48.344	9.669	136.975	1.611	61.236	56.079	0.131	0.026	0.372	0.004	0.166
36	New York	099	Seneca Co	2610030000	50.507	10.101	143.105	1.684	63.976	58.589	0.137	0.027	0.389	0.005	0.174
36	New York	101	Steuben Co	2610030000	170.440	34.088	482.914	5.681	215.891	197.711	0.463	0.093	1.312	0.015	0.587
36	New York	103	Suffolk Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	105	Sullivan Co	2610030000	147.330	29.466	417.434	4.911	186.618	170.903	0.400	0.080	1.134	0.013	0.507
36	New York	107	Tioga Co	2610030000	89.263	17.853	252.911	2.975	113.066	103.545	0.243	0.049	0.687	0.008	0.307
36	New York	109	Tompkins Co	2610030000	114.709	22.942	325.010	3.824	145.298	133.063	0.312	0.062	0.883	0.010	0.395
36	New York	111	Ulster Co	2610030000	294.403	58.881	834.142	9.813	372.910	341.507	0.800	0.160	2.267	0.027	1.013
36	New York	113	Warren Co	2610030000	62.943	12.589	178.338</								

Table D-1. Waste Disposal, Treatment, and Recovery Open Burning Residential

FIPS STATE	FIPS COUNTY	FIPS COUNTY	SCC	VOC_ANN (Tons)	NOX_ANN (Tons)	CO_ANN (Tons)	SO2_ANN (Tons)	PM10_ANN (Tons)	PM2.5_ANN (Tons)	VOC_OSD (Tons)	NOX_OSD (Tons)	CO_OSD (Tons)	SO2_OSD (Tons)	PM10_OSD (Tons)	PM2.5_OSD (Tons)
42	Pennsylvania	003 Allegheny Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	005 Armstrong Co	2610030000	156.351	31.270	442.995	5.212	198.045	181.367	0.425	0.085	1.204	0.014	0.538	0.493
42	Pennsylvania	007 Beaver Co	2610030000	114.363	22.873	324.027	3.812	144.859	132.661	0.311	0.062	0.881	0.010	0.394	0.360
42	Pennsylvania	009 Bedford Co	2610030000	116.769	23.354	330.847	3.892	147.908	135.453	0.317	0.063	0.899	0.011	0.402	0.368
42	Pennsylvania	011 Berks Co	2610030000	342.784	68.557	971.222	11.426	434.193	397.630	0.931	0.186	2.639	0.031	1.180	1.081
42	Pennsylvania	013 Blair Co	2610030000	114.383	22.877	324.086	3.813	144.885	132.685	0.311	0.062	0.881	0.010	0.394	0.361
42	Pennsylvania	015 Bradford Co	2610030000	124.208	24.842	351.922	4.140	157.330	144.081	0.338	0.068	0.956	0.011	0.428	0.392
42	Pennsylvania	017 Bucks Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	019 Butler Co	2610030000	292.404	58.481	828.478	9.747	370.378	339.189	0.795	0.159	2.251	0.026	1.006	0.922
42	Pennsylvania	021 Cambria Co	2610030000	187.193	37.439	530.379	6.240	237.111	217.143	0.509	0.102	1.441	0.017	0.644	0.590
42	Pennsylvania	023 Cameron Co	2610030000	8.088	1.618	22.916	0.270	10.245	9.382	0.022	0.004	0.062	0.001	0.028	0.025
42	Pennsylvania	025 Carbon Co	2610030000	70.298	14.060	199.177	2.343	89.044	81.545	0.191	0.038	0.541	0.006	0.242	0.222
42	Pennsylvania	027 Centre Co	2610030000	141.958	28.392	402.214	4.732	179.813	164.671	0.386	0.077	1.093	0.013	0.489	0.447
42	Pennsylvania	029 Chester Co	2610030000	421.093	84.219	1,193.097	14.036	533.384	488.468	1.144	0.229	3.242	0.038	1.449	1.327
42	Pennsylvania	031 Clarion Co	2610030000	88.512	17.702	250.783	2.950	112.115	102.674	0.241	0.048	0.681	0.008	0.305	0.279
42	Pennsylvania	033 Clearfield Co	2610030000	156.590	31.318	443.670	5.220	198.347	181.644	0.426	0.085	1.206	0.014	0.539	0.494
42	Pennsylvania	035 Clinton Co	2610030000	69.504	13.901	196.927	2.317	88.038	80.624	0.189	0.038	0.535	0.006	0.239	0.219
42	Pennsylvania	037 Columbia Co	2610030000	100.764	20.153	285.499	3.359	127.635	116.887	0.274	0.055	0.776	0.009	0.347	0.318
42	Pennsylvania	039 Crawford Co	2610030000	170.069	34.014	481.862	5.669	215.421	197.280	0.462	0.092	1.309	0.015	0.585	0.536
42	Pennsylvania	041 Cumberland Co	2610030000	191.993	38.399	543.980	6.400	243.191	222.712	0.522	0.104	1.478	0.017	0.661	0.605
42	Pennsylvania	043 Dauphin Co	2610030000	153.374	30.675	434.558	5.112	194.273	177.913	0.417	0.083	1.181	0.014	0.528	0.483
42	Pennsylvania	045 Delaware Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	047 Elk Co	2610030000	52.542	10.508	148.870	1.751	66.553	60.949	0.143	0.029	0.405	0.005	0.181	0.166
42	Pennsylvania	049 Erie Co	2610030000	175.405	35.081	496.981	5.847	222.180	203.470	0.477	0.095	1.350	0.016	0.604	0.553
42	Pennsylvania	051 Fayette Co	2610030000	255.978	51.196	725.272	8.533	324.239	296.935	0.696	0.139	1.971	0.023	0.881	0.807
42	Pennsylvania	053 Forest Co	2610030000	12.415	2.483	35.175	0.414	15.725	14.401	0.034	0.007	0.096	0.001	0.043	0.039
42	Pennsylvania	055 Franklin Co	2610030000	230.295	46.059	652.502	7.676	291.707	267.142	0.626	0.125	1.773	0.021	0.793	0.726
42	Pennsylvania	057 Fulton Co	2610030000	36.746	7.349	104.115	1.225	46.545	42.626	0.100	0.020	0.283	0.003	0.126	0.116
42	Pennsylvania	059 Greene Co	2610030000	94.363	18.873	267.362	3.145	119.527	109.461	0.256	0.051	0.727	0.009	0.325	0.297
42	Pennsylvania	061 Huntingdon Co	2610030000	87.753	17.551	248.632	2.925	111.153	101.793	0.238	0.048	0.676	0.008	0.302	0.277
42	Pennsylvania	063 Indiana Co	2610030000	174.637	34.927	494.805	5.821	221.207	202.579	0.475	0.095	1.345	0.016	0.601	0.550
42	Pennsylvania	065 Jefferson Co	2610030000	81.208	16.242	230.089	2.707	102.863	94.201	0.221	0.044	0.625	0.007	0.280	0.256
42	Pennsylvania	067 Juniata Co	2610030000	55.824	11.165	158.167	1.861	70.710	64.755	0.152	0.030	0.430	0.005	0.192	0.176
42	Pennsylvania	069 Lackawanna Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	071 Lancaster Co	2610030000	490.701	98.140	1,390.321	16.357	621.555	569.214	1.333	0.267	3.778	0.044	1.689	1.547
42	Pennsylvania	073 Lawrence Co	2610030000	128.600	25.720	364.367	4.287	162.893	149.176	0.449	0.070	0.990	0.012	0.443	0.405
42	Pennsylvania	075 Lebanon Co	2610030000	170.886	34.177	484.176	5.696	216.455	198.228	0.464	0.093	1.316	0.015	0.588	0.539
42	Pennsylvania	077 Lehigh Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	079 Luzerne Co	2610030000	212.588	42.518	602.333	7.086	269.278	246.602	0.578	0.116	1.637	0.019	0.732	0.670
42	Pennsylvania	081 Lycoming Co	2610030000	134.067	26.813	379.856	4.469	169.818	155.517	0.364	0.073	1.032	0.012	0.461	0.423
42	Pennsylvania	083 McKean Co	2610030000	80.751	16.150	228.795	2.692	102.285	93.672	0.219	0.044	0.622	0.007	0.278	0.255
42	Pennsylvania	085 Mercer Co	2610030000	149.742	29.948	424.268	4.991	189.673	173.700	0.407	0.081	1.153	0.014	0.515	0.472
42	Pennsylvania	087 Mifflin Co	2610030000	93.860	18.772	265.937	3.129	118.889	108.878	0.255	0.051	0.723	0.009	0.323	0.296
42	Pennsylvania	089 Monroe Co	2610030000	259.495	51.899	735.237	8.650	328.694	301.015	0.705	0.141	1.998	0.024	0.893	0.818
42	Pennsylvania	091 Montgomery Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	093 Montour Co	2610030000	24.322	4.864	68.912	0.811	30.808	28.213	0.066	0.013	0.187	0.002	0.084	0.077
42	Pennsylvania	095 Northampton Co	2610030000	195.742	39.148	554.602	6.525	247.940	227.061	0.532	0.106	1.507	0.018	0.674	0.617
42	Pennsylvania	097 Northumberland Co	2610030000	119.484	23.897	338.539	3.983	151.347	138.602	0.325	0.065	0.920	0.011	0.411	0.377
42	Pennsylvania	099 Perry Co	2610030000	104.770	20.954	296.849	3.492	132.709	121.533	0.285	0.057	0.807	0.009	0.361	0.330
42	Pennsylvania	101 Philadelphia Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	103 Pike Co	2610030000	103.976	20.795	294.600	3.466	131.704	120.613	0.283	0.057	0.801	0.009	0.358	0.328
42	Pennsylvania	105 Potter Co	2610030000	35.691	7.138	101.123	1.190	45.208	41.401	0.097	0.019	0.275	0.003	0.123	0.113
42	Pennsylvania	107 Schuylkill Co	2610030000	218.262	43.652	618.409	7.275	276.465	253.184	0.583	0.119	1.680	0.020	0.751	0.688
42	Pennsylvania	109 Snyder Co	2610030000	81.248	16.250	230.203	2.708	102.914	94.248	0.221	0.044	0.626	0.007	0.280	0.256
42	Pennsylvania	111 Somerset Co	2610030000	162.017	32.403	459.048	5.401	205.222	187.940	0.440	0.088	1.247	0.015	0.558	0.511
42	Pennsylvania	113 Sullivan Co	2610030000	15.180	3.036	43.011	0.506	19.228	17.609	0.208	0.008	0.117	0.001	0.052	0.048
42	Pennsylvania	115 Susquehanna Co	2610030000	106.071	21.214	300.534	3.536	134.356	123.042	0.288	0.058	0.817	0.010	0.365	0.334
42	Pennsylvania	117 Tioga Co	2610030000	86.999	17.400	246.498	2.900	110.199	100.919	0.236	0.047	0.670	0.008	0.299	0.274
42	Pennsylvania	119 Union Co	2610030000	75.825	15.165	214.837	2.527	96.045	87.957	0.206	0.041	0.584	0.007	0.261	0.239
42	Pennsylvania	121 Venango Co	2610030000	87.231	17.446	247.155	2.908	110.493	101.188	0.237	0.047	0.672	0.008	0.300	0.275
42	Pennsylvania	123 Warren Co	2610030000	82.285	16.457	233.140	2.743	104.227	95.450	0.224	0.045	0.634	0.007	0.283	0.259
42	Pennsylvania	125 Washington Co	2610030000	216.587	43.317	613.662	7.220	274.343	251.240	0.589	0.118	1.668	0.020	0.745	0.683
42	Pennsylvania	127 Wayne Co	2610030000	101.442	20.288	287.419	3.381	128.493	117.673	0.276	0.055	0.781	0.009	0.349	0.320
42	Pennsylvania	129 Westmoreland Co	2610030000	348.001	69.600	986.002	11.600	440.801	403.681	0.946	0.189	2.679	0.032	1.198	1.097
42	Pennsylvania	131 Wyoming Co	2610030000	73.659	14.732	208.700	2.455	93.301	85.444	0.200	0.040	0.567	0.007	0.254	0.232
42	Pennsylvania	133 York Co	2610030000	435.858	87.172	1,234.930	14.529	552.086	505.595	1.184	0.237	3.356	0.039	1.500	1.374
44	Rhode Island	001 Bristol Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	Rhode Island	003 Kent Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	Rhode Island	005 Newport Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	Rhode Island	007 Providence Co	2610030000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	Rhode Island	009 Washington Co	2610030000	165.860	33.172	469.936	5.529	210.089							

Table D-1. Waste Disposal, Treatment, and Recovery Open Burning Residential

FIPS STATE	STATE	FIPS COUNTY	COUNTY	SCC	VOC_ANN (Tons)	NOX_ANN (Tons)	CO_ANN (Tons)	SO2_ANN (Tons)	PM10_ANN (Tons)	PM2.5_ANN (Tons)	VOC_OSD (Tons)	NOX_OSD (Tons)	CO_OSD (Tons)	SO2_OSD (Tons)	PM10_OSD (Tons)	PM2.5_OSD (Tons)
50	Vermont	019	Orleans Co	2610030000	52.284	10.457	148.139	1.743	66.227	60.650	0.142	0.028	0.403	0.005	0.180	0.165
50	Vermont	021	Rutland Co	2610030000	110.871	22.174	314.134	3.696	140.436	128.610	0.301	0.060	0.854	0.010	0.382	0.349
50	Vermont	023	Washington Co	2610030000	95.840	19.168	271.546	3.195	121.397	111.174	0.260	0.052	0.738	0.009	0.330	0.302
50	Vermont	025	Windham Co	2610030000	68.429	13.686	193.883	2.281	86.677	79.378	0.186	0.037	0.527	0.006	0.236	0.216
50	Vermont	027	Windsor Co	2610030000	122.143	24.429	346.072	4.071	154.715	141.686	0.332	0.066	0.940	0.011	0.420	0.385
Total					25,759	5,152	72,985	859	32,628	29,881	70	14	198	2	89	81

Table D-2. Waste Disposal, Treatment, and Recovery Open Burning All Categories Yard Waste - Leaf Species Unspecified

FIPSSST	STATENM	FIPSCNTY	COUNTYNM	SCC	VOC_ANN (Tons)	NOX_ANN (Tons)	CO_ANN (Tons)	SO2_ANN (Tons)	PM10_ANN (Tons)	PM25_ANN (Tons)	VOC_OSD (Tons)	NOX_OSD (Tons)	CO_OSD (Tons)	SO2_OSD (Tons)	PM10_OSD (Tons)	PM25_OSD (Tons)
09	Connecticut	015	Windham Co	2610000100	7.304	0.000	29.215	0.000	9.912	9.912	0.020	0.000	0.079	0.000	0.027	0.027
09	Connecticut	011	New London Co	2610000100	8.542	0.000	34.168	0.000	11.593	11.593	0.023	0.000	0.093	0.000	0.032	0.032
09	Connecticut	013	Tolland Co	2610000100	7.811	0.000	31.242	0.000	10.600	10.600	0.021	0.000	0.085	0.000	0.029	0.029
09	Connecticut	003	Hartford Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
09	Connecticut	007	Middlesex Co	2610000100	7.305	0.000	29.222	0.000	9.915	9.915	0.020	0.000	0.079	0.000	0.027	0.027
09	Connecticut	009	New Haven Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
09	Connecticut	005	Litchfield Co	2610000100	9.381	0.000	37.525	0.000	12.732	12.732	0.025	0.000	0.102	0.000	0.035	0.035
09	Connecticut	001	Fairfield Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	Delaware	001	Kent Co	2610000100	3.032	0.000	12.126	0.000	4.114	4.114	0.008	0.000	0.033	0.000	0.011	0.011
10	Delaware	003	New Castle Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	Delaware	005	Sussex Co	2610000100	6.126	0.000	24.505	0.000	8.314	8.314	0.017	0.000	0.067	0.000	0.023	0.023
11	DC	001	Washington	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	Maine	021	Piscataquis Co	2610000100	1.539	0.000	6.155	0.000	2.088	2.088	0.004	0.000	0.017	0.000	0.006	0.006
23	Maine	023	Sagadahoc Co	2610000100	1.936	0.000	7.745	0.000	2.628	2.628	0.005	0.000	0.021	0.000	0.007	0.007
23	Maine	025	Somerset Co	2610000100	3.638	0.000	14.553	0.000	4.938	4.938	0.010	0.000	0.040	0.000	0.013	0.013
23	Maine	027	Waldo Co	2610000100	3.065	0.000	12.261	0.000	4.160	4.160	0.008	0.000	0.033	0.000	0.011	0.011
23	Maine	031	York Co	2610000100	9.107	0.000	36.430	0.000	12.360	12.360	0.025	0.000	0.099	0.000	0.034	0.034
23	Maine	019	Penobscot Co	2610000100	6.864	0.000	27.458	0.000	9.316	9.316	0.019	0.000	0.075	0.000	0.025	0.025
23	Maine	011	Kennebec Co	2610000100	5.710	0.000	22.841	0.000	7.750	7.750	0.016	0.000	0.062	0.000	0.021	0.021
23	Maine	029	Washington Co	2610000100	3.279	0.000	13.114	0.000	4.449	4.449	0.009	0.000	0.036	0.000	0.012	0.012
23	Maine	013	Knox Co	2610000100	1.312	0.000	5.247	0.000	1.780	1.780	0.004	0.000	0.014	0.000	0.005	0.005
23	Maine	009	Hancock Co	2610000100	4.045	0.000	16.179	0.000	5.489	5.489	0.011	0.000	0.044	0.000	0.015	0.015
23	Maine	007	Franklin Co	2610000100	2.511	0.000	10.044	0.000	3.408	3.408	0.007	0.000	0.027	0.000	0.009	0.009
23	Maine	005	Cumberland Co	2610000100	10.835	0.000	43.338	0.000	14.704	14.704	0.029	0.000	0.118	0.000	0.040	0.040
23	Maine	003	Aroostook Co	2610000100	4.488	0.000	17.952	0.000	6.091	6.091	0.012	0.000	0.049	0.000	0.017	0.017
23	Maine	001	Androscoggin Co	2610000100	3.319	0.000	13.275	0.000	4.504	4.504	0.009	0.000	0.036	0.000	0.012	0.012
23	Maine	017	Oxford Co	2610000100	4.649	0.000	18.596	0.000	6.309	6.309	0.013	0.000	0.051	0.000	0.017	0.017
23	Maine	015	Lincoln Co	2610000100	3.257	0.000	13.027	0.000	4.420	4.420	0.009	0.000	0.035	0.000	0.012	0.012
24	Maryland	510	Baltimore	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	029	Kent Co	2610000100	0.755	0.000	3.018	0.000	1.024	1.024	0.002	0.000	0.008	0.000	0.003	0.003
24	Maryland	031	Montgomery Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	033	Prince Georges Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	035	Queen Annes Co	2610000100	2.074	0.000	8.296	0.000	2.815	2.815	0.006	0.000	0.023	0.000	0.008	0.008
24	Maryland	037	St. Mary's Co	2610000100	3.303	0.000	13.211	0.000	4.482	4.482	0.009	0.000	0.036	0.000	0.012	0.012
24	Maryland	039	Somerset Co	2610000100	1.084	0.000	4.335	0.000	1.471	1.471	0.003	0.000	0.012	0.000	0.004	0.004
24	Maryland	041	Talbot Co	2610000100	1.185	0.000	4.742	0.000	1.609	1.609	0.003	0.000	0.013	0.000	0.004	0.004
24	Maryland	045	Wicomico Co	2610000100	5.481	0.000	21.924	0.000	7.438	7.438	0.015	0.000	0.060	0.000	0.020	0.020
24	Maryland	047	Worcester Co	2610000100	1.215	0.000	4.862	0.000	1.650	1.650	0.003	0.000	0.013	0.000	0.004	0.004
24	Maryland	027	Howard Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	043	Washington Co	2610000100	5.712	0.000	22.846	0.000	7.751	7.751	0.016	0.000	0.062	0.000	0.021	0.021
24	Maryland	009	Calvert Co	2610000100	3.362	0.000	13.449	0.000	4.563	4.563	0.009	0.000	0.037	0.000	0.012	0.012
24	Maryland	025	Harford Co	2610000100	3.364	0.000	13.455	0.000	4.565	4.565	0.009	0.000	0.037	0.000	0.012	0.012
24	Maryland	003	Anne Arundel Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	005	Baltimore Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	011	Caroline Co	2610000100	2.695	0.000	10.780	0.000	3.657	3.657	0.007	0.000	0.029	0.000	0.010	0.010
24	Maryland	013	Carroll Co	2610000100	5.357	0.000	21.430	0.000	7.271	7.271	0.015	0.000	0.058	0.000	0.020	0.020
24	Maryland	015	Cecil Co	2610000100	3.471	0.000	13.882	0.000	4.710	4.710	0.009	0.000	0.038	0.000	0.013	0.013
24	Maryland	017	Charles Co	2610000100	2.478	0.000	9.914	0.000	3.364	3.364	0.007	0.000	0.027	0.000	0.009	0.009
24	Maryland	019	Dorchester Co	2610000100	0.938	0.000	3.751	0.000	1.273	1.273	0.003	0.000	0.010	0.000	0.003	0.003
24	Maryland	021	Frederick Co	2610000100	8.228	0.000	32.913	0.000	11.167	11.167	0.022	0.000	0.089	0.000	0.030	0.030
24	Maryland	023	Garrett Co	2610000100	2.996	0.000	11.984	0.000	4.066	4.066	0.008	0.000	0.033	0.000	0.011	0.011
24	Maryland	001	Allegany Co	2610000100	2.276	0.000	9.105	0.000	3.089	3.089	0.006	0.000	0.025	0.000	0.008	0.008
25	Massachusetts	021	Norfolk Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	015	Hampshire Co	2610000100	5.059	0.000	20.237	0.000	6.866	6.866	0.014	0.000	0.055	0.000	0.019	0.019
25	Massachusetts	027	Worcester Co	2610000100	21.536	0.000	86.143	0.000	29.227	29.227	0.059	0.000	0.234	0.000	0.079	0.079
25	Massachusetts	023	Plymouth Co	2610000100	9.383	0.000	37.534	0.000	12.735	12.735	0.025	0.000	0.102	0.000	0.035	0.035
25	Massachusetts	019	Nantucket Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	017	Middlesex Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	001	Barnstable Co	2610000100	4.162	0.000	16.650	0.000	5.649	5.649	0.011	0.000	0.045	0.000	0.015	0.015
25	Massachusetts	011	Franklin Co	2610000100	4.897	0.000	19.589	0.000	6.646	6.646	0.013	0.000	0.053	0.000	0.018	0.018
25	Massachusetts	009	Essex Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	007	Dukes Co	2610000100	0.716	0.000	2.864	0.000	0.972	0.972	0.002	0.000	0.008	0.000	0.003	0.003
25	Massachusetts	005	Bristol Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	025	Suffolk Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	003	Berkshire Co	2610000100	5.176	0.000	20.703	0.000	7.024	7.024	0.014	0.000	0.056	0.000	0.019	0.019
25	Massachusetts	013	Hampden Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
33	New Hampshire	011	Hillsborough Co	2610000100	12.566	0.000	50.263	0.000	17.054	17.054	0.034	0.000	0.137	0.000	0.046	0.046
33	New Hampshire	019	Sullivan Co	2610000100	2.224	0.000	8.898	0.000	3.019	3.019	0.006	0.000	0.024	0.000	0.008	0.008
33	New Hampshire	017	Strafford Co	2610000100	2.882	0.000	11.528	0.000	3.911	3.911	0.008	0.000	0.031	0.000	0.011	0.011
33	New Hampshire	013	Merrimack Co	2610000100	7.028	0.000	28.110	0.000	9.537	9.537	0.019	0.000	0.076	0.000	0.026	0.026
33	New Hampshire	007	Coos Co	2610000100	2.272	0.000	9.088	0.000	3.083	3.083	0.00					

Table D-2. Waste Disposal, Treatment, and Recovery Open Burning All Categories Yard Waste - Leaf Species Unspecified

FIPSSST	STATENM	FIPSCNTY	COUNTYNM	SCC	VOC_ANN (Tons)	NOX_ANN (Tons)	CO_ANN (Tons)	SO2_ANN (Tons)	PM10_ANN (Tons)	PM25_ANN (Tons)	VOC_OSD (Tons)	NOX_OSD (Tons)	CO_OSD (Tons)	SO2_OSD (Tons)	PM10_OSD (Tons)	PM25_OSD (Tons)
34	New Jersey	027	Morris Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	029	Ocean Co	2610000100	5.169	0.000	20.676	0.000	7.015	7.015	0.014	0.000	0.056	0.000	0.019	0.019
34	New Jersey	031	Passaic Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	035	Somerset Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	039	Union Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	017	Hudson Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	033	Salem Co	2610000100	1.448	0.000	5.792	0.000	1.965	1.965	0.004	0.000	0.016	0.000	0.005	0.005
34	New Jersey	001	Atlantic Co	2610000100	5.917	0.000	23.667	0.000	8.030	8.030	0.016	0.000	0.064	0.000	0.022	0.022
34	New Jersey	015	Gloucester Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	013	Essex Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	011	Cumberland Co	2610000100	1.851	0.000	7.403	0.000	2.512	2.512	0.005	0.000	0.020	0.000	0.007	0.007
34	New Jersey	009	Cape May Co	2610000100	1.663	0.000	6.651	0.000	2.256	2.256	0.005	0.000	0.018	0.000	0.006	0.006
34	New Jersey	007	Camden Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	005	Burlington Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	003	Bergen Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	021	Mercer Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	019	Hunterdon Co	2610000100	11.300	0.000	45.201	0.000	15.336	15.336	0.031	0.000	0.123	0.000	0.042	0.042
36	New York	067	Onondaga Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	089	St. Lawrence Co	2610000100	6.730	0.000	26.921	0.000	9.134	9.134	0.018	0.000	0.073	0.000	0.025	0.025
36	New York	087	Rockland Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	085	Richmond Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	083	Rensselaer Co	2610000100	6.151	0.000	24.605	0.000	8.348	8.348	0.017	0.000	0.067	0.000	0.023	0.023
36	New York	081	Queens Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	079	Putnam Co	2610000100	5.381	0.000	21.522	0.000	7.302	7.302	0.015	0.000	0.058	0.000	0.020	0.020
36	New York	077	Otsego Co	2610000100	4.754	0.000	19.017	0.000	6.452	6.452	0.013	0.000	0.052	0.000	0.018	0.018
36	New York	075	Oswego Co	2610000100	8.686	0.000	34.743	0.000	11.788	11.788	0.024	0.000	0.094	0.000	0.032	0.032
36	New York	073	Orleans Co	2610000100	3.212	0.000	12.850	0.000	4.360	4.360	0.009	0.000	0.035	0.000	0.012	0.012
36	New York	069	Ontario Co	2610000100	7.513	0.000	30.054	0.000	10.197	10.197	0.020	0.000	0.082	0.000	0.028	0.028
36	New York	065	Oneida Co	2610000100	8.202	0.000	32.807	0.000	11.131	11.131	0.022	0.000	0.089	0.000	0.030	0.030
36	New York	091	Saratoga Co	2610000100	10.257	0.000	41.026	0.000	13.920	13.920	0.028	0.000	0.111	0.000	0.038	0.038
36	New York	113	Warren Co	2610000100	2.552	0.000	10.209	0.000	3.464	3.464	0.007	0.000	0.028	0.000	0.009	0.009
36	New York	071	Orange Co	2610000100	14.000	0.000	55.999	0.000	19.000	19.000	0.038	0.000	0.152	0.000	0.052	0.052
36	New York	093	Schenectady Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	097	Schuyler Co	2610000100	1.960	0.000	7.841	0.000	2.660	2.660	0.005	0.000	0.021	0.000	0.007	0.007
36	New York	101	Steuben Co	2610000100	6.911	0.000	27.645	0.000	9.379	9.379	0.019	0.000	0.075	0.000	0.025	0.025
36	New York	103	Suffolk Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	105	Sullivan Co	2610000100	5.974	0.000	23.896	0.000	8.108	8.108	0.016	0.000	0.065	0.000	0.022	0.022
36	New York	107	Tioga Co	2610000100	3.619	0.000	14.478	0.000	4.912	4.912	0.010	0.000	0.039	0.000	0.013	0.013
36	New York	063	Niagara Co	2610000100	3.153	0.000	12.610	0.000	4.279	4.279	0.009	0.000	0.034	0.000	0.012	0.012
36	New York	111	Ulster Co	2610000100	11.938	0.000	47.751	0.000	16.201	16.201	0.032	0.000	0.130	0.000	0.044	0.044
36	New York	095	Schoharie Co	2610000100	2.727	0.000	10.907	0.000	3.701	3.701	0.007	0.000	0.030	0.000	0.010	0.010
36	New York	115	Washington Co	2610000100	3.960	0.000	15.839	0.000	5.374	5.374	0.011	0.000	0.043	0.000	0.015	0.015
36	New York	117	Wayne Co	2610000100	7.808	0.000	31.230	0.000	10.596	10.596	0.021	0.000	0.085	0.000	0.029	0.029
36	New York	119	Westchester Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	121	Wyoming Co	2610000100	3.374	0.000	13.497	0.000	4.580	4.580	0.009	0.000	0.037	0.000	0.012	0.012
36	New York	123	Yates Co	2610000100	1.927	0.000	7.708	0.000	2.615	2.615	0.005	0.000	0.021	0.000	0.007	0.007
36	New York	109	Tompkins Co	2610000100	4.651	0.000	18.605	0.000	6.313	6.313	0.013	0.000	0.051	0.000	0.017	0.017
36	New York	013	Chautauqua Co	2610000100	6.669	0.000	26.678	0.000	9.051	9.051	0.018	0.000	0.072	0.000	0.025	0.025
36	New York	027	Dutchess Co	2610000100	11.903	0.000	47.611	0.000	16.154	16.154	0.032	0.000	0.129	0.000	0.044	0.044
36	New York	025	Delaware Co	2610000100	3.614	0.000	14.454	0.000	4.904	4.904	0.010	0.000	0.039	0.000	0.013	0.013
36	New York	023	Cortland Co	2610000100	2.567	0.000	10.270	0.000	3.484	3.484	0.007	0.000	0.028	0.000	0.009	0.009
36	New York	021	Columbia Co	2610000100	5.603	0.000	22.411	0.000	7.604	7.604	0.015	0.000	0.061	0.000	0.021	0.021
36	New York	019	Clinton Co	2610000100	5.222	0.000	20.888	0.000	7.087	7.087	0.014	0.000	0.057	0.000	0.019	0.019
36	New York	029	Erie Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	015	Chemung Co	2610000100	2.550	0.000	10.201	0.000	3.461	3.461	0.007	0.000	0.028	0.000	0.009	0.009
36	New York	011	Cayuga Co	2610000100	5.167	0.000	20.667	0.000	7.012	7.012	0.014	0.000	0.056	0.000	0.019	0.019
36	New York	009	Cattaraugus Co	2610000100	6.002	0.000	24.007	0.000	8.145	8.145	0.016	0.000	0.065	0.000	0.022	0.022
36	New York	005	Bronx Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	003	Allegany Co	2610000100	4.153	0.000	16.611	0.000	5.636	5.636	0.011	0.000	0.045	0.000	0.015	0.015
36	New York	001	Albany Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	061	New York Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	099	Seneca Co	2610000100	1.024	0.000	4.096	0.000	1.390	1.390	0.003	0.000	0.011	0.000	0.004	0.004
36	New York	017	Chenango Co	2610000100	4.409	0.000	17.636	0.000	5.984	5.984	0.012	0.000	0.048	0.000	0.016	0.016
36	New York	051	Livingston Co	2610000100	4.746	0.000	18.983	0.000	6.441	6.441	0.013	0.000	0.052	0.000	0.018	0.018
36	New York	059	Nassau Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	057	Montgomery Co	2610000100	3.089	0.000	12.356	0.000	4.192	4.192	0.008	0.000	0.034	0.000	0.011	0.011
36	New York	007	Broome Co	2610000100	5.688	0.000	22.752	0.000	7.719	7.719	0.015	0.000	0.062	0.000	0.021	0.021
36	New York	031	Essex Co	2610000100	1.699	0.000	6.796	0.000	2.306	2.306	0.005	0.000	0.018	0.000	0.006	0.006
36	New York	055	Monroe Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	053	Madison Co	2610000100	4.188	0.000	16.752	0.000	5.684	5.684	0.011	0.000	0.046	0.000	0.015	0.015
36	New York	049	Lewis Co	2610000100	2.405	0.000	9.619	0.000	3.264	3.264	0.007	0.000	0.026	0.000	0.009	

Table D-2. Waste Disposal, Treatment, and Recovery Open Burning All Categories Yard Waste - Leaf Species Unspecified

FIPSST	STATENM	FIPSCNTY	COUNTYNM	SCC	VOC_ANN (Tons)	NOX_ANN (Tons)	CO_ANN (Tons)	SO2_ANN (Tons)	PM10_ANN (Tons)	PM25_ANN (Tons)	VOC_OSD (Tons)	NOX_OSD (Tons)	CO_OSD (Tons)	SO2_OSD (Tons)	PM10_OSD (Tons)	PM25_OSD (Tons)
42	Pennsylvania	099	Perry Co	2610000100	4.248	0.000	16.993	0.000	5.766	5.766	0.012	0.000	0.046	0.000	0.016	0.016
42	Pennsylvania	097	Northumberland Co	2610000100	4.845	0.000	19.380	0.000	6.575	6.575	0.013	0.000	0.053	0.000	0.018	0.018
42	Pennsylvania	095	Northampton Co	2610000100	7.937	0.000	31.748	0.000	10.772	10.772	0.022	0.000	0.086	0.000	0.029	0.029
42	Pennsylvania	093	Montour Co	2610000100	0.493	0.000	1.972	0.000	0.669	0.669	0.001	0.000	0.005	0.000	0.002	0.002
42	Pennsylvania	091	Montgomery Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	089	Monroe Co	2610000100	10.522	0.000	42.089	0.000	14.280	14.280	0.029	0.000	0.114	0.000	0.039	0.039
42	Pennsylvania	087	Mifflin Co	2610000100	3.806	0.000	15.224	0.000	5.165	5.165	0.010	0.000	0.041	0.000	0.014	0.014
42	Pennsylvania	069	Lackawanna Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	083	McKean Co	2610000100	3.274	0.000	13.097	0.000	4.444	4.444	0.009	0.000	0.036	0.000	0.012	0.012
42	Pennsylvania	077	Lehigh Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	073	Lawrence Co	2610000100	5.215	0.000	20.858	0.000	7.077	7.077	0.014	0.000	0.057	0.000	0.019	0.019
42	Pennsylvania	101	Philadelphia Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	123	Warren Co	2610000100	3.337	0.000	13.346	0.000	4.528	4.528	0.009	0.000	0.036	0.000	0.012	0.012
42	Pennsylvania	071	Lancaster Co	2610000100	9.949	0.000	39.795	0.000	13.502	13.502	0.027	0.000	0.108	0.000	0.037	0.037
42	Pennsylvania	085	Mercer Co	2610000100	6.072	0.000	24.287	0.000	8.240	8.240	0.016	0.000	0.066	0.000	0.022	0.022
42	Pennsylvania	117	Tioga Co	2610000100	3.528	0.000	14.111	0.000	4.788	4.788	0.010	0.000	0.038	0.000	0.013	0.013
42	Pennsylvania	067	Juniata Co	2610000100	2.264	0.000	9.054	0.000	3.072	3.072	0.006	0.000	0.025	0.000	0.008	0.008
42	Pennsylvania	075	Lebanon Co	2610000100	6.929	0.000	27.717	0.000	9.404	9.404	0.019	0.000	0.075	0.000	0.026	0.026
42	Pennsylvania	133	York Co	2610000100	8.837	0.000	35.347	0.000	11.993	11.993	0.024	0.000	0.096	0.000	0.033	0.033
42	Pennsylvania	131	Wyoming Co	2610000100	2.987	0.000	11.947	0.000	4.053	4.053	0.008	0.000	0.032	0.000	0.011	0.011
42	Pennsylvania	129	Westmoreland Co	2610000100	14.111	0.000	56.444	0.000	19.151	19.151	0.038	0.000	0.153	0.000	0.052	0.052
42	Pennsylvania	127	Wayne Co	2610000100	4.113	0.000	16.453	0.000	5.582	5.582	0.011	0.000	0.045	0.000	0.015	0.015
42	Pennsylvania	119	Union Co	2610000100	3.075	0.000	12.298	0.000	4.173	4.173	0.008	0.000	0.033	0.000	0.011	0.011
42	Pennsylvania	121	Venango Co	2610000100	3.537	0.000	14.148	0.000	4.800	4.800	0.010	0.000	0.038	0.000	0.013	0.013
42	Pennsylvania	103	Pike Co	2610000100	4.216	0.000	16.864	0.000	5.722	5.722	0.011	0.000	0.046	0.000	0.016	0.016
42	Pennsylvania	115	Susquehanna Co	2610000100	4.301	0.000	17.204	0.000	5.837	5.837	0.012	0.000	0.047	0.000	0.016	0.016
42	Pennsylvania	113	Sullivan Co	2610000100	0.616	0.000	2.462	0.000	0.835	0.835	0.002	0.000	0.007	0.000	0.002	0.002
42	Pennsylvania	111	Somerset Co	2610000100	6.570	0.000	26.278	0.000	8.916	8.916	0.018	0.000	0.071	0.000	0.024	0.024
42	Pennsylvania	109	Snyder Co	2610000100	3.295	0.000	13.178	0.000	4.471	4.471	0.009	0.000	0.036	0.000	0.012	0.012
42	Pennsylvania	107	Schuylkill Co	2610000100	8.850	0.000	35.401	0.000	12.011	12.011	0.024	0.000	0.096	0.000	0.033	0.033
42	Pennsylvania	105	Potter Co	2610000100	1.447	0.000	5.789	0.000	1.964	1.964	0.004	0.000	0.016	0.000	0.005	0.005
42	Pennsylvania	125	Washington Co	2610000100	8.782	0.000	35.129	0.000	11.919	11.919	0.024	0.000	0.095	0.000	0.032	0.032
42	Pennsylvania	015	Bradford Co	2610000100	5.036	0.000	20.146	0.000	6.835	6.835	0.014	0.000	0.055	0.000	0.019	0.019
42	Pennsylvania	031	Clarion Co	2610000100	3.589	0.000	14.356	0.000	4.871	4.871	0.010	0.000	0.039	0.000	0.013	0.013
42	Pennsylvania	029	Chester Co	2610000100	8.537	0.000	34.150	0.000	11.586	11.586	0.023	0.000	0.093	0.000	0.031	0.031
42	Pennsylvania	027	Centre Co	2610000100	5.756	0.000	23.025	0.000	7.812	7.812	0.016	0.000	0.063	0.000	0.021	0.021
42	Pennsylvania	025	Carbon Co	2610000100	2.850	0.000	11.402	0.000	3.869	3.869	0.008	0.000	0.031	0.000	0.011	0.011
42	Pennsylvania	023	Cameron Co	2610000100	0.328	0.000	1.312	0.000	0.445	0.445	0.001	0.000	0.004	0.000	0.001	0.001
42	Pennsylvania	021	Cambria Co	2610000100	7.590	0.000	30.362	0.000	10.301	10.301	0.021	0.000	0.083	0.000	0.028	0.028
42	Pennsylvania	033	Clearfield Co	2610000100	6.350	0.000	25.398	0.000	8.617	8.617	0.017	0.000	0.069	0.000	0.023	0.023
42	Pennsylvania	017	Bucks Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	009	Bedford Co	2610000100	4.735	0.000	18.939	0.000	6.426	6.426	0.013	0.000	0.051	0.000	0.017	0.017
42	Pennsylvania	013	Blair Co	2610000100	4.638	0.000	18.552	0.000	6.295	6.295	0.013	0.000	0.050	0.000	0.017	0.017
42	Pennsylvania	011	Berks Co	2610000100	13.899	0.000	55.598	0.000	18.864	18.864	0.038	0.000	0.151	0.000	0.051	0.051
42	Pennsylvania	007	Beaver Co	2610000100	4.637	0.000	18.549	0.000	6.293	6.293	0.013	0.000	0.050	0.000	0.017	0.017
42	Pennsylvania	003	Allegheny Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	065	Jefferson Co	2610000100	3.293	0.000	13.172	0.000	4.469	4.469	0.009	0.000	0.036	0.000	0.012	0.012
42	Pennsylvania	079	Luzerne Co	2610000100	8.620	0.000	34.481	0.000	11.699	11.699	0.023	0.000	0.094	0.000	0.032	0.032
42	Pennsylvania	019	Butler Co	2610000100	11.857	0.000	47.427	0.000	16.091	16.091	0.032	0.000	0.129	0.000	0.044	0.044
42	Pennsylvania	051	Fayette Co	2610000100	10.380	0.000	41.518	0.000	14.087	14.087	0.028	0.000	0.113	0.000	0.038	0.038
42	Pennsylvania	035	Clinton Co	2610000100	2.818	0.000	11.273	0.000	3.825	3.825	0.008	0.000	0.031	0.000	0.010	0.010
42	Pennsylvania	061	Huntingdon Co	2610000100	3.558	0.000	14.233	0.000	4.829	4.829	0.010	0.000	0.039	0.000	0.013	0.013
42	Pennsylvania	001	Adams Co	2610000100	7.488	0.000	29.953	0.000	10.162	10.162	0.020	0.000	0.081	0.000	0.028	0.028
42	Pennsylvania	063	Indiana Co	2610000100	7.081	0.000	28.325	0.000	9.610	9.610	0.019	0.000	0.077	0.000	0.026	0.026
42	Pennsylvania	057	Fulton Co	2610000100	1.490	0.000	5.960	0.000	2.022	2.022	0.004	0.000	0.016	0.000	0.005	0.005
42	Pennsylvania	005	Armstrong Co	2610000100	6.340	0.000	25.359	0.000	8.604	8.604	0.017	0.000	0.069	0.000	0.023	0.023
42	Pennsylvania	053	Forest Co	2610000100	0.503	0.000	2.014	0.000	0.683	0.683	0.001	0.000	0.005	0.000	0.002	0.002
42	Pennsylvania	059	Greene Co	2610000100	3.826	0.000	15.305	0.000	5.193	5.193	0.010	0.000	0.042	0.000	0.014	0.014
42	Pennsylvania	049	Erie Co	2610000100	7.112	0.000	28.450	0.000	9.653	9.653	0.019	0.000	0.077	0.000	0.026	0.026
42	Pennsylvania	047	Elk Co	2610000100	2.131	0.000	8.522	0.000	2.891	2.891	0.006	0.000	0.023	0.000	0.008	0.008
42	Pennsylvania	045	Delaware Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	043	Dauphin Co	2610000100	6.219	0.000	24.876	0.000	8.440	8.440	0.017	0.000	0.068	0.000	0.023	0.023
42	Pennsylvania	041	Cumberland Co	2610000100	7.785	0.000	31.140	0.000	10.565	10.565	0.021	0.000	0.085	0.000	0.029	0.029
42	Pennsylvania	039	Crawford Co	2610000100	6.896	0.000	27.584	0.000	9.359	9.359	0.019	0.000	0.075	0.000	0.025	0.025
42	Pennsylvania	037	Columbia Co	2610000100	4.086	0.000	16.343	0.000	5.545	5.545	0.011	0.000	0.044	0.000	0.015	0.015
42	Pennsylvania	055	Franklin Co	2610000100	9.338	0.000	37.353	0.000	12.673	12.673	0.025	0.000	0.102	0.000	0.034	0.034
44	Rhode Island	005	Newport Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	Rhode Island	007	Providence Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	Rhode Island	003	Kent Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	Rhode Island	001	Bristol Co	2610000100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	Rhode Island	009	Washington Co	2610000100	3.363	0.000	13.451									

Table D-2. Waste Disposal, Treatment, and Recovery Open Burning All Categories Yard Waste - Leaf Species Unspecified

FIPSSST	STATENM	FIPSCNTY	COUNTYNM	SCC	VOC_ANN (Tons)	NOX_ANN (Tons)	CO_ANN (Tons)	SO2_ANN (Tons)	PM10_ANN (Tons)	PM25_ANN (Tons)	VOC_OSD (Tons)	NOX_OSD (Tons)	CO_OSD (Tons)	SO2_OSD (Tons)	PM10_OSD (Tons)	PM25_OSD (Tons)
50	Vermont	007	Chittenden Co	2610000100	4.999	0.000	19.997	0.000	6.785	6.785	0.014	0.000	0.054	0.000	0.018	0.018
50	Vermont	005	Caledonia Co	2610000100	2.260	0.000	9.041	0.000	3.068	3.068	0.006	0.000	0.025	0.000	0.008	0.008
50	Vermont	003	Bennington Co	2610000100	2.691	0.000	10.766	0.000	3.653	3.653	0.007	0.000	0.029	0.000	0.010	0.010
50	Vermont	001	Addison Co	2610000100	2.672	0.000	10.687	0.000	3.626	3.626	0.007	0.000	0.029	0.000	0.010	0.010
50	Vermont	017	Orange Co	2610000100	2.841	0.000	11.365	0.000	3.856	3.856	0.008	0.000	0.031	0.000	0.010	0.010
Total					941	0	3,765	0	1,277	1,277	3	0	10	0	3	3

Table D-3. Waste Disposal, Treatment, and Recovery Open Burning All Categories Yard Waste - Brush Species Unspecified

FIPSS	STATENM	FIPSCNTY	COUNTYNM	SCC	VOC_ANN (Tons)	NOX_ANN (Tons)	CO_ANN (Tons)	SO2_ANN (Tons)	PM10_ANN (Tons)	PM25_ANN (Tons)	VOC_OSD (Tons)	NOX_OSD (Tons)	CO_OSD (Tons)	SO2_OSD (Tons)	PM10_OSD (Tons)	PM25_OSD (Tons)
09	Connecticut	001	Fairfield Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
09	Connecticut	003	Hartford Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
09	Connecticut	005	Litchfield Co	2610000400	6.366	0.000	46.906	0.000	5.696	5.696	0.017	0.000	0.127	0.000	0.015	0.015
09	Connecticut	007	Middlesex Co	2610000400	4.957	0.000	36.527	0.000	4.435	4.435	0.013	0.000	0.099	0.000	0.012	0.012
09	Connecticut	009	New Haven Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
09	Connecticut	011	New London Co	2610000400	5.796	0.000	42.709	0.000	5.186	5.186	0.016	0.000	0.116	0.000	0.014	0.014
09	Connecticut	013	Tolland Co	2610000400	5.300	0.000	39.053	0.000	4.742	4.742	0.014	0.000	0.106	0.000	0.013	0.013
09	Connecticut	015	Windham Co	2610000400	4.956	0.000	36.519	0.000	4.434	4.434	0.013	0.000	0.099	0.000	0.012	0.012
10	Delaware	001	Kent Co	2610000400	2.057	0.000	15.158	0.000	1.841	1.841	0.006	0.000	0.041	0.000	0.005	0.005
10	Delaware	003	New Castle Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	Delaware	005	Sussex Co	2610000400	4.157	0.000	30.631	0.000	3.720	3.720	0.011	0.000	0.083	0.000	0.010	0.010
11	DC	001	Washington	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	Maine	001	Androscoggin Co	2610000400	2.252	0.000	16.593	0.000	2.015	2.015	0.006	0.000	0.045	0.000	0.005	0.005
23	Maine	003	Aroostook Co	2610000400	3.045	0.000	22.440	0.000	2.725	2.725	0.008	0.000	0.067	0.000	0.007	0.007
23	Maine	005	Cumberland Co	2610000400	7.352	0.000	54.173	0.000	6.578	6.578	0.020	0.000	0.147	0.000	0.018	0.018
23	Maine	007	Franklin Co	2610000400	1.704	0.000	12.555	0.000	1.524	1.524	0.005	0.000	0.034	0.000	0.004	0.004
23	Maine	009	Hancock Co	2610000400	2.745	0.000	20.224	0.000	2.456	2.456	0.007	0.000	0.055	0.000	0.007	0.007
23	Maine	011	Kennebec Co	2610000400	3.875	0.000	28.551	0.000	3.467	3.467	0.011	0.000	0.078	0.000	0.009	0.009
23	Maine	013	Knox Co	2610000400	0.890	0.000	6.558	0.000	0.796	0.796	0.002	0.000	0.018	0.000	0.002	0.002
23	Maine	015	Lincoln Co	2610000400	2.210	0.000	16.284	0.000	1.977	1.977	0.006	0.000	0.044	0.000	0.005	0.005
23	Maine	017	Oxford Co	2610000400	3.155	0.000	23.245	0.000	2.823	2.823	0.009	0.000	0.063	0.000	0.008	0.008
23	Maine	019	Penobscot Co	2610000400	4.658	0.000	34.322	0.000	4.168	4.168	0.013	0.000	0.093	0.000	0.011	0.011
23	Maine	021	Piscataquis Co	2610000400	1.044	0.000	7.694	0.000	0.934	0.934	0.003	0.000	0.021	0.000	0.003	0.003
23	Maine	023	Sagadahoc Co	2610000400	1.314	0.000	9.682	0.000	1.176	1.176	0.004	0.000	0.026	0.000	0.003	0.003
23	Maine	025	Somerset Co	2610000400	2.469	0.000	18.191	0.000	2.209	2.209	0.007	0.000	0.049	0.000	0.006	0.006
23	Maine	027	Waldo Co	2610000400	2.080	0.000	15.326	0.000	1.861	1.861	0.006	0.000	0.042	0.000	0.005	0.005
23	Maine	029	Washington Co	2610000400	2.225	0.000	16.393	0.000	1.991	1.991	0.006	0.000	0.045	0.000	0.005	0.005
23	Maine	031	York Co	2610000400	6.180	0.000	45.537	0.000	5.529	5.529	0.017	0.000	0.124	0.000	0.015	0.015
24	Maryland	001	Allegany Co	2610000400	1.545	0.000	11.381	0.000	1.382	1.382	0.004	0.000	0.031	0.000	0.004	0.004
24	Maryland	003	Anne Arundel Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	005	Baltimore Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	009	Calvert Co	2610000400	2.282	0.000	16.812	0.000	2.041	2.041	0.006	0.000	0.046	0.000	0.006	0.006
24	Maryland	011	Caroline Co	2610000400	1.829	0.000	13.474	0.000	1.636	1.636	0.005	0.000	0.037	0.000	0.004	0.004
24	Maryland	013	Carroll Co	2610000400	3.635	0.000	26.787	0.000	3.253	3.253	0.010	0.000	0.073	0.000	0.009	0.009
24	Maryland	015	Cecil Co	2610000400	2.355	0.000	17.353	0.000	2.107	2.107	0.006	0.000	0.047	0.000	0.006	0.006
24	Maryland	017	Charles Co	2610000400	1.682	0.000	12.392	0.000	1.505	1.505	0.005	0.000	0.034	0.000	0.004	0.004
24	Maryland	019	Dorchester Co	2610000400	0.636	0.000	4.689	0.000	0.569	0.569	0.002	0.000	0.013	0.000	0.002	0.002
24	Maryland	021	Frederick Co	2610000400	5.583	0.000	41.141	0.000	4.996	4.996	0.015	0.000	0.112	0.000	0.014	0.014
24	Maryland	023	Garrett Co	2610000400	2.033	0.000	14.980	0.000	1.819	1.819	0.006	0.000	0.041	0.000	0.005	0.005
24	Maryland	025	Harford Co	2610000400	2.283	0.000	16.819	0.000	2.042	2.042	0.006	0.000	0.046	0.000	0.006	0.006
24	Maryland	027	Howard Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	029	Kent Co	2610000400	0.512	0.000	3.773	0.000	0.458	0.458	0.001	0.000	0.010	0.000	0.001	0.001
24	Maryland	031	Montgomery Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	033	Prince Georges Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	Maryland	035	Queen Annes Co	2610000400	1.407	0.000	10.370	0.000	1.259	1.259	0.004	0.000	0.028	0.000	0.003	0.003
24	Maryland	037	St. Mary's Co	2610000400	2.241	0.000	16.513	0.000	2.005	2.005	0.006	0.000	0.045	0.000	0.005	0.005
24	Maryland	039	Somerset Co	2610000400	0.735	0.000	5.418	0.000	0.658	0.658	0.002	0.000	0.015	0.000	0.002	0.002
24	Maryland	041	Talbot Co	2610000400	0.804	0.000	5.927	0.000	0.720	0.720	0.002	0.000	0.016	0.000	0.002	0.002
24	Maryland	043	Washington Co	2610000400	3.876	0.000	28.558	0.000	3.468	3.468	0.011	0.000	0.078	0.000	0.009	0.009
24	Maryland	045	Wicomico Co	2610000400	3.719	0.000	27.405	0.000	3.328	3.328	0.010	0.000	0.074	0.000	0.009	0.009
24	Maryland	047	Worcester Co	2610000400	0.825	0.000	6.077	0.000	0.738	0.738	0.002	0.000	0.017	0.000	0.002	0.002
24	Maryland	510	Baltimore	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	001	Barnstable Co	2610000400	2.825	0.000	20.812	0.000	2.527	2.527	0.008	0.000	0.057	0.000	0.007	0.007
25	Massachusetts	003	Berkshire Co	2610000400	3.512	0.000	25.879	0.000	3.142	3.142	0.010	0.000	0.070	0.000	0.009	0.009
25	Massachusetts	005	Bristol Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	007	Dukes Co	2610000400	0.486	0.000	3.580	0.000	0.435	0.435	0.001	0.000	0.010	0.000	0.001	0.001
25	Massachusetts	009	Essex Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	011	Franklin Co	2610000400	3.323	0.000	24.486	0.000	2.973	2.973	0.009	0.000	0.067	0.000	0.008	0.008
25	Massachusetts	013	Hampden Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	015	Hampshire Co	2610000400	3.433	0.000	25.296	0.000	3.072	3.072	0.009	0.000	0.069	0.000	0.008	0.008
25	Massachusetts	017	Middlesex Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	019	Nantucket Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	021	Norfolk Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	023	Plymouth Co	2610000400	6.367	0.000	46.917	0.000	5.697	5.697	0.017	0.000	0.127	0.000	0.015	0.015
25	Massachusetts	025	Suffolk Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	Massachusetts	027	Worcester Co	2610000400	14.613	0.000	107.678	0.000	13.075	13.075	0.040	0.000	0.293	0.000	0.036	0.036
33	New Hampshire	001	Belknap Co	2610000400	2.454	0.000	18.083	0.000	2.196	2.196	0.007	0.000	0.049	0.000	0.006	0.006
33	New Hampshire	003	Carroll Co	2610000400	2.557	0.000	18.838	0.000	2.287	2.287	0.007	0.000	0.051	0.000	0.006	0.006
33	New Hampshire	005	Cheshire Co	2610000400	3.242	0.000	23.891	0.000	2.901	2.901	0.009	0.000	0.065	0.000	0.008	0.008
33	New Hampshire	007	Coos Co	2610000400	1.542	0.000	11.359	0.000	1.379	1.379	0.004	0.000	0.031	0.000	0.004	0.004
33	New Hampshire	009	Grafton Co	2610000400	3.464	0.000	25.521	0.000	3.099	3.099	0.009	0.000				

Table D-3. Waste Disposal, Treatment, and Recovery Open Burning All Categories Yard Waste - Brush Species Unspecified

FIPSS	STATENM	FIPSCNTY	COUNTYNM	SCC	VOC_ANN (Tons)	NOX_ANN (Tons)	CO_ANN (Tons)	SO2_ANN (Tons)	PM10_ANN (Tons)	PM25_ANN (Tons)	VOC OSD (Tons)	NOX OSD (Tons)	CO OSD (Tons)	SO2 OSD (Tons)	PM10 OSD (Tons)	PM25 OSD (Tons)
34	New Jersey	009	Cape May Co	2610000400	1.128	0.000	8.313	0.000	1.009	1.009	0.003	0.000	0.023	0.000	0.003	0.003
34	New Jersey	011	Cumberland Co	2610000400	1.256	0.000	9.254	0.000	1.124	1.124	0.003	0.000	0.025	0.000	0.003	0.003
34	New Jersey	013	Essex Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	015	Gloucester Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	017	Hudson Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	019	Hunterdon Co	2610000400	7.668	0.000	56.501	0.000	6.861	6.861	0.021	0.000	0.154	0.000	0.019	0.019
34	New Jersey	021	Mercer Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	023	Middlesex Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	025	Monmouth Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	027	Morris Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	029	Ocean Co	2610000400	3.507	0.000	25.845	0.000	3.138	3.138	0.010	0.000	0.070	0.000	0.009	0.009
34	New Jersey	031	Passaic Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	033	Salem Co	2610000400	0.983	0.000	7.240	0.000	0.879	0.879	0.003	0.000	0.020	0.000	0.002	0.002
34	New Jersey	035	Somerset Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	037	Sussex Co	2610000400	5.937	0.000	43.743	0.000	5.312	5.312	0.016	0.000	0.119	0.000	0.014	0.014
34	New Jersey	039	Union Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
34	New Jersey	041	Warren Co	2610000400	3.235	0.000	23.840	0.000	2.895	2.895	0.009	0.000	0.065	0.000	0.008	0.008
36	New York	001	Albany Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	003	Allegany Co	2610000400	2.818	0.000	20.763	0.000	2.521	2.521	0.008	0.000	0.056	0.000	0.007	0.007
36	New York	005	Bronx Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	007	Broome Co	2610000400	3.860	0.000	28.439	0.000	3.453	3.453	0.010	0.000	0.077	0.000	0.009	0.009
36	New York	009	Cattaraugus Co	2610000400	4.073	0.000	30.009	0.000	3.644	3.644	0.011	0.000	0.082	0.000	0.010	0.010
36	New York	011	Cayuga Co	2610000400	3.506	0.000	25.834	0.000	3.137	3.137	0.010	0.000	0.070	0.000	0.009	0.009
36	New York	013	Chautauqua Co	2610000400	4.526	0.000	33.347	0.000	4.049	4.049	0.012	0.000	0.091	0.000	0.011	0.011
36	New York	015	Chemung Co	2610000400	1.730	0.000	12.751	0.000	1.548	1.548	0.005	0.000	0.035	0.000	0.004	0.004
36	New York	017	Chenango Co	2610000400	2.992	0.000	22.045	0.000	2.677	2.677	0.008	0.000	0.060	0.000	0.007	0.007
36	New York	019	Clinton Co	2610000400	3.543	0.000	26.110	0.000	3.170	3.170	0.010	0.000	0.071	0.000	0.009	0.009
36	New York	021	Columbia Co	2610000400	3.802	0.000	28.013	0.000	3.402	3.402	0.010	0.000	0.076	0.000	0.009	0.009
36	New York	023	Cortland Co	2610000400	1.742	0.000	12.837	0.000	1.559	1.559	0.005	0.000	0.035	0.000	0.004	0.004
36	New York	025	Delaware Co	2610000400	2.452	0.000	18.068	0.000	2.194	2.194	0.007	0.000	0.049	0.000	0.006	0.006
36	New York	027	Dutchess Co	2610000400	8.077	0.000	59.514	0.000	7.227	7.227	0.022	0.000	0.162	0.000	0.020	0.020
36	New York	029	Erie Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	031	Essex Co	2610000400	1.153	0.000	8.494	0.000	1.031	1.031	0.003	0.000	0.023	0.000	0.003	0.003
36	New York	033	Franklin Co	2610000400	2.283	0.000	16.822	0.000	2.043	2.043	0.006	0.000	0.046	0.000	0.006	0.006
36	New York	035	Fulton Co	2610000400	1.921	0.000	14.158	0.000	1.719	1.719	0.005	0.000	0.038	0.000	0.005	0.005
36	New York	037	Genesee Co	2610000400	2.700	0.000	19.893	0.000	2.416	2.416	0.007	0.000	0.054	0.000	0.007	0.007
36	New York	039	Greene Co	2610000400	2.785	0.000	20.522	0.000	2.492	2.492	0.008	0.000	0.056	0.000	0.007	0.007
36	New York	041	Hamilton Co	2610000400	0.180	0.000	1.323	0.000	0.161	0.161	0.000	0.000	0.004	0.000	0.000	0.000
36	New York	043	Herkimer Co	2610000400	1.213	0.000	8.941	0.000	1.086	1.086	0.003	0.000	0.024	0.000	0.003	0.003
36	New York	045	Jefferson Co	2610000400	4.496	0.000	33.125	0.000	4.022	4.022	0.012	0.000	0.090	0.000	0.011	0.011
36	New York	047	Kings Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	049	Lewis Co	2610000400	1.632	0.000	12.024	0.000	1.460	1.460	0.004	0.000	0.033	0.000	0.004	0.004
36	New York	051	Livingston Co	2610000400	3.220	0.000	23.729	0.000	2.881	2.881	0.009	0.000	0.064	0.000	0.008	0.008
36	New York	053	Madison Co	2610000400	2.842	0.000	20.940	0.000	2.543	2.543	0.008	0.000	0.057	0.000	0.007	0.007
36	New York	055	Monroe Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	057	Montgomery Co	2610000400	2.096	0.000	15.445	0.000	1.876	1.876	0.006	0.000	0.042	0.000	0.005	0.005
36	New York	059	Nassau Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	061	New York Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	063	Niagara Co	2610000400	2.139	0.000	15.763	0.000	1.914	1.914	0.006	0.000	0.043	0.000	0.005	0.005
36	New York	065	Oneida Co	2610000400	5.566	0.000	41.009	0.000	4.980	4.980	0.015	0.000	0.111	0.000	0.014	0.014
36	New York	067	Onondaga Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	069	Ontario Co	2610000400	5.098	0.000	37.567	0.000	4.562	4.562	0.014	0.000	0.102	0.000	0.012	0.012
36	New York	071	Orange Co	2610000400	9.500	0.000	69.998	0.000	8.500	8.500	0.026	0.000	0.190	0.000	0.023	0.023
36	New York	073	Orleans Co	2610000400	2.180	0.000	16.062	0.000	1.950	1.950	0.006	0.000	0.044	0.000	0.005	0.005
36	New York	075	Oswego Co	2610000400	5.894	0.000	43.429	0.000	5.273	5.273	0.016	0.000	0.118	0.000	0.014	0.014
36	New York	077	Otsego Co	2610000400	3.226	0.000	23.771	0.000	2.886	2.886	0.009	0.000	0.065	0.000	0.008	0.008
36	New York	079	Putnam Co	2610000400	3.651	0.000	26.903	0.000	3.267	3.267	0.010	0.000	0.073	0.000	0.009	0.009
36	New York	081	Queens Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	083	Rensselaer Co	2610000400	4.174	0.000	30.756	0.000	3.735	3.735	0.011	0.000	0.084	0.000	0.010	0.010
36	New York	085	Richmond Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	087	Rockland Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	089	St. Lawrence Co	2610000400	4.567	0.000	33.651	0.000	4.086	4.086	0.012	0.000	0.091	0.000	0.011	0.011
36	New York	091	Saratoga Co	2610000400	6.960	0.000	51.283	0.000	6.227	6.227	0.019	0.000	0.139	0.000	0.017	0.017
36	New York	093	Schenectady Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	095	Schoharie Co	2610000400	1.850	0.000	13.634	0.000	1.656	1.656	0.005	0.000	0.037	0.000	0.004	0.004
36	New York	097	Schuyler Co	2610000400	1.330	0.000	9.801	0.000	1.190	1.190	0.004	0.000	0.027	0.000	0.003	0.003
36	New York	099	Seneca Co	2610000400	0.695	0.000	5.120	0.000	0.622	0.622	0.002	0.000	0.014	0.000	0.002	0.002
36	New York	101	Steuben Co	2610000400	4.690	0.000	34.556	0.000	4.196	4.196	0.013	0.000	0.094	0.000	0.011	0.011
36	New York	103	Suffolk Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	New York	105	Sullivan Co	2610000400	4.054	0.000	29.870	0.000	3.627	3.627	0.011	0.000	0.081	0.000	0.010	0.010
36	New York	107	Tioga Co	2610000400	2.456	0.000	18.097	0.000	2.198	2.198	0.007	0.000	0.049	0.000	0.006	0.006
36	New York															

Table D-3. Waste Disposal, Treatment, and Recovery Open Burning All Categories Yard Waste - Brush Species Unspecified

FIPSS	STATENM	FIPSCNTY	COUNTYNM	SCC	VOC_ANN (Tons)	NOX_ANN (Tons)	CO_ANN (Tons)	SO2_ANN (Tons)	PM10_ANN (Tons)	PM25_ANN (Tons)	VOC_OSD (Tons)	NOX_OSD (Tons)	CO_OSD (Tons)	SO2_OSD (Tons)	PM10_OSD (Tons)	PM25_OSD (Tons)
42	Pennsylvania	003	Allegheny Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	005	Armstrong Co	2610000400	4.302	0.000	31.699	0.000	3.849	3.849	0.012	0.000	0.086	0.000	0.010	0.010
42	Pennsylvania	007	Beaver Co	2610000400	3.147	0.000	23.186	0.000	2.815	2.815	0.009	0.000	0.063	0.000	0.008	0.008
42	Pennsylvania	009	Bedford Co	2610000400	3.213	0.000	23.674	0.000	2.875	2.875	0.009	0.000	0.064	0.000	0.008	0.008
42	Pennsylvania	011	Berks Co	2610000400	9.432	0.000	69.497	0.000	8.439	8.439	0.026	0.000	0.189	0.000	0.023	0.023
42	Pennsylvania	013	Blair Co	2610000400	3.147	0.000	23.191	0.000	2.816	2.816	0.009	0.000	0.063	0.000	0.008	0.008
42	Pennsylvania	015	Bradford Co	2610000400	3.418	0.000	25.182	0.000	3.058	3.058	0.009	0.000	0.068	0.000	0.008	0.008
42	Pennsylvania	017	Bucks Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	019	Butler Co	2610000400	8.046	0.000	59.283	0.000	7.199	7.199	0.022	0.000	0.161	0.000	0.020	0.020
42	Pennsylvania	021	Cambria Co	2610000400	5.151	0.000	37.952	0.000	4.608	4.608	0.014	0.000	0.103	0.000	0.013	0.013
42	Pennsylvania	023	Cameron Co	2610000400	0.223	0.000	1.640	0.000	0.199	0.199	0.001	0.000	0.004	0.000	0.001	0.001
42	Pennsylvania	025	Carbon Co	2610000400	1.934	0.000	14.252	0.000	1.731	1.731	0.005	0.000	0.039	0.000	0.005	0.005
42	Pennsylvania	027	Centre Co	2610000400	3.906	0.000	28.781	0.000	3.495	3.495	0.011	0.000	0.078	0.000	0.009	0.009
42	Pennsylvania	029	Chester Co	2610000400	5.793	0.000	42.687	0.000	5.183	5.183	0.016	0.000	0.116	0.000	0.014	0.014
42	Pennsylvania	031	Clarion Co	2610000400	2.435	0.000	17.945	0.000	2.179	2.179	0.007	0.000	0.049	0.000	0.006	0.006
42	Pennsylvania	033	Clearfield Co	2610000400	4.309	0.000	31.748	0.000	3.855	3.855	0.012	0.000	0.086	0.000	0.010	0.010
42	Pennsylvania	035	Clinton Co	2610000400	1.912	0.000	14.091	0.000	1.711	1.711	0.005	0.000	0.038	0.000	0.005	0.005
42	Pennsylvania	037	Columbia Co	2610000400	2.773	0.000	20.429	0.000	2.481	2.481	0.008	0.000	0.056	0.000	0.007	0.007
42	Pennsylvania	039	Crawford Co	2610000400	4.679	0.000	34.480	0.000	4.187	4.187	0.013	0.000	0.094	0.000	0.011	0.011
42	Pennsylvania	041	Cumberland Co	2610000400	5.283	0.000	38.925	0.000	4.727	4.727	0.014	0.000	0.106	0.000	0.013	0.013
42	Pennsylvania	043	Dauphin Co	2610000400	4.220	0.000	31.096	0.000	3.776	3.776	0.011	0.000	0.084	0.000	0.010	0.010
42	Pennsylvania	045	Delaware Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	047	Elk Co	2610000400	1.446	0.000	10.653	0.000	1.294	1.294	0.004	0.000	0.029	0.000	0.004	0.004
42	Pennsylvania	049	Erie Co	2610000400	4.826	0.000	35.562	0.000	4.318	4.318	0.013	0.000	0.097	0.000	0.012	0.012
42	Pennsylvania	051	Fayette Co	2610000400	7.043	0.000	51.898	0.000	6.302	6.302	0.019	0.000	0.141	0.000	0.017	0.017
42	Pennsylvania	053	Forest Co	2610000400	0.342	0.000	2.517	0.000	0.306	0.306	0.001	0.000	0.007	0.000	0.001	0.001
42	Pennsylvania	055	Franklin Co	2610000400	6.337	0.000	46.691	0.000	5.670	5.670	0.017	0.000	0.127	0.000	0.015	0.015
42	Pennsylvania	057	Fulton Co	2610000400	1.011	0.000	7.450	0.000	0.905	0.905	0.003	0.000	0.020	0.000	0.002	0.002
42	Pennsylvania	059	Greene Co	2610000400	2.596	0.000	19.132	0.000	2.323	2.323	0.007	0.000	0.052	0.000	0.006	0.006
42	Pennsylvania	061	Huntingdon Co	2610000400	2.415	0.000	17.791	0.000	2.160	2.160	0.007	0.000	0.048	0.000	0.006	0.006
42	Pennsylvania	063	Indiana Co	2610000400	4.805	0.000	35.407	0.000	4.299	4.299	0.013	0.000	0.096	0.000	0.012	0.012
42	Pennsylvania	065	Jefferson Co	2610000400	2.234	0.000	16.464	0.000	1.999	1.999	0.006	0.000	0.045	0.000	0.005	0.005
42	Pennsylvania	067	Juniata Co	2610000400	1.536	0.000	11.318	0.000	1.374	1.374	0.004	0.000	0.031	0.000	0.004	0.004
42	Pennsylvania	069	Lackawanna Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	071	Lancaster Co	2610000400	6.751	0.000	49.743	0.000	6.040	6.040	0.018	0.000	0.135	0.000	0.016	0.016
42	Pennsylvania	073	Lawrence Co	2610000400	3.538	0.000	26.073	0.000	3.166	3.166	0.010	0.000	0.071	0.000	0.009	0.009
42	Pennsylvania	075	Lebanon Co	2610000400	4.702	0.000	34.646	0.000	4.207	4.207	0.013	0.000	0.094	0.000	0.011	0.011
42	Pennsylvania	077	Lehigh Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	079	Luzerne Co	2610000400	5.849	0.000	43.101	0.000	5.234	5.234	0.016	0.000	0.117	0.000	0.014	0.014
42	Pennsylvania	081	Lycoming Co	2610000400	3.689	0.000	27.181	0.000	3.301	3.301	0.010	0.000	0.074	0.000	0.009	0.009
42	Pennsylvania	083	McKean Co	2610000400	2.222	0.000	16.372	0.000	1.988	1.988	0.006	0.000	0.044	0.000	0.005	0.005
42	Pennsylvania	085	Mercer Co	2610000400	4.120	0.000	30.359	0.000	3.686	3.686	0.011	0.000	0.082	0.000	0.010	0.010
42	Pennsylvania	087	Mifflin Co	2610000400	2.583	0.000	19.030	0.000	2.311	2.311	0.007	0.000	0.052	0.000	0.006	0.006
42	Pennsylvania	089	Monroe Co	2610000400	7.140	0.000	52.611	0.000	6.388	6.388	0.019	0.000	0.143	0.000	0.017	0.017
42	Pennsylvania	091	Montgomery Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	093	Montour Co	2610000400	0.335	0.000	2.466	0.000	0.299	0.299	0.001	0.000	0.007	0.000	0.001	0.001
42	Pennsylvania	095	Northampton Co	2610000400	5.386	0.000	39.686	0.000	4.819	4.819	0.015	0.000	0.108	0.000	0.013	0.013
42	Pennsylvania	097	Northumberland Co	2610000400	3.288	0.000	24.225	0.000	2.942	2.942	0.009	0.000	0.066	0.000	0.008	0.008
42	Pennsylvania	099	Perry Co	2610000400	2.883	0.000	21.241	0.000	2.579	2.579	0.008	0.000	0.058	0.000	0.007	0.007
42	Pennsylvania	101	Philadelphia Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42	Pennsylvania	103	Pike Co	2610000400	2.861	0.000	21.081	0.000	2.560	2.560	0.008	0.000	0.057	0.000	0.007	0.007
42	Pennsylvania	105	Potter Co	2610000400	0.982	0.000	7.236	0.000	0.879	0.879	0.003	0.000	0.020	0.000	0.002	0.002
42	Pennsylvania	107	Schuylkill Co	2610000400	6.006	0.000	44.251	0.000	5.373	5.373	0.016	0.000	0.120	0.000	0.015	0.015
42	Pennsylvania	109	Snyder Co	2610000400	2.236	0.000	16.473	0.000	2.000	2.000	0.006	0.000	0.045	0.000	0.005	0.005
42	Pennsylvania	111	Somerset Co	2610000400	4.458	0.000	32.848	0.000	3.989	3.989	0.012	0.000	0.089	0.000	0.011	0.011
42	Pennsylvania	113	Sullivan Co	2610000400	0.418	0.000	3.078	0.000	0.374	0.374	0.001	0.000	0.008	0.000	0.001	0.001
42	Pennsylvania	115	Susquehanna Co	2610000400	2.919	0.000	21.505	0.000	2.611	2.611	0.008	0.000	0.058	0.000	0.007	0.007
42	Pennsylvania	117	Tioga Co	2610000400	2.394	0.000	17.639	0.000	2.142	2.142	0.007	0.000	0.048	0.000	0.006	0.006
42	Pennsylvania	119	Union Co	2610000400	2.086	0.000	15.373	0.000	1.867	1.867	0.006	0.000	0.042	0.000	0.005	0.005
42	Pennsylvania	121	Venango Co	2610000400	2.400	0.000	17.686	0.000	2.148	2.148	0.007	0.000	0.048	0.000	0.006	0.006
42	Pennsylvania	123	Warren Co	2610000400	2.264	0.000	16.683	0.000	2.026	2.026	0.006	0.000	0.045	0.000	0.006	0.006
42	Pennsylvania	125	Washington Co	2610000400	5.959	0.000	43.912	0.000	5.332	5.332	0.016	0.000	0.119	0.000	0.014	0.014
42	Pennsylvania	127	Wayne Co	2610000400	2.791	0.000	20.567	0.000	2.497	2.497	0.008	0.000	0.056	0.000	0.007	0.007
42	Pennsylvania	129	Westmoreland Co	2610000400	9.575	0.000	70.555	0.000	8.567	8.567	0.026	0.000	0.192	0.000	0.023	0.023
42	Pennsylvania	131	Wyoming Co	2610000400	2.027	0.000	14.934	0.000	1.813	1.813	0.006	0.000	0.041	0.000	0.005	0.005
42	Pennsylvania	133	York Co	2610000400	5.986	0.000	44.184	0.000	5.365	5.365	0.016	0.000	0.120	0.000	0.015	0.015
44	Rhode Island	001	Bristol Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	Rhode Island	003	Kent Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	Rhode Island	005	Newport Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	Rhode Island	007	Providence Co	2610000400	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44	Rhode Island	009	Washington Co	2610000400	2.282	0.000	16.814	0.000	2.042	2.042						

Table D-3. Waste Disposal, Treatment, and Recovery Open Burning All Categories Yard Waste - Brush Species Unspecified

FIPSSST	STATENM	FIPSCNTY	COUNTYNM	SCC	VOC_ANN (Tons)	NOX_ANN (Tons)	CO_ANN (Tons)	SO2_ANN (Tons)	PM10_ANN (Tons)	PM25_ANN (Tons)	VOC OSD (Tons)	NOX OSD (Tons)	CO OSD (Tons)	SO2 OSD (Tons)	PM10 OSD (Tons)	PM25 OSD (Tons)
50	Vermont	019	Orleans Co	2610000400	1.439	0.000	10.600	0.000	1.287	1.287	0.004	0.000	0.029	0.000	0.003	0.003
50	Vermont	021	Rutland Co	2610000400	3.051	0.000	22.478	0.000	2.730	2.730	0.008	0.000	0.061	0.000	0.007	0.007
50	Vermont	023	Washington Co	2610000400	2.637	0.000	19.431	0.000	2.359	2.359	0.007	0.000	0.053	0.000	0.006	0.006
50	Vermont	025	Windham Co	2610000400	1.883	0.000	13.874	0.000	1.685	1.685	0.005	0.000	0.038	0.000	0.005	0.005
50	Vermont	027	Windsor Co	2610000400	3.361	0.000	24.764	0.000	3.007	3.007	0.009	0.000	0.067	0.000	0.008	0.008
Total					639	0	4,706	0	571	571	2	0	13	0	2	2

Table D-4. Waste Disposal, Treatment, and Recovery Open Burning Land Clearing Debris

FIPS STATE	STATE	FIPS COUNTY	COUNTY	SCC	VOC (Tons)	CO (Tons)	PM10 (Tons)	PM2.5 (Tons)	VOC OSD (Tons)	CO OSD (Tons)	PM10 OSD (Tons)	PM2.5 OSD (Tons)
09	Connecticut	001	Fairfield Co	2610000500	431.9673	6,304.4878	636.7793	636.7793	1.1738	17.1318	1.7304	1.7304
09	Connecticut	003	Hartford Co	2610000500	540.1746	7,883.7550	796.2919	796.2919	1.4679	21.4232	2.1638	2.1638
09	Connecticut	005	Litchfield Co	2610000500	320.3473	4,675.4134	472.2361	472.2361	0.8705	12.7049	1.2833	1.2833
09	Connecticut	007	Middlesex Co	2610000500	171.4666	2,502.5256	252.7654	252.7654	0.4659	6.8003	0.6869	0.6869
09	Connecticut	009	New Haven Co	2610000500	400.1215	5,839.7047	589.8343	589.8343	1.0873	15.8688	1.6028	1.6028
09	Connecticut	011	New London Co	2610000500	141.8246	2,069.9049	209.0690	209.0690	0.3854	5.6247	0.5681	0.5681
09	Connecticut	013	Tolland Co	2610000500	207.9483	3,034.9693	306.5444	306.5444	0.5651	8.2472	0.8330	0.8330
09	Connecticut	015	Windham Co	2610000500	72.0405	1,051.4187	106.1976	106.1976	0.1958	2.8571	0.2886	0.2886
10	Delaware	001	Kent Co	2610000500	47.7166	696.4158	70.3409	70.3409	0.1297	1.8924	0.1911	0.1911
10	Delaware	003	New Castle Co	2610000500	378.0880	5,518.1286	557.3538	557.3538	1.0274	14.9949	1.5145	1.5145
10	Delaware	005	Sussex Co	2610000500	142.7905	2,084.0034	210.4930	210.4930	0.3880	5.6631	0.5720	0.5720
11	Dist. Columbia	001	Washington	2610000500	297.5925	4,343.3111	438.6924	438.6924	0.8087	11.8025	1.1921	1.1921
23	Maine	001	Androscoggin Co	2610000500	59.8630	873.6901	88.2463	88.2463	0.1627	2.3742	0.2398	0.2398
23	Maine	003	Aroostook Co	2610000500	38.1008	556.0743	56.1658	56.1658	0.1035	1.5111	0.1526	0.1526
23	Maine	005	Cumberland Co	2610000500	215.3719	3,143.3154	317.4878	317.4878	0.5852	8.5416	0.8627	0.8627
23	Maine	007	Franklin Co	2610000500	58.7511	857.4619	86.6072	86.6072	0.1596	2.3301	0.2353	0.2353
23	Maine	009	Hancock Co	2610000500	32.2800	471.1206	47.5851	47.5851	0.0877	1.2802	0.1293	0.1293
23	Maine	011	Kennebec Co	2610000500	52.4815	765.9581	77.3649	77.3649	0.1426	2.0814	0.2102	0.2102
23	Maine	013	Knox Co	2610000500	12.9138	188.4750	19.0368	19.0368	0.0351	0.5122	0.0517	0.0517
23	Maine	015	Lincoln Co	2610000500	15.8329	231.0778	23.3398	23.3398	0.0430	0.6279	0.0634	0.0634
23	Maine	017	Oxford Co	2610000500	37.1961	542.8701	54.8321	54.8321	0.1011	1.4752	0.1490	0.1490
23	Maine	019	Penobscot Co	2610000500	55.5872	811.2856	81.9432	81.9432	0.1511	2.2046	0.2227	0.2227
23	Maine	021	Piscataquis Co	2610000500	6.8196	99.5302	10.0530	10.0530	0.0185	0.2705	0.0273	0.0273
23	Maine	023	Sagadahoc Co	2610000500	13.3215	194.4256	19.6378	19.6378	0.0362	0.5283	0.0534	0.0534
23	Maine	025	Somerset Co	2610000500	36.8223	537.4157	54.2812	54.2812	0.1001	1.4604	0.1475	0.1475
23	Maine	027	Waldo Co	2610000500	18.0362	263.2349	26.5878	26.5878	0.0490	0.7153	0.0722	0.0722
23	Maine	029	Washington Co	2610000500	14.7029	214.5865	21.6741	21.6741	0.0400	0.5831	0.0589	0.0589
23	Maine	031	York Co	2610000500	158.6458	2,315.4075	233.8657	233.8657	0.4311	6.2919	0.6355	0.6355
24	Maryland	001	Allegany Co	2610000500	91.5730	1,336.4928	134.9913	134.9913	0.2488	3.6318	0.3668	0.3668
24	Maryland	003	Anne Arundel Co	2610000500	301.9838	4,407.4018	445.1658	445.1658	0.8206	11.9766	1.2097	1.2097
24	Maryland	005	Baltimore Co	2610000500	599.9345	8,755.9405	884.3862	884.3862	1.6303	23.7933	2.4032	2.4032
24	Maryland	009	Calvert Co	2610000500	68.0311	992.9024	100.2873	100.2873	0.1849	2.6981	0.2725	0.2725
24	Maryland	011	Caroline Co	2610000500	13.8498	202.1352	20.4165	20.4165	0.0376	0.5493	0.0555	0.0555
24	Maryland	013	Carroll Co	2610000500	71.9444	1,050.0168	106.0560	106.0560	0.1955	2.8533	0.2882	0.2882
24	Maryland	015	Cecil Co	2610000500	52.7041	769.2071	77.6931	77.6931	0.1432	2.0902	0.2111	0.2111
24	Maryland	017	Charles Co	2610000500	108.5486	1,584.2480	160.0156	160.0156	0.2950	4.3050	0.4348	0.4348
24	Maryland	019	Dorchester Co	2610000500	5.3536	78.1343	7.8919	7.8919	0.0145	0.2123	0.0214	0.0214
24	Maryland	021	Frederick Co	2610000500	247.9665	3,619.0280	365.5368	365.5368	0.6738	9.8343	0.9933	0.9933
24	Maryland	023	Garrett Co	2610000500	35.3204	515.4947	52.0671	52.0671	0.0960	1.4008	0.1415	0.1415
24	Maryland	025	Harford Co	2610000500	174.9394	2,553.2103	257.8848	257.8848	0.4754	6.9381	0.7008	0.7008
24	Maryland	027	Howard Co	2610000500	350.5095	5,115.6253	516.6993	516.6993	0.9525	13.9012	1.4041	1.4041
24	Maryland	029	Kent Co	2610000500	4.3568	63.5864	6.4225	6.4225	0.0118	0.1728	0.0175	0.0175
24	Maryland	031	Montgomery Co	2610000500	912.2505	13,314.1393	1,344.7831	1,344.7831	2.4789	36.1797	3.6543	3.6543
24	Maryland	033	Prince George's Co	2610000500	626.9679	9,150.4878	924.2371	924.2371	1.7037	24.8655	2.5115	2.5115
24	Maryland	035	Queen Annes Co	2610000500	23.4467	342.2012	34.5637	34.5637	0.0637	0.9299	0.0939	0.0939
24	Maryland	037	St. Mary's Co	2610000500	40.9451	597.5869	60.3588	60.3588	0.1113	1.6239	0.1640	0.1640
24	Maryland	039	Somerset Co	2610000500	2.8102	41.0147	4.1427	4.1427	0.0076	0.1115	0.0113	0.0113
24	Maryland	041	Talbot Co	2610000500	9.3444	136.3803	13.7750	13.7750	0.0254	0.3706	0.0374	0.0374
24	Maryland	043	Washington Co	2610000500	61.3244	895.0191	90.4006	90.4006	0.1666	2.4321	0.2457	0.2457
24	Maryland	045	Wicomico Co	2610000500	75.1753	1,097.1711	110.8188	110.8188	0.2043	2.9814	0.3011	0.3011
24	Maryland	047	Worcester Co	2610000500	53.2301	776.8845	78.4685	78.4685	0.1446	2.1111	0.2132	0.2132
24	Maryland	510	Baltimore	2610000500	146.1764	2,133.4197	215.4842	215.4842	0.3972	5.7973	0.5856	0.5856
25	Massachusetts	001	Barnstable Co	2610000500	137.1136	2,001.1491	202.1243	202.1243	0.3726	5.4379	0.5493	0.5493
25	Massachusetts	003	Berkshire Co	2610000500	129.3223	1,887.4369	190.6389	190.6389	0.3514	5.1289	0.5180	0.5180
25	Massachusetts	005	Bristol Co	2610000500	398.6774	5,818.6275	587.7054	587.7054	1.0834	15.8115	1.5970	1.5970
25	Massachusetts	007	Dukes Co	2610000500	12.8377	187.3645	18.9246	18.9246	0.0349	0.5091	0.0514	0.0514
25	Massachusetts	009	Essex Co	2610000500	187.7004	2,739.4546	276.6962	276.6962	0.5101	7.4442	0.7519	0.7519
25	Massachusetts	011	Franklin Co	2610000500	45.0570	657.5985	66.4202	66.4202	0.1224	1.7870	0.1805	0.1805
25	Massachusetts	013	Hampden Co	2610000500	178.2750	2,601.8930	262.8019	262.8019	0.4844	7.0704	0.7141	0.7141
25	Massachusetts	015	Hampshire Co	2610000500	178.9536	2,611.7972	263.8023	263.8023	0.4863	7.0973	0.7169	0.7169

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FIPS STATE	STATE	FIPS COUNTY	COUNTY	SCC	VOC (Tons)	CO (Tons)	PM10 (Tons)	PM2.5 (Tons)	VOC OSD (Tons)	CO OSD (Tons)	PM10 OSD (Tons)	PM2.5 OSD (Tons)
25	Massachusetts	017	Middlesex Co	2610000500	1,270.5452	18,543.3877	1,872.9588	1,872.9588	3.4526	50.3896	5.0896	5.0896
25	Massachusetts	019	Nantucket Co	2610000500	7.0659	103.1261	10.4162	10.4162	0.0192	0.2802	0.0283	0.0283
25	Massachusetts	021	Norfolk Co	2610000500	528.2919	7,710.3286	778.7751	778.7751	1.4356	20.9520	2.1162	2.1162
25	Massachusetts	023	Plymouth Co	2610000500	253.3748	3,697.9614	373.5094	373.5094	0.6885	10.0488	1.0150	1.0150
25	Massachusetts	025	Suffolk Co	2610000500	140.9934	2,057.7744	207.8437	207.8437	0.3831	5.5918	0.5648	0.5648
25	Massachusetts	027	Worcester Co	2610000500	869.3878	12,688.5646	1,281.5975	1,281.5975	2.3625	34.4798	3.4826	3.4826
33	New Hampshire	001	Belknap Co	2610000500	87.2780	1,273.8067	128.6597	128.6597	0.2372	3.4614	0.3496	0.3496
33	New Hampshire	003	Carroll Co	2610000500	88.9197	1,297.7679	131.0799	131.0799	0.2416	3.5265	0.3562	0.3562
33	New Hampshire	005	Cheshire Co	2610000500	97.7393	1,426.4883	144.0812	144.0812	0.2656	3.8763	0.3915	0.3915
33	New Hampshire	007	Coos Co	2610000500	15.3796	224.4624	22.6716	22.6716	0.0418	0.6100	0.0616	0.0616
33	New Hampshire	009	Grafton Co	2610000500	101.5644	1,482.3146	149.7199	149.7199	0.2760	4.0280	0.4068	0.4068
33	New Hampshire	011	Hillsborough Co	2610000500	402.8092	5,878.9309	593.7963	593.7963	1.0946	15.9754	1.6136	1.6136
33	New Hampshire	013	Merrimack Co	2610000500	187.7139	2,739.6522	276.7162	276.7162	0.5101	7.4447	0.7519	0.7519
33	New Hampshire	015	Rockingham Co	2610000500	274.5951	4,007.6679	404.7910	404.7910	0.7462	10.8904	1.1000	1.1000
33	New Hampshire	017	Strafford Co	2610000500	100.8924	1,472.5069	148.7293	148.7293	0.2742	4.0014	0.4042	0.4042
33	New Hampshire	019	Sullivan Co	2610000500	22.7159	331.5341	33.4863	33.4863	0.0617	0.9009	0.0910	0.0910
34	New Jersey	001	Atlantic Co	2610000500	160.9693	2,349.3192	237.2910	237.2910	0.4374	6.3840	0.6448	0.6448
34	New Jersey	003	Bergen Co	2610000500	183.5376	2,678.6989	270.5597	270.5597	0.4987	7.2791	0.7352	0.7352
34	New Jersey	005	Burlington Co	2610000500	300.4143	4,384.4948	442.8521	442.8521	0.8163	11.9144	1.2034	1.2034
34	New Jersey	007	Camden Co	2610000500	140.8845	2,056.1853	207.6832	207.6832	0.3828	5.5875	0.5644	0.5644
34	New Jersey	009	Cape May Co	2610000500	22.5159	328.6154	33.1915	33.1915	0.0612	0.8930	0.0902	0.0902
34	New Jersey	011	Cumberland Co	2610000500	30.1235	439.6467	44.4061	44.4061	0.0819	1.1947	0.1207	0.1207
34	New Jersey	013	Essex Co	2610000500	73.6640	1,075.1130	108.5909	108.5909	0.2002	2.9215	0.2951	0.2951
34	New Jersey	015	Gloucester Co	2610000500	117.7784	1,718.9556	173.6216	173.6216	0.3201	4.6711	0.4718	0.4718
34	New Jersey	017	Hudson Co	2610000500	145.0772	2,117.3769	213.8638	213.8638	0.3942	5.7537	0.5812	0.5812
34	New Jersey	019	Hunterdon Co	2610000500	50.1121	731.3769	73.8721	73.8721	0.1362	1.9874	0.2007	0.2007
34	New Jersey	021	Mercer Co	2610000500	117.0120	1,707.7696	172.4918	172.4918	0.3180	4.6407	0.4687	0.4687
34	New Jersey	023	Middlesex Co	2610000500	309.1284	4,511.6759	455.6979	455.6979	0.8400	12.2600	1.2383	1.2383
34	New Jersey	025	Monmouth Co	2610000500	196.9123	2,873.9012	290.2759	290.2759	0.5351	7.8095	0.7888	0.7888
34	New Jersey	027	Morris Co	2610000500	259.0135	3,780.2574	381.8216	381.8216	0.7038	10.2724	1.0376	1.0376
34	New Jersey	029	Ocean Co	2610000500	298.2353	4,352.6922	439.6399	439.6399	0.8104	11.8280	1.1947	1.1947
34	New Jersey	031	Passaic Co	2610000500	67.9884	992.2787	100.2242	100.2242	0.1848	2.6964	0.2723	0.2723
34	New Jersey	033	Salem Co	2610000500	7.2470	105.7681	10.6830	10.6830	0.0197	0.2874	0.0290	0.0290
34	New Jersey	035	Somerset Co	2610000500	215.2436	3,141.4433	317.2988	317.2988	0.5849	8.5365	0.8622	0.8622
34	New Jersey	037	Sussex Co	2610000500	82.0513	1,197.5242	120.9549	120.9549	0.2230	3.2541	0.3287	0.3287
34	New Jersey	039	Union Co	2610000500	39.4883	576.3254	58.2112	58.2112	0.1073	1.5661	0.1582	0.1582
34	New Jersey	041	Warren Co	2610000500	84.9475	1,239.7934	125.2243	125.2243	0.2308	3.3690	0.3403	0.3403
36	New York	001	Albany Co	2610000500	368.7709	5,382.1483	543.6192	543.6192	1.0021	14.6254	1.4772	1.4772
36	New York	003	Allegany Co	2610000500	24.0766	351.3933	35.4922	35.4922	0.0654	0.9549	0.0964	0.0964
36	New York	005	Bronx Co	2610000500	87.7262	1,280.3481	129.3205	129.3205	0.2384	3.4792	0.3514	0.3514
36	New York	007	Broome Co	2610000500	148.5123	2,167.5113	218.9276	218.9276	0.4036	5.8900	0.5949	0.5949
36	New York	009	Cattaraugus Co	2610000500	44.5900	650.7835	65.7318	65.7318	0.1212	1.7684	0.1786	0.1786
36	New York	011	Cayuga Co	2610000500	31.6679	462.1872	46.6828	46.6828	0.0861	1.2559	0.1269	0.1269
36	New York	013	Chautauqua Co	2610000500	45.1155	658.4522	66.5064	66.5064	0.1226	1.7893	0.1807	0.1807
36	New York	015	Chemung Co	2610000500	176.7815	2,580.0962	260.6004	260.6004	0.4804	7.0111	0.7082	0.7082
36	New York	017	Chenango Co	2610000500	11.9710	174.7143	17.6469	17.6469	0.0325	0.4748	0.0480	0.0480
36	New York	019	Clinton Co	2610000500	148.8288	2,172.1310	219.3942	219.3942	0.4044	5.9025	0.5962	0.5962
36	New York	021	Columbia Co	2610000500	32.8061	478.7998	48.3608	48.3608	0.0891	1.3011	0.1314	0.1314
36	New York	023	Cortland Co	2610000500	21.8290	318.5900	32.1789	32.1789	0.0593	0.8657	0.0874	0.0874
36	New York	025	Delaware Co	2610000500	41.3613	603.6604	60.9722	60.9722	0.1124	1.6404	0.1657	0.1657
36	New York	027	Dutchess Co	2610000500	307.2721	4,484.5835	452.9615	452.9615	0.8350	12.1864	1.2309	1.2309
36	New York	029	Erie Co	2610000500	631.0187	9,209.6089	930.2086	930.2086	1.7147	25.0261	2.5277	2.5277
36	New York	031	Essex Co	2610000500	25.0306	365.3167	36.8985	36.8985	0.0680	0.9927	0.1003	0.1003
36	New York	033	Franklin Co	2610000500	20.6131	300.8443	30.3865	30.3865	0.0560	0.8175	0.0826	0.0826
36	New York	035	Fulton Co	2610000500	21.7220	317.0292	32.0213	32.0213	0.0590	0.8615	0.0870	0.0870
36	New York	037	Genesee Co	2610000500	37.2143	543.1362	54.8590	54.8590	0.1011	1.4759	0.1491	0.1491
36	New York	039	Greene Co	2610000500	23.8547	348.1552	35.1651	35.1651	0.0648	0.9461	0.0956	0.0956
36	New York	041	Hamilton Co	2610000500	4.5447	66.3284	6.6994	6.6994	0.0123	0.1802	0.0182	0.0182
36	New York	043	Herkimer Co	2610000500	23.6150	344.6572	34.8118	34.8118	0.0642	0.9366	0.0946	0.0946
36	New York	045	Jefferson Co	2610000500	52.7851	770.3891	77.8125	77.8125	0.1434	2.0934	0.2114	0.2114

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FIPS STATE	STATE	FIPS COUNTY	COUNTY	SCC	VOC (Tons)	CO (Tons)	PM10 (Tons)	PM2.5 (Tons)	VOC OSD (Tons)	CO OSD (Tons)	PM10 OSD (Tons)	PM2.5 OSD (Tons)
36	New York	047	Kings Co	2610000500	261.1400	3,811.2927	384.9563	384.9563	0.7096	10.3568	1.0461	1.0461
36	New York	049	Lewis Co	2610000500	39.5039	576.5531	58.2343	58.2343	0.1073	1.5667	0.1582	0.1582
36	New York	051	Livingston Co	2610000500	32.8766	479.8287	48.4647	48.4647	0.0893	1.3039	0.1317	0.1317
36	New York	053	Madison Co	2610000500	25.3094	369.3857	37.3095	37.3095	0.0688	1.0038	0.1014	0.1014
36	New York	055	Monroe Co	2610000500	448.1180	6,540.2045	660.5877	660.5877	1.2177	17.7723	1.7951	1.7951
36	New York	057	Montgomery Co	2610000500	5.7846	84.4250	8.5273	8.5273	0.0157	0.2294	0.0232	0.0232
36	New York	059	Nassau Co	2610000500	140.8299	2,055.3883	207.6027	207.6027	0.3827	5.5853	0.5641	0.5641
36	New York	061	New York Co	2610000500	724.2711	10,570.6117	1,067.6755	1,067.6755	1.9681	28.7245	2.9013	2.9013
36	New York	063	Niagara Co	2610000500	55.6372	812.0158	82.0170	82.0170	0.1512	2.2066	0.2229	0.2229
36	New York	065	Oneida Co	2610000500	131.6157	1,920.9082	194.0197	194.0197	0.3577	5.2199	0.5272	0.5272
36	New York	067	Onondaga Co	2610000500	315.5689	4,605.6741	465.1921	465.1921	0.8575	12.5154	1.2641	1.2641
36	New York	069	Ontario Co	2610000500	158.7993	2,317.6483	234.0921	234.0921	0.4315	6.2980	0.6361	0.6361
36	New York	071	Orange Co	2610000500	384.0543	5,605.2059	566.1490	566.1490	1.0436	15.2315	1.5384	1.5384
36	New York	073	Orleans Co	2610000500	8.5000	124.0559	12.5302	12.5302	0.0231	0.3371	0.0340	0.0340
36	New York	075	Oswego Co	2610000500	89.3555	1,304.1283	131.7223	131.7223	0.2428	3.5438	0.3579	0.3579
36	New York	077	Otsego Co	2610000500	43.8388	639.8195	64.6244	64.6244	0.1191	1.7386	0.1756	0.1756
36	New York	079	Putnam Co	2610000500	79.5200	1,160.5804	117.2234	117.2234	0.2161	3.1538	0.3185	0.3185
36	New York	081	Queens Co	2610000500	172.0956	2,511.7057	253.6927	253.6927	0.4677	6.8253	0.6894	0.6894
36	New York	083	Rensselaer Co	2610000500	93.6494	1,366.7964	138.0521	138.0521	0.2545	3.7141	0.3751	0.3751
36	New York	085	Richmond Co	2610000500	62.3838	910.4804	91.9623	91.9623	0.1695	2.4741	0.2499	0.2499
36	New York	087	Rockland Co	2610000500	177.4419	2,589.7333	261.5738	261.5738	0.4822	7.0373	0.7108	0.7108
36	New York	089	St. Lawrence Co	2610000500	88.4951	1,291.5700	130.4539	130.4539	0.2405	3.5097	0.3545	0.3545
36	New York	091	Saratoga Co	2610000500	307.1189	4,482.3481	452.7357	452.7357	0.8346	12.1803	1.2303	1.2303
36	New York	093	Schenectady Co	2610000500	115.8745	1,691.1690	170.8151	170.8151	0.3149	4.5956	0.4642	0.4642
36	New York	095	Schoharie Co	2610000500	16.6113	242.4389	24.4873	24.4873	0.0451	0.6588	0.0665	0.0665
36	New York	097	Schuyler Co	2610000500	8.7381	127.5308	12.8811	12.8811	0.0237	0.3466	0.0350	0.0350
36	New York	099	Seneca Co	2610000500	4.3556	63.5687	6.4207	6.4207	0.0118	0.1727	0.0174	0.0174
36	New York	101	Steuben Co	2610000500	77.6472	1,133.2473	114.4627	114.4627	0.2110	3.0795	0.3110	0.3110
36	New York	103	Suffolk Co	2610000500	226.7056	3,308.7295	334.1954	334.1954	0.6160	8.9911	0.9081	0.9081
36	New York	105	Sullivan Co	2610000500	60.1027	877.1884	88.5997	88.5997	0.1633	2.3837	0.2408	0.2408
36	New York	107	Tioga Co	2610000500	32.0652	467.9861	47.2685	47.2685	0.0871	1.2717	0.1284	0.1284
36	New York	109	Tompkins Co	2610000500	126.5921	1,847.5893	186.6142	186.6142	0.3440	5.0206	0.5071	0.5071
36	New York	111	Ulster Co	2610000500	106.2808	1,551.1499	156.6726	156.6726	0.2888	4.2151	0.4257	0.4257
36	New York	113	Warren Co	2610000500	53.0682	774.5211	78.2298	78.2298	0.1442	2.1047	0.2126	0.2126
36	New York	115	Washington Co	2610000500	44.2724	646.1474	65.2636	65.2636	0.1203	1.7558	0.1773	0.1773
36	New York	117	Wayne Co	2610000500	60.5393	883.5609	89.2433	89.2433	0.1645	2.4010	0.2425	0.2425
36	New York	119	Westchester Co	2610000500	489.2514	7,140.5393	721.2240	721.2240	1.3295	19.4036	1.9598	1.9598
36	New York	121	Wyoming Co	2610000500	16.8281	245.6034	24.8070	24.8070	0.0457	0.6674	0.0674	0.0674
36	New York	123	Yates Co	2610000500	12.0546	175.9348	17.7701	17.7701	0.0328	0.4781	0.0483	0.0483
42	Pennsylvania	001	Adams Co	2610000500	66.1130	964.9076	97.4597	97.4597	0.1797	2.6220	0.2648	0.2648
42	Pennsylvania	003	Allegheny Co	2610000500	1,260.5865	18,398.0430	1,858.2784	1,858.2784	3.4255	49.9947	5.0497	5.0497
42	Pennsylvania	005	Armstrong Co	2610000500	18.3342	267.5851	27.0272	27.0272	0.0498	0.7271	0.0734	0.0734
42	Pennsylvania	007	Beaver Co	2610000500	87.3496	1,274.8520	128.7653	128.7653	0.2374	3.4643	0.3499	0.3499
42	Pennsylvania	009	Bedford Co	2610000500	34.1846	498.9182	50.3928	50.3928	0.0929	1.3558	0.1369	0.1369
42	Pennsylvania	011	Berks Co	2610000500	177.7927	2,594.8533	262.0909	262.0909	0.4831	7.0512	0.7122	0.7122
42	Pennsylvania	013	Blair Co	2610000500	144.2719	2,105.6236	212.6767	212.6767	0.3920	5.7218	0.5779	0.5779
42	Pennsylvania	015	Bradford Co	2610000500	22.7315	331.7617	33.5093	33.5093	0.0618	0.9015	0.0911	0.0911
42	Pennsylvania	017	Bucks Co	2610000500	390.3965	5,697.7692	575.4982	575.4982	1.0609	15.4831	1.5639	1.5639
42	Pennsylvania	019	Butler Co	2610000500	139.0692	2,029.6908	205.0072	205.0072	0.3779	5.5155	0.5571	0.5571
42	Pennsylvania	021	Cambria Co	2610000500	97.9180	1,429.0967	144.3447	144.3447	0.2661	3.8834	0.3922	0.3922
42	Pennsylvania	023	Cameron Co	2610000500	1.0639	15.5268	1.5683	1.5683	0.0029	0.0422	0.0043	0.0043
42	Pennsylvania	025	Carbon Co	2610000500	39.4367	575.5721	58.1352	58.1352	0.1072	1.5641	0.1580	0.1580
42	Pennsylvania	027	Centre Co	2610000500	230.2638	3,360.6605	339.4406	339.4406	0.6257	9.1322	0.9224	0.9224
42	Pennsylvania	029	Chester Co	2610000500	386.4527	5,640.2104	569.6846	569.6846	1.0501	15.3267	1.5481	1.5481
42	Pennsylvania	031	Clarion Co	2610000500	29.9089	436.5147	44.0898	44.0898	0.0813	1.1862	0.1198	0.1198
42	Pennsylvania	033	Clearfield Co	2610000500	48.6670	710.2861	71.7418	71.7418	0.1322	1.9301	0.1950	0.1950
42	Pennsylvania	035	Clinton Co	2610000500	35.0386	511.3817	51.6517	51.6517	0.0952	1.3896	0.1404	0.1404
42	Pennsylvania	037	Columbia Co	2610000500	23.1819	338.3364	34.1734	34.1734	0.0630	0.9194	0.0929	0.0929
42	Pennsylvania	039	Crawford Co	2610000500	24.8218	362.2699	36.5908	36.5908	0.0675	0.9844	0.0994	0.0994
42	Pennsylvania	041	Cumberland Co	2610000500	114.3166	1,668.4309	168.5184	168.5184	0.3106	4.5338	0.4579	0.4579

Table D-4. Waste Disposal, Treatment, and Recovery Open Burning Land Clearing Debris

FIPS STATE	STATE	FIPS COUNTY	COUNTY	SCC	VOC (Tons)	CO (Tons)	PM10 (Tons)	PM2.5 (Tons)	VOC OSD (Tons)	CO OSD (Tons)	PM10 OSD (Tons)	PM2.5 OSD (Tons)
42	Pennsylvania	043	Dauphin Co	2610000500	271.2009	3,958.1301	399.7875	399.7875	0.7370	10.7558	1.0864	1.0864
42	Pennsylvania	045	Delaware Co	2610000500	179.0840	2,613.7001	263.9945	263.9945	0.4866	7.1024	0.7174	0.7174
42	Pennsylvania	047	Elk Co	2610000500	32.9172	480.4210	48.5245	48.5245	0.0894	1.3055	0.1319	0.1319
42	Pennsylvania	049	Erie Co	2610000500	170.9013	2,494.2748	251.9321	251.9321	0.4644	6.7779	0.6846	0.6846
42	Pennsylvania	051	Fayette Co	2610000500	51.6853	754.3385	76.1913	76.1913	0.1404	2.0498	0.2070	0.2070
42	Pennsylvania	053	Forest Co	2610000500	9.0520	132.1123	13.3439	13.3439	0.0246	0.3590	0.0363	0.0363
42	Pennsylvania	055	Franklin Co	2610000500	123.5517	1,803.2152	182.1322	182.1322	0.3357	4.9000	0.4949	0.4949
42	Pennsylvania	057	Fulton Co	2610000500	7.4002	108.0041	10.9089	10.9089	0.0201	0.2935	0.0296	0.0296
42	Pennsylvania	059	Greene Co	2610000500	10.8466	158.3046	15.9894	15.9894	0.0295	0.4302	0.0434	0.0434
42	Pennsylvania	061	Huntingdon Co	2610000500	31.3982	458.2507	46.2852	46.2852	0.0853	1.2452	0.1258	0.1258
42	Pennsylvania	063	Indiana Co	2610000500	35.6598	520.4489	52.5675	52.5675	0.0969	1.4143	0.1428	0.1428
42	Pennsylvania	065	Jefferson Co	2610000500	24.4163	356.3513	35.9930	35.9930	0.0663	0.9683	0.0978	0.0978
42	Pennsylvania	067	Juniata Co	2610000500	13.7430	200.5768	20.2591	20.2591	0.0373	0.5450	0.0551	0.0551
42	Pennsylvania	069	Lackawanna Co	2610000500	163.3653	2,384.2885	240.8230	240.8230	0.4439	6.4790	0.6544	0.6544
42	Pennsylvania	071	Lancaster Co	2610000500	197.9700	2,889.3381	291.8351	291.8351	0.5380	7.8515	0.7930	0.7930
42	Pennsylvania	073	Lawrence Co	2610000500	40.3908	589.4962	59.5416	59.5416	0.1098	1.6019	0.1618	0.1618
42	Pennsylvania	075	Lebanon Co	2610000500	88.0569	1,285.1759	129.8081	129.8081	0.2393	3.4923	0.3527	0.3527
42	Pennsylvania	077	Lehigh Co	2610000500	174.7825	2,550.9207	257.6535	257.6535	0.4750	6.9318	0.7001	0.7001
42	Pennsylvania	079	Luzerne Co	2610000500	118.0035	1,722.2412	173.9535	173.9535	0.3207	4.6800	0.4727	0.4727
42	Pennsylvania	081	Lycoming Co	2610000500	121.3252	1,770.7206	178.8501	178.8501	0.3297	4.8117	0.4860	0.4860
42	Pennsylvania	083	McKean Co	2610000500	51.2994	748.7061	75.6224	75.6224	0.1394	2.0345	0.2055	0.2055
42	Pennsylvania	085	Mercer Co	2610000500	61.0371	890.8263	89.9771	89.9771	0.1659	2.4207	0.2445	0.2445
42	Pennsylvania	087	Mifflin Co	2610000500	20.1908	294.6818	29.7641	29.7641	0.0549	0.8008	0.0809	0.0809
42	Pennsylvania	089	Monroe Co	2610000500	265.6245	3,876.7441	391.5672	391.5672	0.7218	10.5346	1.0640	1.0640
42	Pennsylvania	091	Montgomery Co	2610000500	403.1317	5,883.6382	594.2718	594.2718	1.0955	15.9881	1.6149	1.6149
42	Pennsylvania	093	Montour Co	2610000500	6.0123	87.7488	8.8630	8.8630	0.0163	0.2384	0.0241	0.0241
42	Pennsylvania	095	Northampton Co	2610000500	120.2639	1,755.2314	177.2856	177.2856	0.3268	4.7697	0.4818	0.4818
42	Pennsylvania	097	Northumberland Co	2610000500	53.8710	786.2381	79.4133	79.4133	0.1464	2.1365	0.2158	0.2158
42	Pennsylvania	099	Perry Co	2610000500	30.0466	438.5250	44.2928	44.2928	0.0816	1.1916	0.1204	0.1204
42	Pennsylvania	101	Philadelphia Co	2610000500	39.5824	577.6982	58.3499	58.3499	0.1076	1.5698	0.1586	0.1586
42	Pennsylvania	103	Pike Co	2610000500	80.5302	1,175.3244	118.7126	118.7126	0.2188	3.1938	0.3226	0.3226
42	Pennsylvania	105	Potter Co	2610000500	20.4967	299.1459	30.2150	30.2150	0.0557	0.8129	0.0821	0.0821
42	Pennsylvania	107	Schuylkill Co	2610000500	73.2921	1,069.6856	108.0427	108.0427	0.1992	2.9068	0.2936	0.2936
42	Pennsylvania	109	Snyder Co	2610000500	19.3329	282.1600	28.4993	28.4993	0.0525	0.7667	0.0774	0.0774
42	Pennsylvania	111	Somerset Co	2610000500	33.9082	494.8837	49.9853	49.9853	0.0921	1.3448	0.1358	0.1358
42	Pennsylvania	113	Sullivan Co	2610000500	8.0999	118.2171	11.9404	11.9404	0.0220	0.3212	0.0324	0.0324
42	Pennsylvania	115	Susquehanna Co	2610000500	24.4226	356.4438	36.0023	36.0023	0.0664	0.9686	0.0978	0.0978
42	Pennsylvania	117	Tioga Co	2610000500	23.8045	347.4228	35.0911	35.0911	0.0647	0.9441	0.0954	0.0954
42	Pennsylvania	119	Union Co	2610000500	25.1093	366.4653	37.0145	37.0145	0.0682	0.9958	0.1006	0.1006
42	Pennsylvania	121	Venango Co	2610000500	45.3588	662.0042	66.8652	66.8652	0.1233	1.7989	0.1817	0.1817
42	Pennsylvania	123	Warren Co	2610000500	20.8047	303.6414	30.6690	30.6690	0.0565	0.8251	0.0833	0.0833
42	Pennsylvania	125	Washington Co	2610000500	103.2411	1,506.7865	152.1917	152.1917	0.2805	4.0945	0.4136	0.4136
42	Pennsylvania	127	Wayne Co	2610000500	44.9233	655.6483	66.2232	66.2232	0.1221	1.7817	0.1800	0.1800
42	Pennsylvania	129	Westmoreland Co	2610000500	251.9855	3,677.6852	371.4614	371.4614	0.6847	9.9937	1.0094	1.0094
42	Pennsylvania	131	Wyoming Co	2610000500	116.9951	1,707.5236	172.4669	172.4669	0.3179	4.6400	0.4687	0.4687
42	Pennsylvania	133	York Co	2610000500	326.5099	4,765.3555	481.3206	481.3206	0.8873	12.9493	1.3079	1.3079
44	Rhode Island	001	Bristol Co	2610000500	26.4170	385.5511	38.9423	38.9423	0.0718	1.0477	0.1058	0.1058
44	Rhode Island	003	Kent Co	2610000500	103.4425	1,509.7258	152.4885	152.4885	0.2811	4.1025	0.4144	0.4144
44	Rhode Island	005	Newport Co	2610000500	14.6243	213.4397	21.5583	21.5583	0.0397	0.5800	0.0586	0.0586
44	Rhode Island	007	Providence Co	2610000500	462.2424	6,746.3477	681.4090	681.4090	1.2561	18.3325	1.8517	1.8517
44	Rhode Island	009	Washington Co	2610000500	90.6874	1,323.5673	133.6858	133.6858	0.2464	3.5967	0.3633	0.3633
50	Vermont	001	Addison Co	2610000500	48.3163	705.1680	71.2249	71.2249	0.1313	1.9162	0.1935	0.1935
50	Vermont	003	Bennington Co	2610000500	28.0338	409.1491	41.3258	41.3258	0.0762	1.1118	0.1123	0.1123
50	Vermont	005	Caledonia Co	2610000500	19.3190	281.9573	28.4788	28.4788	0.0525	0.7662	0.0774	0.0774
50	Vermont	007	Chittenden Co	2610000500	93.2525	1,361.0045	137.4671	137.4671	0.2534	3.6984	0.3736	0.3736
50	Vermont	009	Essex Co	2610000500	2.3235	33.9115	3.4252	3.4252	0.0063	0.0922	0.0093	0.0093
50	Vermont	011	Franklin Co	2610000500	29.3433	428.2606	43.2561	43.2561	0.0797	1.1638	0.1175	0.1175
50	Vermont	013	Grand Isle Co	2610000500	1.6850	24.5919	2.4839	2.4839	0.0046	0.0668	0.0067	0.0067
50	Vermont	015	Lamoille Co	2610000500	18.5429	270.6311	27.3349	27.3349	0.0504	0.7354	0.0743	0.0743
50	Vermont	017	Orange Co	2610000500	7.4155	108.2284	10.9315	10.9315	0.0202	0.2941	0.0297	0.0297

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FIPS STATE	STATE	FIPS COUNTY	COUNTY	SCC	VOC (Tons)	CO (Tons)	PM10 (Tons)	PM2.5 (Tons)	VOC_OSD (Tons)	CO_OSD (Tons)	PM10_OSD (Tons)	PM2.5_OSD (Tons)
50	Vermont	019	Orleans Co	2610000500	14.2630	208.1658	21.0256	21.0256	0.0388	0.5657	0.0571	0.0571
50	Vermont	021	Rutland Co	2610000500	66.8345	975.4381	98.5233	98.5233	0.1816	2.6506	0.2677	0.2677
50	Vermont	023	Washington Co	2610000500	72.8704	1,063.5305	107.4210	107.4210	0.1980	2.8900	0.2919	0.2919
50	Vermont	025	Windham Co	2610000500	30.9865	452.2430	45.6784	45.6784	0.0842	1.2289	0.1241	0.1241
50	Vermont	027	Windsor Co	2610000500	42.1514	615.1927	62.1370	62.1370	0.1145	1.6717	0.1689	0.1689
Total					32,986	481,424	48,626	48,626	90	1,308	132	132