National Fire Incident Reporting System

VERSION 5.0 DESIGN DOCUMENTATION

Specification Release 2015.1 • January 2015

FEMA

U.S. Department of Homeland Security
United States Fire Administration
National Fire Data Center

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Section 1

EXECUTIVE SUMMARY

Introduction

The objective of this manual is to provide local and state fire agencies with the specifications necessary to develop version 5.0 of the National Fire Incident Reporting System (NFIRS). To meet this objective, three major sections are included in this document.

- Overview of the NFIRS 5.0 System
- Data Dictionary, Edits and Transfer File Specifications
- System Implementation Guide

One critical success factor in establishing an all-incident NFIRS is a complete system specification that is accepted as the national standard for fire incident reporting. This document serves as both a national standard and a guide for implementing NFIRS 5.0 at the local and state levels.

NFIRS 5.0 is designed to be a modular, all-incident reporting system. The system was designed by the United States Fire Administration, a part of the Federal Emergency Management Agency.

How NFIRS Works

NFIRS is jointly managed by the U.S. Fire Administration (USFA) and the National Fire Information Council (NFIC). NFIC is a users' group comprised of volunteers who donate their time to maintain the existing system and to research and implement changes to improve it. The members of NFIC are representatives from state agencies and large metropolitan areas that are responsible for incident data collection and analysis. As federal budgets have been reduced, the role of NFIC has expanded. Due to the extraordinary commitment of the members of this council, as well as the ongoing support of USFA, NFIRS is able to maintain its high level of performance.

As critical a role as the members of NFIC play, the heart of the system is dispersed across the country, in the 14,000 fire departments that participate in NFIRS. After responding to an incident, fire department personnel fill out the appropriate NFIRS modules. These describe the nature of the call, the actions firefighters took in response to the call, and the result. The latter includes the number of civilian or firefighter casualties and an estimate of property loss. While specific modules filled out by a local fire department may be state-specific, they contain a core of information common to every state's reporting system. The uniformity of definitions used in coding these fields makes aggregation of national data possible.

Local agencies forward the completed NFIRS modules, which are filled out either manually or via computer, to the state agency responsible for NFIRS data. The state agency combines the information with data from other fire departments into a statewide database and then electronically submits the data to the National Fire Data Center (NFDC) at the U.S. Fire Administration. The NFDC can then compare and contrast statistics from states and large metropolitan departments to develop national public education campaigns, make recommendations for national codes and standards, guide allocation of federal funds, ascertain consumer product failures, identify the focus for research efforts, and support federal legislation. The annual NFIRS data are used as the basis for the U.S. Fire Administration's publication *Fire in the United States*, which is the single most comprehensive reference on the nature and scope of the fire problem in the U.S.

At the national level, data combined from participating states is also used by information partners, including:

- U.S. Consumer Product Safety Commission (CPSC)
- International Association of Fire Chiefs (IAFC)
- International Association of Firefighters (IAFF)
- National Association of State Fire Marshals (NASFM)
- National Fire Protection Association (NFPA)
- National Highway Traffic Safety Administration (NHTSA)
- National Volunteer Fire Council (NVFC)

The Benefits of NFIRS to Firefighters

The new system is specifically designed to be more firefighter friendly. Two additional modules, the Apparatus and Personnel Modules, have been added to assist fire departments in managing apparatus, personnel, and resources.

Every fire department is responsible for managing its operations in such a way that firefighters can do the most effective job of fire control and fire prevention. Effective performance requires careful planning, which can only take place if accurate information about fires and other incidents are available. Patterns that emerge from the analysis of incident data can help departments focus on current problems, predict future problems in their communities, and measure their programs' successes.

The same principle is also applicable at the state and national level. NFIRS provides a mechanism for analyzing incident data at each level to help meet fire protection management and planning needs. In addition, NFIRS information is used by labor organizations on a variety of matters, such as workloads and firefighter injuries.

Coding Background

Incident data collection is not new. Many cities and states have used data systems for years—some doing their analyses by hand, some using computer systems.

In 1963, the National Fire Protection Association (NFPA) formed a technical committee to devise a uniform system of fire reporting to encourage fire departments to use a common set of definitions.

A dictionary of fire terminology and associated numerical codes was developed. This dictionary is known as NFPA 901, *Standard Classifications for Incident Reporting and Fire Protection*. As the fire service gained experience with this fire data "language," improvements were made to the system. The current set of codes used in NFIRS 5.0 represents the merging of the ideas from NFPA 901 and the many suggested improvements from the users of the NFIRS 4.1 coding system.

NFIRS Background

In 1972, the President's Commission on Fire Prevention and Control issued a document entitled, *America Burning*. This document was the first "in-depth" discussion of this country's fire problem. The outgrowth of *America Burning* was the National Fire Prevention and Control Act, Public Law 93-498, which established the National Fire Prevention and Control Administration.

One of the results of the Public Law 93-498 mandate to collect national data on fires was the establishment of the National Fire Incident Reporting System. In 1976, six states piloted what was to become the National Fire Incident Reporting System, or NFIRS. The U.S. Fire Administration developed NFIRS as a means of assessing the nature and scope of the fire problem in the U.S.

NFIRS Today

The NFIRS system first came on line in 1976, and since then, it has grown in both participation and use. At the time this handbook was being prepared, 42 states and over 14,000 of this nation's fire departments were participating in NFIRS. This makes NFIRS the largest collector of fire-related incident data in the world. NFIRS contributes over 900,000 fire incidents each year to the National Fire Database.

Some states and fire departments are just beginning to participate in NFIRS, others have large databases containing several years of data. NFIRS data is being used at all levels of government: local, state, and national.

At the local level, incident and casualty module information is being used for setting priorities and targeting resources. The data now being collected is particularly useful for designing fire prevention/education programs and EMS-related activities specifically suited to the real emergency problems the local community is currently facing.

On the state level, NFIRS is being used in many different capacities. One valuable way that it has aided the states is through work with the legislature. NFIRS has been used to justify state budgets and has helped in the passage of important bills on fireworks and arson. As in the local level, the data collected is particularly useful for designing fire prevention and education programs.

Nationally, NFIRS has been used by various private industry organizations, including national associations for home appliance product manufacturers, the hotel and motel industry, insurance companies, attorneys and many others.

Many other federal agencies (aside from FEMA and the USFA) use NFIRS data, such as the Consumer Product Safety Commission, the National Highway Traffic Safety Administration, and the National Institute of Standards and Technology. The Consumer Product Safety Commission has found this system very useful in finding products that could be a hazard to consumers. With each year, the quality of the available data is improving and new and better ways to use it are devised.

What is NFIC?

As the number of NFIRS states and major metropolitan areas increased from six initial states to 42 states and 34 major metropolitan areas, it became apparent that some organization was needed to give these NFIRS participants a forum to exchange ideas and discuss common problems. The National Association of NFIRS States (NANS) was established in 1979 to provide this opportunity. Through continued change and alignment of state and metro participation in the overall operation of the NFIRS System, the importance of NANS increased.

In 1981, the name of the organization was changed to the "National Fire Information Council," or NFIC. Each state participating in NFIRS has one representative in NFIC, as does each major metropolitan area that serves 500,000 or more people.

NFIC is governed by a board of 15 directors, three from each of four geographical regions and three from metro areas. Members of the board are elected at an annual conference. The board acts as a liaison between USFA and NFIRS participants for major policy decisions concerning NFIRS operations or support.

History of NFIRS Participation

Because NFIRS is a voluntary system, not all states or fire departments within states participate. In 1977, one of the early years of the system, five states regularly reported data to the National Fire Data Center, and 19 others had data systems in some stage of development. Since then participation has increased to 42 states, and over 14,000 fire departments report to NFIRS. It is estimated that 44 percent of all fires to which fire departments respond are captured in NFIRS, making NFIRS an extremely large sample of all fires that occur each year.

Because states have the flexibility to adapt their state reporting systems to their needs, and since reporting by localities is voluntary, the design of a state's data collection system can vary from state to state. However, NFIRS was designed so that data from state systems can be converted to a single format that is used at the national level to aggregate and store NFIRS data.

The existing NFIRS employs techniques of data entry, validation, transmittal and analysis that represented the state-of-the-art at the time of its original design in the late 1970's. Advances in computer technology have now far eclipsed the current NFIRS. Survey feedback from participating fire departments, states and vendors has resulted in valuable suggestions to improve the system, many of which cannot easily be implemented within the current system due to the vintage of its architecture.

Roles and Responsibilities

United States Fire Administration. Provide oversight and leadership in developing NFIRS 5.0 specifications and maintaining the National Fire Data Center.

National Fire Information Council. Coordinate the implementation and ongoing training and overall policy decision-making functions to support NFIRS.

State Fire Marshals/State Incident Reporting Focus. Implement and maintain an active NFIRS 5.0 compliant data collection program within their jurisdiction, provide statewide data management policy making, and act as a central focus for information management at a state level.

Local Agencies. Document incidents and implement and maintain an active NFIRS 5.0 compliant reporting system.

Information Partners. Use the data/information and make suggestions for improvement and/or additions to the system. Support and encourage the use and expansion of NFIRS 5.0 compliant systems. Work with NFIC to create updates and improvements that will meet the dynamic needs of the fire service.

Section 2

SYSTEM OVERVIEW

The Data-based Decision-making Process

Fire personnel accurately recording the circumstances of all incidents, using a reliable and consistent coding methodology, is the first step in the data reporting process and a key for developing profiles that affect a department's decisions. Incident data can be used by fire departments to document their experience, support all types of management decisions, and identify, prepare and justify budget requests.

Consistent response data supports local decision making in administration and operations.

Local agencies then can send their incident data to the state, where the information is combined with data from other fire departments into a statewide database. By combining data at the state level, trends in fire problems can be detected that are often too infrequent to be seen at the local level and a state fire profile developed. Trend information can be used to target fire safety and prevention programs, as well as assist in identifying the safety level of products and practices. For these reasons, fire incident reporting is mandatory in many states.

State-level data points policy-makers to problems that need a broadly-based response.

State incident data is sent to the National Fire Data Center (NFDC) at the United States Fire Administration for further analysis. The NFDC can compare and contrast statistics from states and large metropolitan departments to develop national public education programs, make recommendations for national codes and standards, guide allocation of federal funds, identify consumer product failures, identify the focus for research efforts, and support federal legislation, such as the Hotel/Motel Fire Safety Act (Pub. L. 101-391 - Sept. 25, 1990).

National level data can be used by information partners to address community risk reduction issues.

At the national level, data combined from participating states can be used by the information partners. These organizations use national-level fire data to establish policy, allocate funds, and set standards to affect the fire problem. Decision-making based on incident patterns identifies common areas for prevention and high-risk products, and geographic areas so partners can take steps in response.

Addressing issues nationally can help local emergency responders acquire resources to address high-risk issues.

The purpose at all levels in the data reporting system is to provide timely and reliable information that supports the decision-making process, whether it is a fire captain identifying target hazards and properly deploying resources based on incident information, or the CPSC banning unsafe products like flammable sleepwear for children.

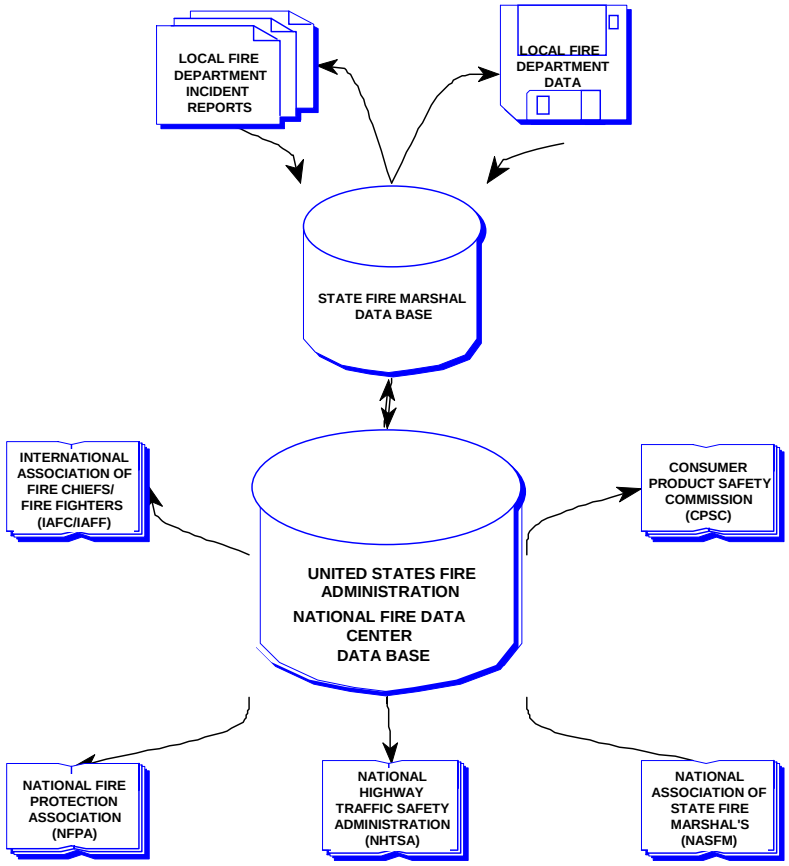
The All-Incident Reporting System

The USFA, as well as many states, is mandated by law to collect information on fires, and rely on the nation's fire service to meet that requirement through the National Fire Incident Reporting System (NFIRS). The NFIRS (Version 4.1) cannot adequately meet today's fire service information needs because it was designed to collect only fire information, which represents a fraction of the tasks performed by the fire service. The new NFIRS will address the fire service's need for a system that accounts for the full range of fire department incidents.

NFIRS 5.0 is based on 20 years of experience in data management among current NFIRS users, and ideas from national fire service organizations.

NFIRS program managers representing 42 states and 34 metro fire departments have learned many lessons about fire reporting during the past 20 years. With the input of state Fire Marshals, Metro Fire Chiefs, local Fire Departments, and customers such as the IAFC, IAFF, NFPA, CPSC, and NHTSA, they developed NFIRS 5.0, guided by the following specific design objectives.

FIGURE 2-1. Incident Reporting Process



System Design Objectives

NFIRS 5.0 records information about all responses, not just fires.

- Create an All-Incident Reporting System. To keep pace with the rapidly changing activities of the fire service, NFIRS 5.0 must be designed as an "all-incident" system including, but not limited to: Fire, EMS,

HazMat, Wildland and Arson incidents. Inclusion of new incident types must be supported by the NFIRS 5.0 Standard.

- Develop a set of reporting codes that can accurately, reliably and easily describe any incident. All data should be readily collectible, reportable and usable.
- Promote uniformity of incident reporting by establishing the NFIRS 5.0 coding methodology as the accepted national standard, with the consensus of the USFA, NFIC, NFPA, IAFC, IAFF, NASFM and other information partners.
- Make the system hardware platform independent. The NFIRS 5.0 Design Specifications must support the development of a data collection system on any hardware platform to ensure its universal acceptance and the capability to integrate with existing systems, where needed.

NFIRS 5.0 is broadly supported by national organizations.

- Make the system application software/database independent. The NFIRS 5.0 Design Specifications must support the development of a data collection system using industry standard software that is non-proprietary to the specification. This will help to ensure universal acceptance of the NFIRS 5.0 Standard and allow for its integration with existing systems.

NFIRS 5.0 is flexible and adaptable, working with a variety of hardware and software systems, including previous editions of NFIRS.

- Map the historical data from the old system to the new system where feasible.
- Preserve the ability for a state to collect Version 4 or 4.1 incident reports without maintaining a separate database.

Benefits

The new system is modular in design and only uses the modules necessary to describe the incidents. Data is collected for all incident types in one basic module. More detailed information can be collected with other modules to further profile fires, structure fires, civilian casualties, fire fighter casualties, hazardous materials, wildland fires, arson, apparatus, personnel, and EMS incidents as necessary.

A modular design increases the system flexibility, and decreases data collection.

The modular design makes the system easier to use because only the data required to profile the extent of the incident is captured. Accuracy and reliability have been improved by modifying the coding system.

Ease of Use

- Simplifies look-ups by alphabetizing coding lists with multiple choices for the same code.
- Merges the codes ending in 9 and 0. Version 4.1 required a distinction between the codes ending in 9, "not otherwise classified", and the codes ending in 0, "insufficient information to classify further". The proper distinction between these two codes is often not observable in the field.

Data coding has been revised to reduce confusing classifications.

Abbreviated reporting for most incidents will reduce data collection and classification times.

- Eliminates compound codes. Some of the previous codes have contained embedded multiple questions. NFIRS 5.0 splits these elements, since they are often confusing to the reporter and result in ambiguous or erroneous answers. Although this may increase the number of fields, the choices will be clearer among alternatives and the number of codes are decreased. For example, "Equipment Involved in Ignition" in Version 4.1 is a long, complex list of equipment that includes factors on power source and use. Version 5.0 creates just three categories (Equipment, Equipment Portability, and Equipment Power Source) to make coding easier, more accurate, and specific.
- Provides for abbreviated reporting of self-contained, non-loss fires by using a basic incident form that can be completed with as little as three look-ups. This may represent the majority of all fire incidents in many jurisdictions.
- Abbreviates paths through the system for nuisance fires where there have been no losses or casualties. This will eliminate the amount of information that needs to be entered into the system.
- Documents small spills of common hazardous materials on the basic form. More detailed information can be provided on the optional hazardous materials module if a serious release of hazardous materials occurs.

Compatibility

NFIRS 5.0 works with current technology and anticipates future equipment and software developments.

- Compatible with current electronic technology. Version 5.0 is designed for electronic media technology. The design specification in Section 3 contains specific data libraries, programming specifications, and data flow charts.
- Includes a mapping strategy back to Version 4.1 to provide for statistical analysis of historical data.
- Designed to support current and anticipated technologies: client-server, object-oriented database; and Internet WEB server technology.
- Allows for the inclusion of optional state or local data storage and retrieval. This data is for use at the local or state level only.
- Recognizes that there may be a need for additional data elements to meet the local situation.

Comprehensiveness

- Collects behavioral information on multiple levels, e.g., children playing with fire, age range, what they used to set the fire, and if they were alone at the time of the incident.
- Formats the address to allow computerized queries and street-based address matching for Geographic Information System (GIS) purposes.

- Breaks fire losses into property and contents to better define structure losses. Pre-incident value is also now captured as an optional data element.
- Captures specific property information about multiple on-site materials and their use. This will allow identification of non-intended or illegal uses of property, such as residential drug houses or laboratories.

NFIRS 5.0 offers more precise information classification.

- Notes information on the number of acres burned for all fires. Specific and detailed information about wildland or large open fires is captured for those fires only.
- Represents missing (not-reported) data as blanks system wide. Missing data will no longer be lumped in with undetermined default code values.

Reliability

- Profiles fire prevention and code issues that affected the fire.
- Captures multiple factors contributing to the causes of the fire for the first time. This allows identification of juvenile fire setters, gang involvement in fires, alcohol and cigarette interaction, as well as drugs and youth involvement by age categories.

NFIRS 5.0 data fields can capture information beyond simple incident descriptions.

- Expands on equipment involved in starting fires. Detailed tracking of specific equipment involved in fire ignitions is possible.
- Highlights factors that affect fireground suppression. Burglar bars, high-rack storage, balloon construction and unprotected vertical openings are some examples of this information.

Usefulness

- Provides better information on the impact of fire protection features.
- Transmits certification of applications with certification numbers to the state.

Administrative information is routinely gathered and classified.

- Includes carbon monoxide incidents.
- Notes one-time information for special studies purposes.
- Groups fire service resources for apparatus and personnel by use at the incident. Specific, detailed information about the use of fire service personnel and apparatus will be collected in a standard way for the first time in optional modules. This will permit staffing studies on several levels of use.
- Outlines detailed information on the impact of fires on buildings. Information on the building's size, number of stories and status is now available. Specific information on fire origin, damage patterns, flame spread and materials contributing to flame spread is captured as well.

Data fields profile building and systems information that can be used to develop prevention strategies.

- Expands information on detectors and automatic suppression systems. Information on the system's presence, range, power supply, effectiveness, operation, and reason for failure is included.
- Extends information on casualties to provide a better understanding of the relationship of the casualty to factors contributing to injury, as well as the nature and cause of injuries.

System Module Overview

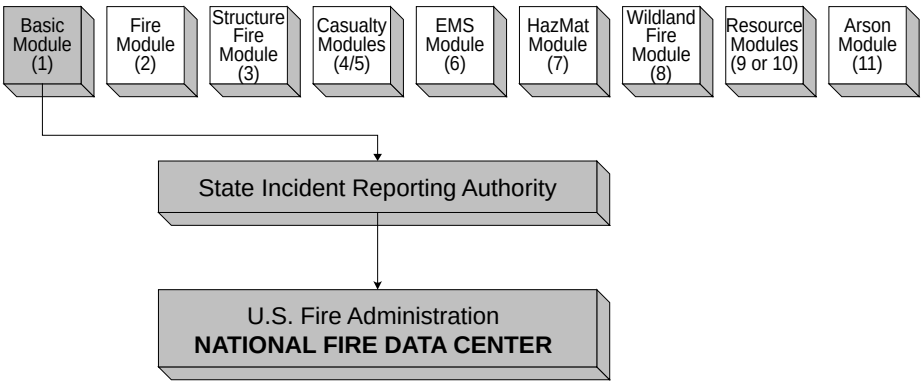
Version 5.0 uses a modular format to increase the accuracy and applicability of data collection for all incident types. The overall number of data fields has been increased. However, because 5.0 takes advantage of selective field entries based on incident type, the number of fields used to define an incident has decreased compared to Version 4.1. Version 5.0 has eleven modules that are described below.

Most incidents can be profiled using a single set of data fields.

Basic Module (NFIRS-1)

The Basic Module is used for every incident. This may be the only module necessary for certain incident types such as confined fires, small vegetation fires, outside rubbish fires, explosions, and other incidents classified as "other fire types and non-fires." This feature satisfies the request for short form fire reporting.

FIGURE 2-2. Basic Module



NFIRS-1 includes information on:

- Fire Department Identifier
- Location
- Incident Type
- Aid Given or Received
- Dates And Times/Shifts/Special Studies
- Actions Taken
- Dollar Losses And Values

- Casualties
- Hazmat Releases
- Property Use
- Persons and Entities Involved

A basic module would be completed for incidents similar to these examples:

- Food on Stove/Contained No-loss Fires
- Outside Trash Fire
- Major Accidents
- First Responder Calls
- Assist Police

Supplemental Module (NFIRS-1S)

This Module is used to record additional information as required by the local fire department.

The Supplemental Module adds flexibility to any incident report by expanding the data.

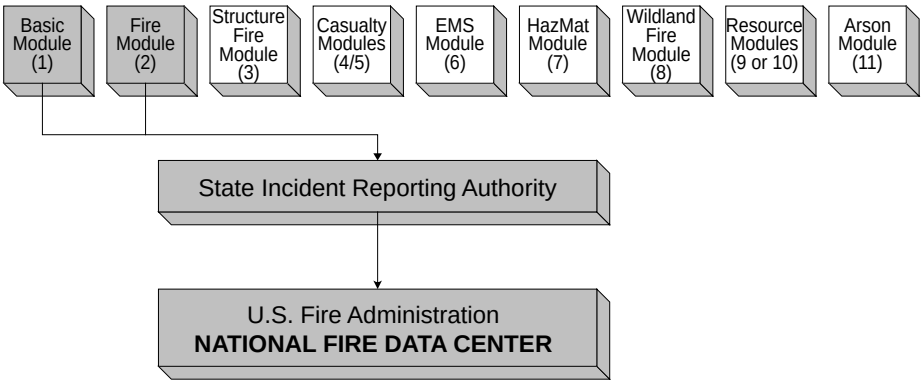
The NFIRS-1S includes information on:

- Person/Entity Involved
- Special Studies

Fire Module (NFIRS-2)

The Fire Module is used to record information on incidents involving fires, including buildings, outside storage fires, vehicle fires, and larger vegetation fires. As an option, the wildland module can be used for vegetation and other outside fires. Building fires require the use of the Structure Fire Module.

FIGURE 2-3. Fire Module



NFIRS–2 includes information on:

- Property Details
- On-Site Materials

- Ignition: Area, Source of Ignition, Material Ignited, Factors Contributing, Human Issues, Equipment Involved
- Human Factors Involved
- Mobile Property Description
- Fire Origin and Spread Description
- Fire Suppression Factors

Actual fire incidents are profiled in depth, using a dedicated module.

A Basic Module and Fire Module would be completed for incidents as outlined in the following example:

Car Fire

The identifier, location, incident type, aid given or received, dates and times, actions taken, estimated dollar losses and values, casualties and property use sections would be completed for the basic module.

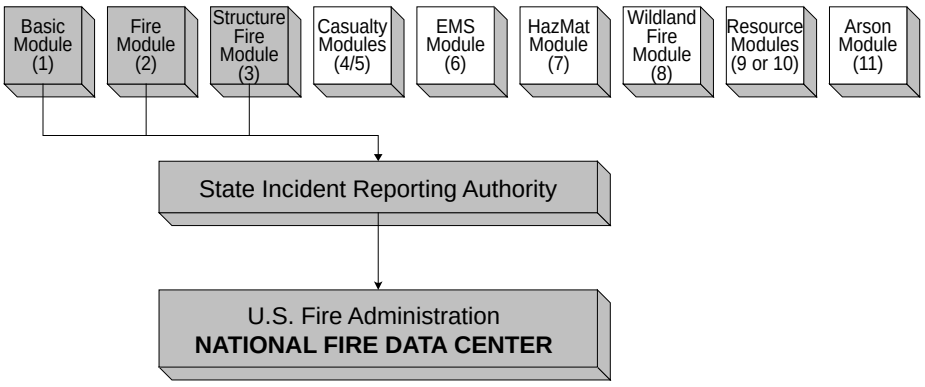
The identifier, on-site materials, ignition, cause of ignition, factors contributing to ignition, human factors contributing to ignition, equipment involved in ignition and mobile property sections would be completed for the fire module.

If multiple persons and entities are involved, the supplemental module would be used to record the additional details.

Structure Fire Module (NFIRS-3)

The Structure Fire Module is used to record information on incidents involving structure fires.

FIGURE 2-4. Structure Fire Module



NFIRS-3 includes information on:

- Structure type
- Building status, height, main floor size
- Fire origin, fire spread, number of stories damaged by flame
- Material contributing to flame spread

- Presence of detectors, detector type, detector power supply, detector operation, detector effectiveness, detector failure reason
- Presence of automatic extinguishment system (AES), type of AES, AES operation, AES effectiveness and AES failure reason

A Basic Module, Fire Module and Structure Fire Module would be completed for incidents such as these examples:

Structure fires can be described through fire and structure module data, personnel information, and apparatus response details.

House Fire

At a minimum, the Basic Module, the Fire Module and the Structure Module would be completed for a house fire. Additional modules may be required if there are casualties, etc.

The Basic Module records the location, incident type, aid given or received, dates and times, actions taken, estimated dollar losses and values, casualties, property use and persons involved.

The Fire Module records the on-site materials, ignition, cause of ignition, factors contributing to ignition, human factors contributing to ignition, equipment involved in ignition and mobile property.

The Structure Fire Module records the building status, building size, main floor size, fire origin, fire spread, number of stories damaged by flame, presence of detectors, detector type, detector power supply, detector operation, detector effectiveness, detector failure reason, presence of automatic extinguishment system (AES), type of AES, AES operation, AES effectiveness and AES failure reason.

Either the resources section on the Basic Module or the Apparatus or Personnel modules could be used. If there are civilian or firefighter casualties, then the appropriate casualty module would be used.

If multiple persons and entities are involved, then the modules for other resources would be used.

Hotel Fire

At a minimum, the Basic Module, the Fire Module and the Structure Module would be completed for a hotel fire.

The Basic Module records the location, incident type, aid given or received, dates and times, actions taken, estimated dollar losses and values, casualties, property use and persons involved.

The Fire Module records the on-site materials, ignition, cause of ignition, factors contributing to ignition, human factors contributing to ignition, equipment involved in ignition and mobile property.

The Structure Fire Module records the building status, building size, main floor size, fire origin, fire spread, number of stories damaged by flame, presence of detectors, detector type, detector power supply, detector operation, detector effectiveness, detector failure reason, presence of

automatic extinguishment system (AES), type of AES, AES operation, AES effectiveness and AES failure reason.

Larger fire incidents can be extensively described through available data fields and supplemental modules.

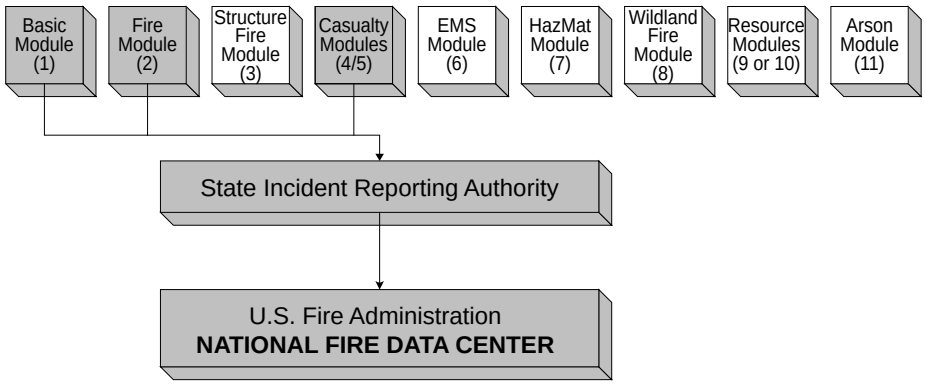
Either the resources section on the Basic Module or the Apparatus or Personnel modules could be used. If there are civilian or firefighter casualties then the appropriate casualty module could be used.

If multiple persons and entities are involved, the supplemental module would be used to record the additional details.

Civilian Fire Casualty Module (NFIRS-4)

The Civilian Casualty Module is used whenever a fire incident type involves a civilian injury or fatality.

FIGURE 2-5. Civilian Fire Casualty Module



NFIRS-4 includes information on:

Civilian Casualty information can be used to develop prevention responses.

- Person's identification
- Demographic information
- Injury causes, including human and contributing factors
- Activity when injured
- Location when injured
- Symptoms and portion of body injured
- Disposition

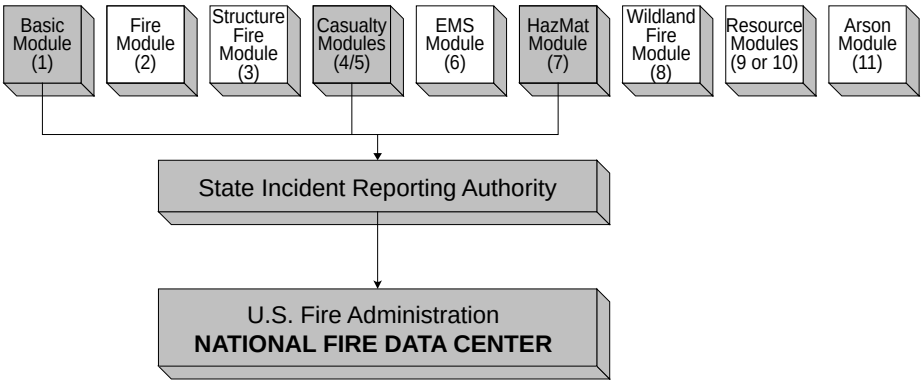
At a minimum, the Basic Module and the Fire Module must be completed. Depending on the incident, the Structure Fire Module may also be required.

Fire Service Casualty Module (NFIRS-5)

Firefighter casualty information can be used by Health and Safety Officers to reduce risks at incidents.

The Fire Service Casualty Module is used when fire service personnel suffer an injury, fall or exposure involved with any incident. When the Fire Service Casualty Module is used, at a minimum the Basic Module must also be completed.

FIGURE 2-6. Fire Service Casualty Module



Other modules may also be required depending on the incident type.

NFIRS-5 includes information on:

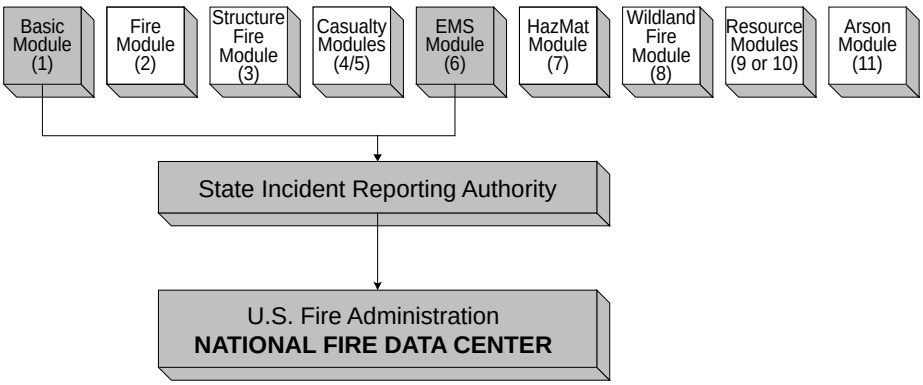
- Person's identification and age
- Injury time
- Assignment and activity at time of injury
- Severity of injury and disposition
- Location of victim when injured
- Symptoms and portion of body injured
- Cause of injury, factors contributing, object involved
- Where injury occurred
- Equipment profiles

Medical service activities can be profiled as an operations function for management and strategic decision-making.

Emergency Medical Services (EMS) Module (NFIRS-6)

The EMS Module is used as an option at the local level when the fire department provides emergency medical service.

FIGURE 2-7. Emergency Medical Services (EMS) Module



NFIRS – 6 includes information on:

- Incident location and type
- In service dates and times
- Provider assessment
- Victim demographics
- Injury/illness description
- Procedures used
- Safety equipment involved
- Care level
- Patient status and disposition

Emergency Medical Services Module example:

Rescue Run

A rescue run would use the Basic Module as well as the EMS Module and possibly one of the other resources modules.

The identifier, location, incident type, aid given or received, dates and times, actions taken, estimated dollar losses and values, casualties and property use sections would be completed for the Basic Module.

Either the resources section on the Basic Module or the Apparatus Module or Personnel Module would be used.

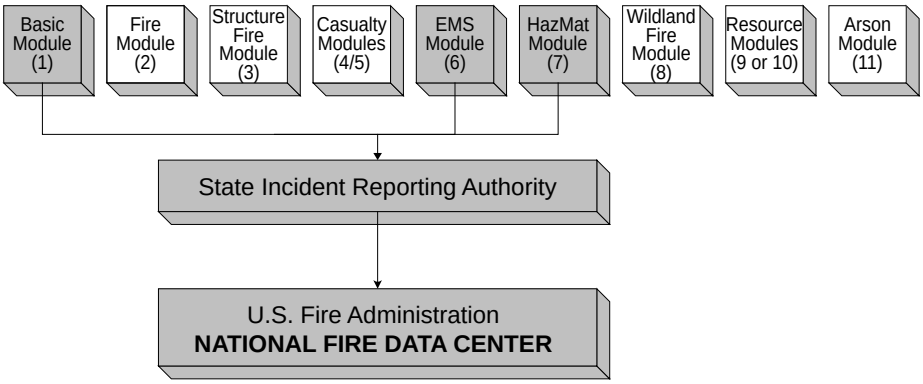
If multiple persons and entities are involved, the other resources modules could be completed.

The EMS Module may be used as an option. The identifier information, dates and times, age and gender, provider impression/assessment, race/ethnicity, injury description, cause of illness/injury, highest level of care, patient status and disposition should be completed.

Hazardous Materials (HazMat) Module (NFIRS-7)

The HazMat Module is used when the Basic Module indicates "other" for hazardous materials.

FIGURE 2-8. HazMat Module



NFIRS-7 includes information on:

- Materials identification
- Container information
- Release amounts and location
- Actions taken
- Mitigating factors

An incident such as this example would be recorded using the Basic Module, Fire Module, and HazMat Module and possibly other Resource Modules.

Hazardous materials incidents can be profiled in depth for management clarification and response strategy development.

Chemical Plant Fire

The identifier, location, incident type, aid given or received, dates and times, actions taken, estimated dollar losses and values, casualties and property use sections would be completed for the Basic Module.

The identifier, on-site materials, ignition, cause of ignition, factors contributing to ignition, human factors contributing to ignition, equipment involved in ignition and mobile property sections would be completed on the Fire Module.

The building status, building size, main floor size, fire origin, fire spread, number of stories damaged by flame, presence of detectors, detector type, detector power supply, detector operation, detector effectiveness, detector failure reason, presence of automatic extinguishment system (AES), type of AES, AES operation, AES effectiveness and AES failure reason sections would be completed for the Structure Module.

Either the resources section on the Basic Module, or the Apparatus or Personnel modules would be used. If casualties occurred then the appropriate casualty module would be completed. The EMS Module is an optional choice but the Civilian Fire Casualty Module is not required.

The identifier, HazMat ID, container type, physical state when released, released from, population density, actions taken, release resulted in, cause

of release, factors contributing to release, mitigating factors and impediments, equipment involved in release and mobile property sections must be completed on the HazMat Module.

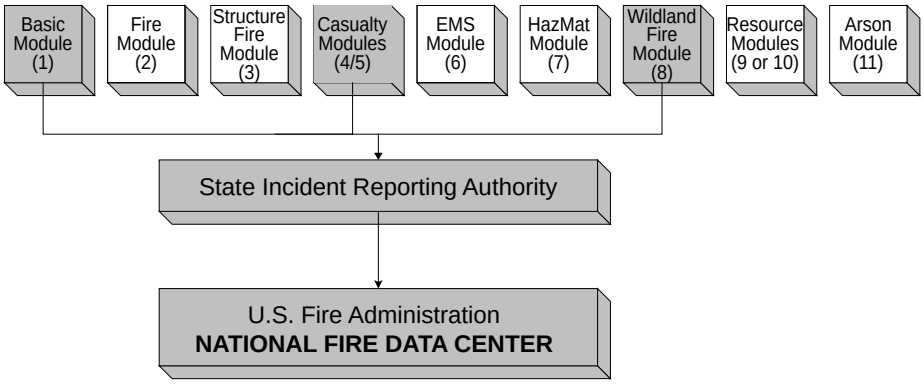
If multiple persons and entities were involved, the other Resources Modules would be used.

Wildland Module (NFIRS-8)

Wildland incidents of all sizes can be described in detail.

The Wildland Module is used when the incident type is vegetation and other outside fires.

FIGURE 2-9. Wildland Module



NFIRS-8 includes information on:

- Property details
- Fire cause
- Ignition information
- Fire suppression and management
- Mobile property type
- Equipment involved in ignition
- Weather data
- Fuel model at origin
- Total acres burned
- Property management
- Person responsible
- Fire behavior

In this example, a Basic Module would be completed, as well as the Wildland Fire Module instead of the Fire Module which is usually completed. A firefighter injury requires the completion of the Firefighter Casualty Module. The other Resources Modules and the EMS Module could be options for this incident as well.

Forest/Wildland Fire

The identifier, location, incident type, aid given or received, dates and times, actions taken, estimated dollar losses and values, casualties and property use sections would be completed for the Basic Module.

The identifier, alternate location (if the location on the basic form is not used), area type, fire cause, factors contributing to ignition, human factors contributing to ignition, suppression factors, equipment involved in ignition, mobile property type, weather information, number of buildings threatened and involved, fuel model at origin, acres and crops burned, the property management section, the person responsible section and the fire behavior section would be completed for the Wildland Module.

The appropriate Casualty Module would be completed. Either the resources section on the Basic Module or the Apparatus Module or Personnel Module would be used.

If multiple persons and entities are involved, the supplemental module could be used.

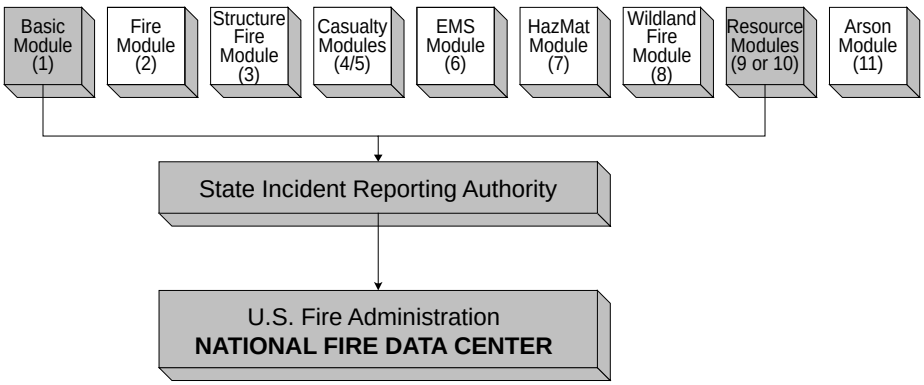
The EMS Module may be used as an option. The identifier information, dates and times, age and gender, provider impression/assessment, race/ethnicity, injury description, cause of illness/injury, highest level of care, patient status and disposition would be completed.

Apparatus Module (NFIRS-9)

The Apparatus Module is used as a local option to identify apparatus sent to each incident. If the Apparatus Module is used, the Basic Module must also be completed.

NOTE: When NFIRS Version 5.0 is implemented the local fire department must choose to use either the Apparatus Module or the Personnel Module depending on the level of detail needed by the department. The Personnel Module contains all data elements from the Apparatus Module plus additional data at the firefighter level.

FIGURE 2-10. Apparatus Module



NFIRS-9 includes information on:

- Apparatus identification and type
- Dispatch, arrival, clear dates and times
- Number of personnel
- Use
- Actions taken

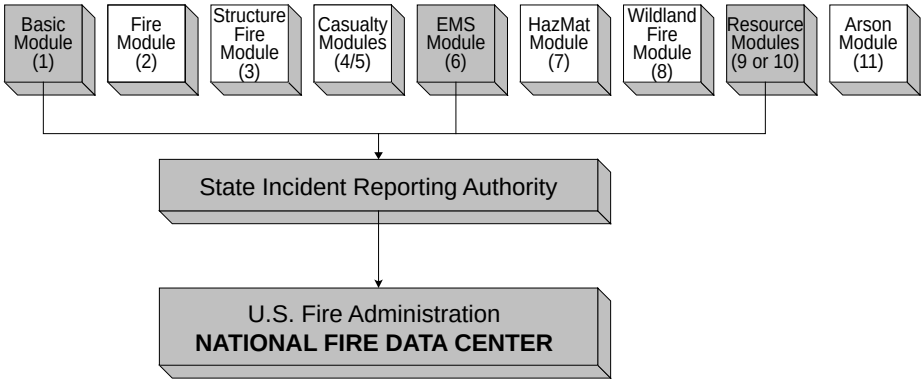
Personnel Module (NFIRS-10)

Modules profiling equipment and personnel provide administrators with data that can be used for management strategy development.

The Personnel Module is used as a local option to identify personnel sent to each incident. If the Personnel Module is used, the Basic Module must also be completed.

NOTE: When NFIRS Version 5.0 is implemented the local fire department must choose to use either the Apparatus Module or the Personnel Module depending on the level of detail needed by the department. The Personnel Module contains all data elements from the Apparatus Module plus additional data at the firefighter level.

FIGURE 2-11. Personnel Module



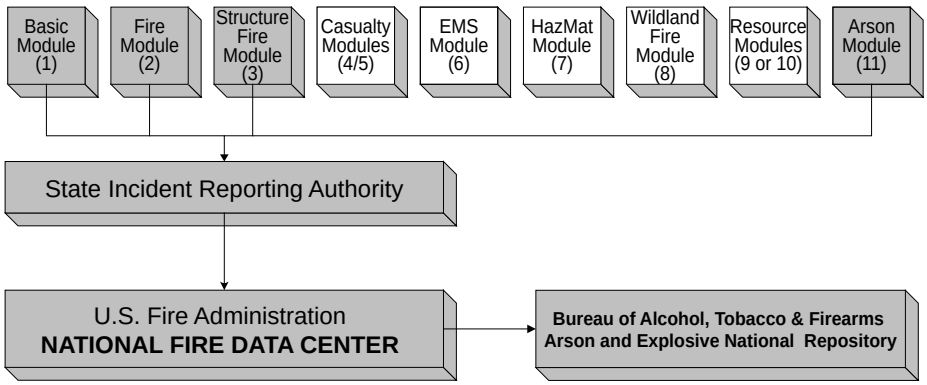
NFIRS – 10 includes information on:

- Apparatus identification and type
- Dispatch, arrival, clear dates and times
- Use
- Actions taken
- Personnel ID, rank, actions taken

Arson Module (NFIRS-11)

The Arson Module is optional and when used in conjunction with the Basic, Fire, and/or Structure Fire Modules allows departments to collect information about intentionally set fires. NFIRS-11 is designed to collect standardized information and interface directly with the Bureau of Alcohol, Tobacco, and Firearms' Arson and Explosives National Repository.

FIGURE 2-12. Arson Module



The NFIRS-11 includes information on:

- Agency investigating the incident
- Case status
- Suspected motivation factors
- Entry methods, devices, other information
- Property ownership,
- Laboratory used

Section 3

TECHNICAL DOCUMENTATION

System Architecture

The NFIRS 5.0 system is implemented as a distributed client-server system using "state-of-the-art" technologies. The system architecture has been specifically designed to provide flexibility for the implementation of the NFIRS 5.0 system.

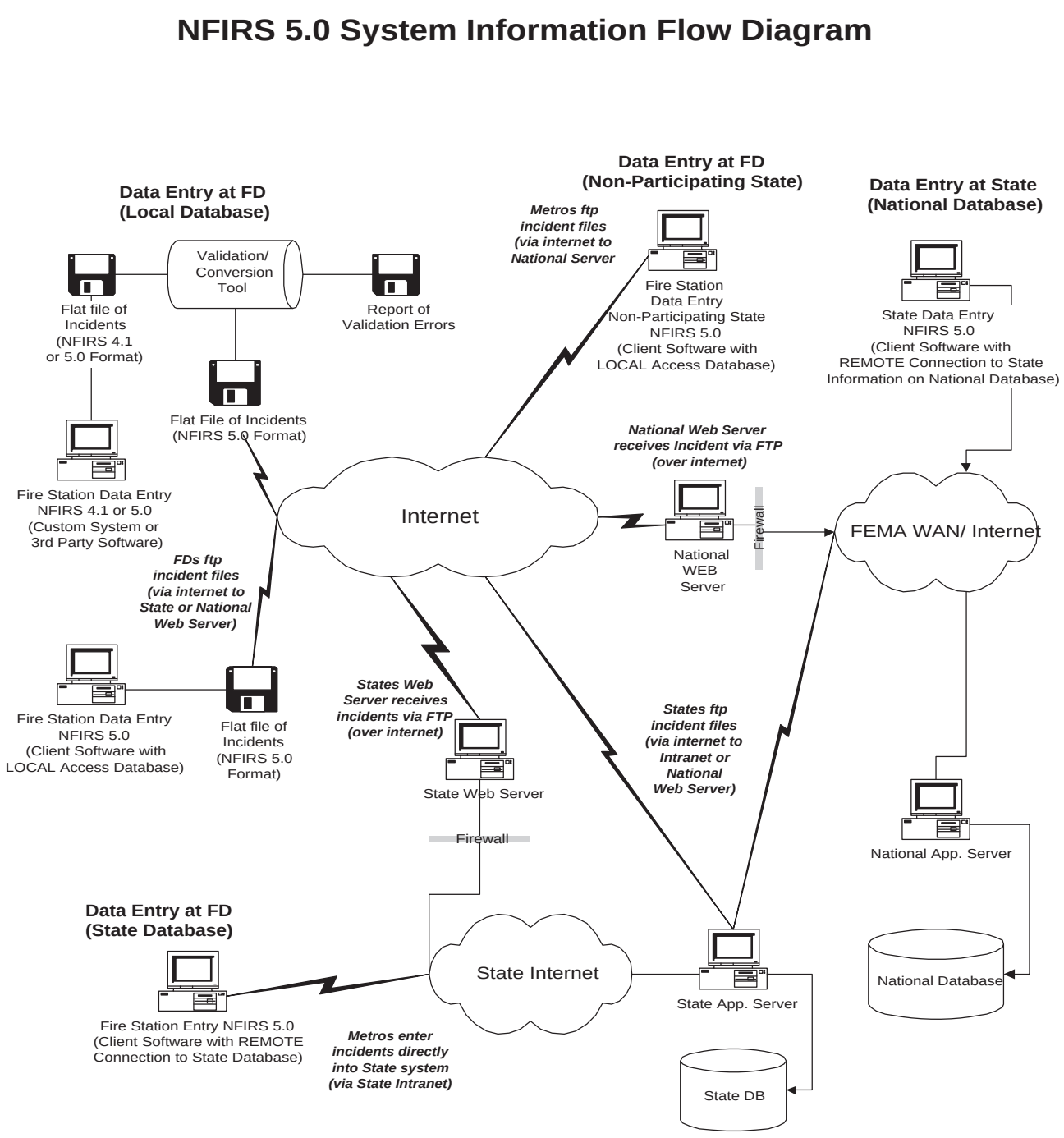
At the core of the NFIRS 5.0 system is a national database server and server software that resides on the FEMA WAN. Incident data stored in the NFIRS 5.0 system is organized by state and identified as a valid incident through the tools provided by the USFA. States are required to 'release' valid incidents that are available for general use. Some states may prefer to store all their incident data on a local database. In this case they have the option to upload only the valid incidents to the National database server and 'release' those valid incidents that are available for general use.

Depending on how a state chooses to implement the NFIRS 5.0 system, the components of the system required and the options available for those components will vary. The main differentiating factors between the scenarios surround where the data is stored and where incident data entry takes place. For discussion of the options available to the state, See "System Implementation Guidelines" on page 333.

System Note: On January 1, 2009, NFIRS ceased collection of NFIRS legacy version 4.1 incidents. Data in the 4.1 format collected after the NFIRS 4.1 sunset date are no longer converted and imported into the NFIRS database.

Figure 3-1 on page 26 depicts some of the inbound incident collection connectivity options available to states and local users.

FIGURE 3-1. NFIRS 5.0 System Information Flow



System Modules

The new system is modular in design and only requires the modules necessary to describe a particular incident. Data is collected on ***all incidents*** in a basic module with additional modules employed to further profile fires, structure fires, civilian fire casualties, fire service casualties, EMS incidents, hazardous material incidents, fires, apparatus, personnel deployment and arson fires.

The following is a brief description of each module used in the NFIRS Version 5.0.

The ***Basic Module* (NFIRS-1)** is used to describe every incident (or emergency call) to which your fire department responds. The Basic Module should be filled out for *every incident to which the department responds*. A sample of the Basic form is shown in Figure 3-2 on page 30.

The ***Fire Module* (NFIRS-2)** is used to describe each *fire* incident to which your fire department responds and must be used in conjunction with the Basic Module (NFIRS-1). For wildland fire incidents, the Wildland Fire Module (NFIRS-8) can be used instead of the Fire Module if that option is selected for use by your state or local reporting system administrator. A sample of the Fire form is shown in Figure 3-4 on page 32.

The ***Structure Fire Module* (NFIRS-3)** is used to describe each *structure fire* to which your fire department responds. This module must be used in conjunction with the Basic Module (NFIRS-1) and the Fire Module (NFIRS-2). When reporting using the paper forms, NFIRS-3 is generally printed on the back of the NFIRS-2 Fire form. A sample of the Structure Fire form is shown in Figure 3-5 on page 33.

The ***Civilian Fire Casualty Module* (NFIRS-4)** is used to report injuries or deaths to civilians or other emergency personnel (such as police officers or non-fire department EMS personnel) that occur in conjunction with a fire incident. The Civilian Fire Casualty Module must be used in conjunction with the Basic Module, the Fire Module, and if applicable the Structure Fire Module. NFIRS-4 is specifically designed for reporting injuries and fatalities caused by, or related to, a fire. To report non-fire related injuries to civilians the EMS Module (NFIRS-6) can be used. A sample of the Civilian Fire Casualty form is shown in Figure 3-6 on page 34.

The ***Fire Service Casualty Module* (NFIRS-5)** is used to report injuries or the deaths to firefighters. The module can also be used to report the exposure of a fire fighter to chemicals or biological agents at an incident where that exposure does not result in any symptoms at that time but where that exposure or accumulated exposures could lead to an illness at a later date. This module must be used in conjunction with the Basic Module and may be used with any of the other modules. A sample of the Fire Service Casualty form is shown in Figure 3-7 on page 35, and Figure 3-8 on page 36.

The ***EMS Module* (NFIRS-6)** is an optional module that can be used by those fire departments that provide emergency medical services to their community. It should be used only when the EMS Module option is selected by your state or local reporting system administrator. The module is used to report all medical incidents where the fire department provided the primary patient care. This includes incidents where there were civilian fire-related injuries and a Civilian Fire Casualty Module was completed, and where there were fire fighter injuries and a Fire Service Casualty Module was completed. *Note* – This is not a patient care record, but should be used in conjunction with the local requirements for patient care. This module can be used in conjunction with the Basic Module (NFIRS-1). A sample of the EMS form is shown in Figure 3-9 on page 37.

The ***Hazardous Materials Module* (NFIRS-7)** is an optional module used to report major spills or releases involving hazardous materials. It should be used only when the Hazardous Materials Module option is selected by your state or local reporting system administrator. This module is designed to be used in conjunction with the Basic Module (NFIRS-1) and, if appropriate, the Fire Module (NFIRS-2) or other modules to provide detailed information about incidents involving hazardous materials. A sample of the Hazardous Materials form is shown in Figure 3-10 on page 38.

The ***Wildland Fire Module* (NFIRS-8)** is an optional module used to report incidents that involve wildland or vegetation fires. It should be used only when the Wildland Fire Module option is selected by your state or local reporting system administrator. This module must be used in conjunction with the Basic Module (NFIRS-1) and replaces the Fire Module (NFIRS-2) for wildland fire incidents. A sample of the Wildland Fire form is shown in Figure 3-11 on page 39.

The ***Apparatus Module* (NFIRS-9)** and ***Personnel Module* (NFIRS-10)** are optional *department use* modules used to report detailed information on the apparatus and personnel that respond to the incident. They should be used only when the Apparatus or the Personnel Module option is selected by your state or local reporting system administrator. The Apparatus Module (NFIRS-9) is used to report data specific to each piece of apparatus that responds to the incident. It includes data that can be used to calculate response time and time out of service. The Personnel Module (NFIRS-10) is used to report the same data on a piece of apparatus but also provides for tracking the personnel associated with that apparatus. These optional modules can be used in conjunction with the Basic Module (NFIRS-1) for any type of incident. A sample of the Apparatus form is shown in Figure 3-12 on page 40, and the Personnel form appears in Figure 3-13 on page 41.

The ***Arson Module* (NFIRS-11)** is an optional module used to report additional information on fires that have been coded by the department as

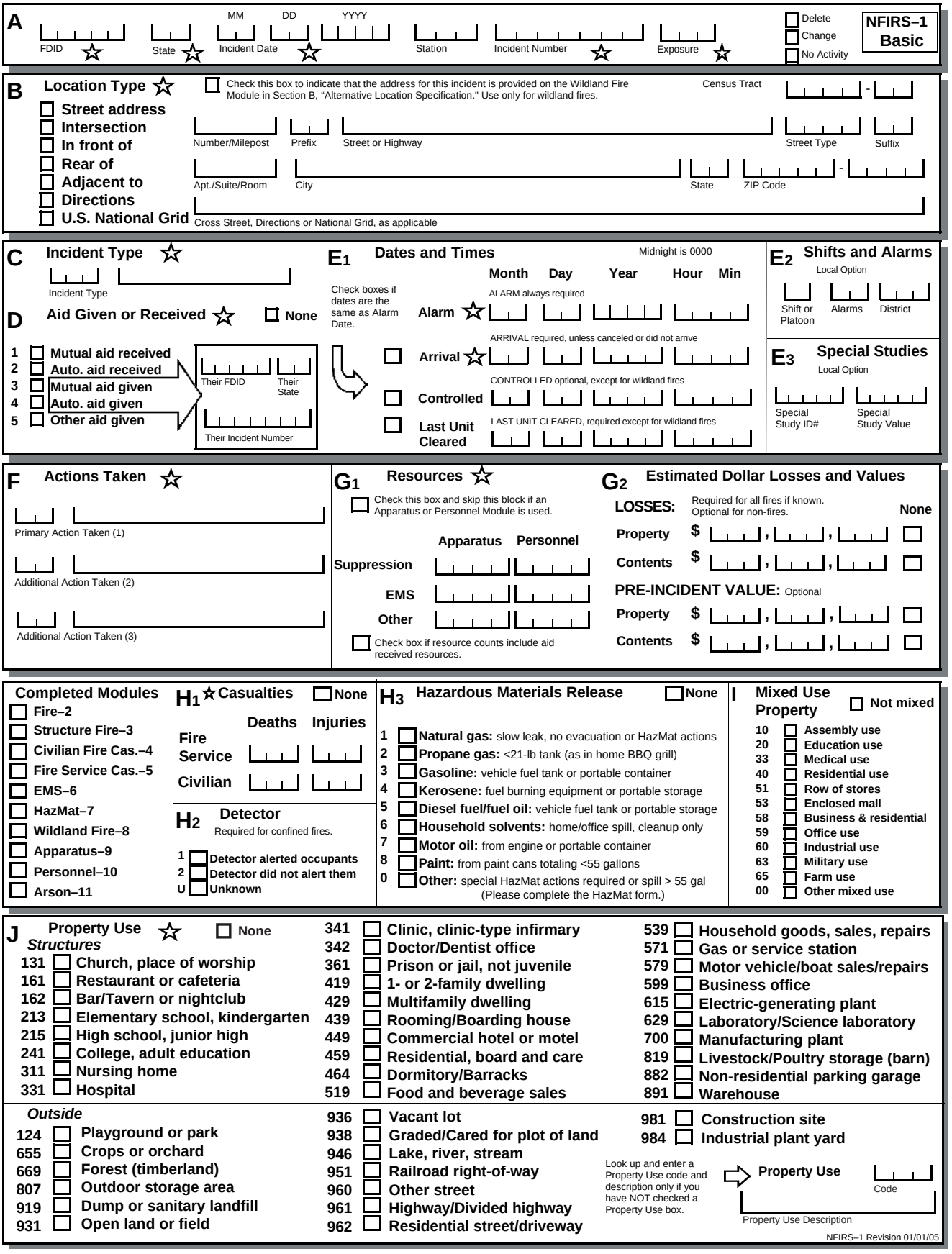
intentionally set. It should be used only when the Arson Module option is selected by your state or local reporting system administrator. This module collects general information on an arson incident, which is then sent to the National Fire Data Center. A sample of the Arson form is shown in Figure 3-14 on page 42, and Figure 3-15 on page 43.

The ***Supplemental Module* (NFIRS-1S)** is an optional module used to report detailed information on additional persons or entities involved in the incident. It adds flexibility to any incident report by expanding the data capability. A sample of the Supplemental form is shown in Figure 3-16 on page 44, and Figure 3-17 on page 45.

To downloaded A complete set of forms from the USFA website click on the following URL:

http://www.nfirs.fema.gov/documentation/design/

FIGURE 3-2. NFIRS-1 Basic Form



A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change ☐ No Activity | **NFIRS–1 Basic**

B Location Type ☆
☐ Street address
☐ Intersection
☐ In front of
☐ Rear of
☐ Adjacent to
☐ Directions
☐ U.S. National Grid

☐ Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.

Census Tract

Number/Milepost | Prefix | Street or Highway | Street Type | Suffix

Apt./Suite/Room | City | State | ZIP Code

Cross Street, Directions or National Grid, as applicable

C Incident Type ☆
Incident Type

D Aid Given or Received ☆ ☐ None
1 ☐ Mutual aid received
2 ☐ Auto. aid received
3 ☐ Mutual aid given
4 ☐ Auto. aid given
5 ☐ Other aid given

Their FDID | Their State | Their Incident Number

E1 Dates and Times (Midnight is 0000)

Check boxes if dates are the same as Alarm Date.

	Month	Day	Year	Hour	Min
Alarm ☆ (ALARM always required)					
☐ Arrival ☆ (ARRIVAL required, unless canceled or did not arrive)					
☐ Controlled (CONTROLLED optional, except for wildland fires)					
☐ Last Unit Cleared (LAST UNIT CLEARED, required except for wildland fires)					

E2 Shifts and Alarms Local Option
Shift or Platoon | Alarms | District

E3 Special Studies Local Option
Special Study ID# | Special Study Value

F Actions Taken ☆
Primary Action Taken (1)
Additional Action Taken (2)
Additional Action Taken (3)

G1 Resources ☆
☐ Check this box and skip this block if an Apparatus or Personnel Module is used.

	Apparatus	Personnel
Suppression		
EMS		
Other		

☐ Check box if resource counts include aid received resources.

G2 Estimated Dollar Losses and Values

LOSSES: Required for all fires if known. Optional for non-fires. None
Property $, , ☐
Contents $, , ☐

PRE-INCIDENT VALUE: Optional
Property $, , ☐
Contents $, , ☐

Completed Modules
☐ Fire–2
☐ Structure Fire–3
☐ Civilian Fire Cas.–4
☐ Fire Service Cas.–5
☐ EMS–6
☐ HazMat–7
☐ Wildland Fire–8
☐ Apparatus–9
☐ Personnel–10
☐ Arson–11

H1 ☆Casualties ☐ None

	Deaths	Injuries
Fire Service		
Civilian		

H2 Detector
Required for confined fires.
1 ☐ Detector alerted occupants
2 ☐ Detector did not alert them
U ☐ Unknown

H3 Hazardous Materials Release ☐ None
1 ☐ **Natural gas:** slow leak, no evacuation or HazMat actions
2 ☐ **Propane gas:** <21-lb tank (as in home BBQ grill)
3 ☐ **Gasoline:** vehicle fuel tank or portable container
4 ☐ **Kerosene:** fuel burning equipment or portable storage
5 ☐ **Diesel fuel/fuel oil:** vehicle fuel tank or portable storage
6 ☐ **Household solvents:** home/office spill, cleanup only
7 ☐ **Motor oil:** from engine or portable container
8 ☐ **Paint:** from paint cans totaling <55 gallons
0 ☐ **Other:** special HazMat actions required or spill > 55 gal (Please complete the HazMat form.)

I Mixed Use Property ☐ Not mixed
10 ☐ Assembly use
20 ☐ Education use
33 ☐ Medical use
40 ☐ Residential use
51 ☐ Row of stores
53 ☐ Enclosed mall
58 ☐ Business & residential
59 ☐ Office use
60 ☐ Industrial use
63 ☐ Military use
65 ☐ Farm use
00 ☐ Other mixed use

J Property Use ☆ ☐ None

Structures
131 ☐ Church, place of worship
161 ☐ Restaurant or cafeteria
162 ☐ Bar/Tavern or nightclub
213 ☐ Elementary school, kindergarten
215 ☐ High school, junior high
241 ☐ College, adult education
311 ☐ Nursing home
331 ☐ Hospital
341 ☐ Clinic, clinic-type infirmary
342 ☐ Doctor/Dentist office
361 ☐ Prison or jail, not juvenile
419 ☐ 1- or 2-family dwelling
429 ☐ Multifamily dwelling
439 ☐ Rooming/Boarding house
449 ☐ Commercial hotel or motel
459 ☐ Residential, board and care
464 ☐ Dormitory/Barracks
519 ☐ Food and beverage sales
539 ☐ Household goods, sales, repairs
571 ☐ Gas or service station
579 ☐ Motor vehicle/boat sales/repairs
599 ☐ Business office
615 ☐ Electric-generating plant
629 ☐ Laboratory/Science laboratory
700 ☐ Manufacturing plant
819 ☐ Livestock/Poultry storage (barn)
882 ☐ Non-residential parking garage
891 ☐ Warehouse

Outside
124 ☐ Playground or park
655 ☐ Crops or orchard
669 ☐ Forest (timberland)
807 ☐ Outdoor storage area
919 ☐ Dump or sanitary landfill
931 ☐ Open land or field
936 ☐ Vacant lot
938 ☐ Graded/Cared for plot of land
946 ☐ Lake, river, stream
951 ☐ Railroad right-of-way
960 ☐ Other street
961 ☐ Highway/Divided highway
962 ☐ Residential street/driveway
981 ☐ Construction site
984 ☐ Industrial plant yard

Look up and enter a Property Use code and description only if you have NOT checked a Property Use box.

Property Use Code
Property Use Description

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FIGURE 3-3. NFIRS-1 Basic Form (side 2)

K1 Person/Entity Involved

Local Option

Business Name (if applicable) | Area Code | Phone Number

☐ Check this box if same address as incident location (Section B). Then skip the three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code

☐ **More people involved? Check this box and attach Supplemental Forms (NFIRS–1S) as necessary.**

K2 Owner

Local Option

☐ Same as person involved? Then check this box and skip the rest of this block.

Business Name (if applicable) | Area Code | Phone Number

☐ Check this box if same address as incident location (Section B). Then skip the three duplicate address lines.

Mr., Ms., Mrs. | First Name | MI | Last Name | Suffix

Number | Prefix | Street or Highway | Street Type | Suffix

Post Office Box | Apt./Suite/Room | City

State | ZIP Code

L Remarks:

Local Option

Fire Module Required?

Check the box that applies and then complete the Fire Module based on Incident Type, as follows:

☐ **Buildings 111**	**Complete Fire & Structure Modules**
☐ **Special structure 112**	**Complete Fire Module & Section I, Structure Module**
☐ **Confined 113–118**	**Basic Module Only**
☐ **Mobile property 120–123**	**Complete Fire & Structure Modules**
☐ **Vehicle 130–138**	**Complete Fire Module**
☐ **Vegetation 140–143**	**Complete Fire or Wildland Module**
☐ **Outside rubbish fire 150–155**	**Basic Module Only**
☐ **Special outside fire 160**	**Complete Fire or Wildland Module**
☐ **Special outside fire 161–163**	**Complete Fire Module**
☐ **Crop fire 170–173**	**Complete Fire or Wildland Module**

ITEMS WITH A ☆ MUST **ALWAYS** BE COMPLETED!

☐ **More remarks? Check this box and attach Supplemental Forms (NFIRS–1S) as necessary.**

M Authorization

Officer in charge ID | Signature | Position or rank | Assignment | Month | Day | Year

Check box if same as Officer in charge. ⇨ ☐

Member making report ID | Signature | Position or rank | Assignment | Month | Day | Year

FIGURE 3-4. NFIRS-2 Fire Form

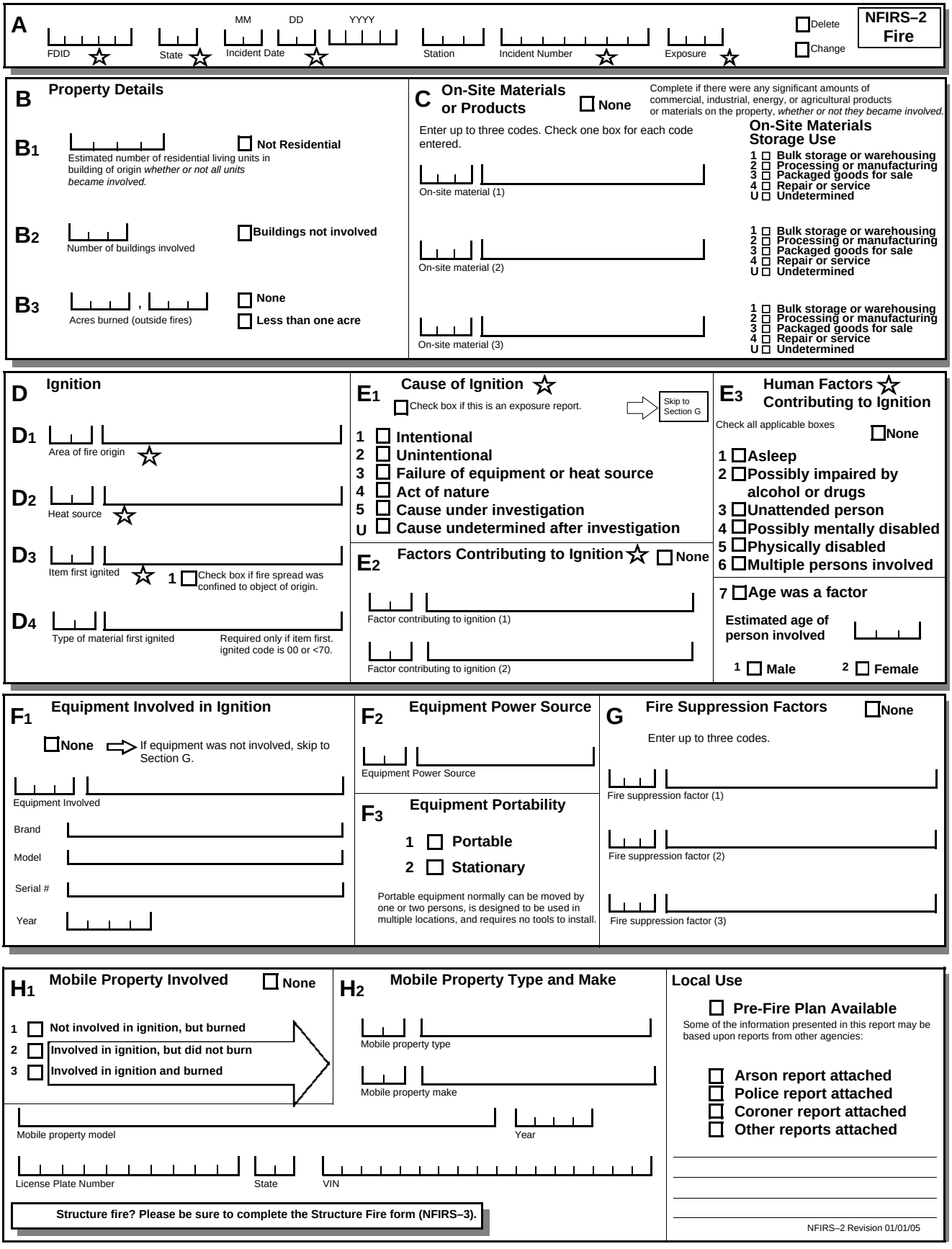


FIGURE 3-5. NFIRS-3 Structure Fire Form

I1 Structure Type ☆
If fire was in an enclosed building or a portable/mobile structure, complete the rest of this form.
1 ☐ Enclosed building
2 ☐ Portable/Mobile structure
3 ☐ Open structure
4 ☐ Air-supported structure
5 ☐ Tent
6 ☐ Open platform (e.g., piers)
7 ☐ Underground structure (work areas)
8 ☐ Connective structure (e.g., fences)
0 ☐ Other type of structure

I2 Building Status ☆
1 ☐ Under construction
2 ☐ Occupied & operating
3 ☐ Idle, not routinely used
4 ☐ Under major renovation
5 ☐ Vacant and secured
6 ☐ Vacant and unsecured
7 ☐ Being demolished
0 ☐ Other
U ☐ Undetermined

I3 Building Height ☆
Count the **roof** as part of the highest story.
Total number of stories at or above grade.
Total number of stories below grade.

I4 Main Floor Size ☆
NFIRS–3 Structure Fire
Total square feet
OR
Length in feet BY Width in feet

J1 Fire Origin ☆
Story of fire origin
☐ Below grade

J2 Fire Spread ☆
If fire spread was confined to object of origin, do not check a box (Ref. Block D3, Fire Module).
2 ☐ Confined to room of origin
3 ☐ Confined to floor of origin
4 ☐ Confined to building of origin
5 ☐ Beyond building of origin

J3 Number of Stories Damaged by Flame
Count the **roof** as part of the highest story.
Number of stories w/minor damage (1 to 24% flame damage)
Number of stories w/significant damage (25 to 49% flame damage)
Number of stories w/heavy damage (50 to 74% flame damage)
Number of stories w/extreme damage (75 to 100% flame damage)

K Type of Material Contributing Most to Flame Spread
☐ Check if no flame spread **OR** if same as Material First Ignited (Block D4, Fire Module) **OR** if unable to determine. → Skip to Section L
K1 Item contributing most to flame spread
K2 Type of material contributing most to flame spread
Required only if item contributing code is 00 or <70.

L1 Presence of Detectors ☆
(In area of the fire)
N ☐ None Present → Skip to Section M
1 ☐ Present
U ☐ Undetermined

L2 Detector Type
1 ☐ Smoke
2 ☐ Heat
3 ☐ Combination smoke and heat
4 ☐ Sprinkler, water flow detection
5 ☐ More than one type present
0 ☐ Other
U ☐ Undetermined

L3 Detector Power Supply
1 ☐ Battery only
2 ☐ Hardwire only
3 ☐ Plug-in
4 ☐ Hardwire with battery
5 ☐ Plug-in with battery
6 ☐ Mechanical
7 ☐ Multiple detectors & power supplies
0 ☐ Other
U ☐ Undetermined

L4 Detector Operation
1 ☐ Fire too small to activate
2 ☐ Operated → Complete Block L5
3 ☐ Failed to operate → Complete Block L6
U ☐ Undetermined

L5 Detector Effectiveness
Required if detector operated.
1 ☐ Alerted occupants, occupants responded
2 ☐ Alerted occupants, occupants failed to respond
3 ☐ There were no occupants
4 ☐ Failed to alert occupants
U ☐ Undetermined

L6 Detector Failure Reason
Required if detector failed to operate.
1 ☐ Power failure, shutoff, or disconnect
2 ☐ Improper installation or placement
3 ☐ Defective
4 ☐ Lack of maintenance, includes not cleaning
5 ☐ Battery missing or disconnected
6 ☐ Battery discharged or dead
0 ☐ Other
U ☐ Undetermined

M1 Presence of Automatic Extinguishing System ☆
N ☐ None Present
1 ☐ Present
2 ☐ Partial System Present
U ☐ Undetermined
→ Complete rest of Section M

M2 Type of Automatic Extinguishing System
Required if fire was within designed range of AES.
1 ☐ Wet-pipe sprinkler
2 ☐ Dry-pipe sprinkler
3 ☐ Other sprinkler system
4 ☐ Dry chemical system
5 ☐ Foam system
6 ☐ Halogen-type system
7 ☐ Carbon dioxide (CO_2) system
0 ☐ Other special hazard system
U ☐ Undetermined

M3 Operation of Automatic Extinguishing System
Required if fire was within designed range.
1 ☐ Operated/effective (go to M4)
2 ☐ Operated/Not effective (go to M4)
3 ☐ Fire too small to activate
4 ☐ Failed to operate (go to M5)
0 ☐ Other
U ☐ Undetermined

M4 Number of Sprinkler Heads Operating
Required if system operated.
Number of sprinkler heads operating

M5 Reason for Automatic Extinguishing System Failure
Required if system failed or not effective.
1 ☐ System shut off
2 ☐ Not enough agent discharged
3 ☐ Agent discharged but did not reach fire
4 ☐ Wrong type of system
5 ☐ Fire not in area protected
6 ☐ System components damaged
7 ☐ Lack of maintenance
8 ☐ Manual intervention
0 ☐ Other
U ☐ Undetermined

NFIRS–3 Revision 01/01/06

FIGURE 3-6. NFIRS-4 Civilian Fire Casualty Form

A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change | **NFIRS–4 Civilian Fire Casualty**

B Injured Person ☆ **Gender** 1 ☐ Male 2 ☐ Female
First Name | MI | Last Name | Suffix

C Casualty Number ☆
Casualty Number

D Age or Date of Birth ☆
Age ☐ Months (for infants)
OR
Date of Birth: Month Day Year

E1 Race
1 ☐ White
2 ☐ Black, African American
3 ☐ Am. Indian, Alaska Native
4 ☐ Asian
5 ☐ Native Hawaiian, Other Pacific Islander
0 ☐ Other, multiracial
U ☐ Undetermined

E2 Ethnicity
1 ☐ Hispanic or Latino
0 ☐ Non Hispanic or Latino

F Affiliation
1 ☐ Civilian
2 ☐ EMS, not fire department
3 ☐ Police
0 ☐ Other

G Date and Time of Injury (Midnight is 0000.)
Date of Injury: Month Day Year | Time of Injury: Hour Minute

H Severity ☆
1 ☐ Minor
2 ☐ Moderate
3 ☐ Severe
4 ☐ Life threatening
5 ☐ Death
U ☐ Undetermined

I Cause of Injury
1 ☐ Exposed to fire products including flame heat, smoke, and gas
2 ☐ Exposed to toxic fumes other than smoke
3 ☐ Jumped in escape attempt
4 ☐ Fell, slipped, or tripped
5 ☐ Caught or trapped
6 ☐ Structural collapse
7 ☐ Struck by or contact with object
8 ☐ Overexertion or strain
9 ☐ Multiple causes
0 ☐ Other
U ☐ Undetermined

J Human Factors Contributing to Injury ☐ None
Check all applicable boxes
1 ☐ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by other drug
5 ☐ Possibly mentally disabled
6 ☐ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

K Factors Contributing to Injury ☐ None
Enter up to three contributing factors
Contributing factor (1)
Contributing factor (2)
Contributing factor (3)

L Activity When Injured
1 ☐ Escaping
2 ☐ Rescue attempt
3 ☐ Fire control
4 ☐ Return to fire before control
5 ☐ Return to fire after control
6 ☐ Sleeping
7 ☐ Unable to act
8 ☐ Irrational act
0 ☐ Other
U ☐ Undetermined

M1 Location at Time of Incident
1 ☐ In area of origin and not involved
2 ☐ Not in area of origin and not involved
3 ☐ Not in area of origin, but involved
4 ☐ In area of origin and involved
0 ☐ Other location
U ☐ Undetermined

M2 General Location at Time of Injury
1 ☐ In area of fire origin → Skip to Section N
2 ☐ In building, but not in area
3 ☐ Outside, but not in area → Skip to Block M5
U ☐ Undetermined

M3 Story at Start of Incident
Complete ONLY if injury occurred INSIDE
Story at start of incident ☐ Below grade

M4 Story Where Injury Occurred
Story where injury occurred, if different from M3 ☐ Below grade

M5 Specific Location at Time of Injury
Complete ONLY if casualty NOT in area of origin
Specific location at time of injury

N Primary Apparent Symptom
01 ☐ Smoke only, asphyxiation
11 ☐ Burns and smoke inhalation
12 ☐ Burns only
21 ☐ Cut, laceration
33 ☐ Strain or sprain
96 ☐ Shock
98 ☐ Pain only
Look up a code only if the symptom is NOT found above
Primary apparent symptom

O Primary Area of Body Injured
1 ☐ Head
2 ☐ Neck and shoulder
3 ☐ Thorax
4 ☐ Abdomen
5 ☐ Spine
6 ☐ Upper extremities
7 ☐ Lower extremities
8 ☐ Internal
9 ☐ Multiple body parts

P Disposition
☐ Transported to emergency care facility

Remarks Local option

NFIRS–4 Revision 01/01/04

FIGURE 3-7. NFIRS-5 Fire Service Casualty Form

A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–5 Fire Service Casualty

B Injured Person Identification Number | 1 ☐ Male ☆ 2 ☐ Female | 1 ☐ Career 2 ☐ Volunteer

First Name | MI | Last Name | Suffix

C Casualty Number ☆ Casualty Number

D Age or Date of Birth ☆
Age (In years) OR Date of Birth (Month Day Year)

E Date and Time of Injury ☆ Midnight is 0000.
Date of Injury (Month Day Year) Time of Injury (Hour Minute)

F Responses
Number of prior responses during past 24 hours

G1 Usual Assignment
1 ☐ Suppression
2 ☐ EMS
3 ☐ Prevention
4 ☐ Training
5 ☐ Maintenance
6 ☐ Communications
7 ☐ Administration
8 ☐ Fire investigation
0 ☐ Other

G2 Physical Condition Just Prior to Injury
1 ☐ Rested
2 ☐ Fatigued
4 ☐ Ill or injured
0 ☐ Other
U ☐ Undetermined

G3 Severity ☆
1 ☐ Report only, including exposure
2 ☐ First aid only
3 ☐ Treated by physician (no lost time)
4 ☐ Moderate (lost time)
5 ☐ Severe (lost time)
6 ☐ Life threatening (lost time)
7 ☐ Death

G4 Taken To ☐ Not transported
1 ☐ Hospital
4 ☐ Doctor's office
5 ☐ Morgue/Funeral home
6 ☐ Residence
7 ☐ Station or quarters
0 ☐ Other

G5 Activity at Time of Injury
Activity at time of injury

H1 Primary Apparent Symptom
Primary apparent symptom

H2 Primary Part of Body Injured ☐ None
Primary injured body part

I1 Cause of Firefighter Injury
Cause of injury

I2 Factor Contributing to Injury ☐ None
Contributing factor

I3 Object Involved in Injury ☐ None
Object involved in injury

J1 Where Injury Occurred
1 ☐ En route to FD location
2 ☐ At FD location
3 ☐ En route to incident scene
4 ☐ En route to medical facility
5 ☐ At scene in structure
6 ☐ At scene outside
7 ☐ At medical facility
8 ☐ Returning from incident
9 ☐ Returning from med facility
0 ☐ Other
U ☐ Undetermined

J2 Story Where Injury Occurred
1 ☐ Check this box and enter the story if the injury occurred inside or on a structure
Story of injury ☐ Below grade
2 ☐ Injury occurred outside

J3 Specific Location Where Injury Occurred
65 ☐ In aircraft
64 ☐ In boat, ship, or barge
63 ☐ In rail vehicle
61 ☐ In motor vehicle
(Complete Block J4)
54 ☐ In sewer
53 ☐ In tunnel
49 ☐ In structure
45 ☐ In attic
36 ☐ In water
35 ☐ In well
34 ☐ In ravine
33 ☐ In quarry or mine
32 ☐ In ditch or trench
31 ☐ In open pit
28 ☐ On steep grade
27 ☐ On fire escape/outside stairs
26 ☐ On vertical surface or ledge
25 ☐ On ground ladder
24 ☐ On aerial ladder or in basket
23 ☐ On roof
22 ☐ Outside at grade
00 ☐ Other
UU ☐ Undetermined

J4 Vehicle Type
Complete ONLY if Specific Location code is >60
1 ☐ Suppression vehicle
2 ☐ EMS vehicle
3 ☐ Other FD vehicle
4 ☐ Non-FD vehicle

Remarks

If protective equipment failed and was a factor in this injury, please complete the other side of this form.

NFIRS–5 Revision 01/01/05

FIGURE 3-8. NFIRS-5 Fire Service Casualty Form (side 2)

K1 Did protective equipment fail and contribute to the injury? Yes Y ☐ No N ☐
Please complete the remainder of this form ONLY if you answer YES.

Equipment Sequence Number ⌊__⌋

NFIRS–5 Fire Service Casualty

K2 Protective Equipment Item

Head or Face Protection

- 11 ☐ Helmet
- 12 ☐ Full face protector
- 13 ☐ Partial face protector
- 14 ☐ Goggles/eye protection
- 15 ☐ Hood
- 16 ☐ Ear protector
- 17 ☐ Neck protector
- 10 ☐ Other

Coat, Shirt, or Trousers

- 21 ☐ Protective coat
- 22 ☐ Protective trousers
- 23 ☐ Uniform shirt
- 24 ☐ Uniform T-shirt
- 25 ☐ Uniform trousers
- 26 ☐ Uniform coat or jacket
- 27 ☐ Coveralls
- 28 ☐ Apron or gown
- 20 ☐ Other

Boots or Shoes

- 31 ☐ Knee length boots with steel baseplate and steel toes
- 32 ☐ Knee length boots with steel toes only
- 33 ☐ 3/4 length boots with steel baseplate and steel toes
- 34 ☐ 3/4 length boots with steel toes only
- 35 ☐ Boots without steel baseplate and steel toes
- 36 ☐ Safety shoes with steel baseplate and steel toes
- 37 ☐ Safety shoes with steel toes only
- 38 ☐ Non-safety shoes
- 30 ☐ Other

Respiratory Protection

- 41 ☐ SCBA (demand) open circuit
- 42 ☐ SCBA (positive pressure) open circuit
- 43 ☐ SCBA closed circuit
- 44 ☐ Not self-contained
- 45 ☐ Cartridge respirator
- 46 ☐ Dust or particle mask
- 40 ☐ Other

Hand Protection

- 51 ☐ Firefighter gloves with wristlets
- 52 ☐ Firefighter gloves without wristlets
- 53 ☐ Work gloves
- 54 ☐ HazMat gloves
- 55 ☐ Medical gloves
- 50 ☐ Other

Special Equipment

- 61 ☐ Proximity suit for entry
- 62 ☐ Proximity suit for non-entry
- 63 ☐ Totally encapsulated, reusable chemical suit
- 64 ☐ Totally encapsulated, disposable chemical suit
- 65 ☐ Partially encapsulated, reusable chemical suit
- 66 ☐ Partially encapsulated, disposable chemical suit
- 67 ☐ Flash protection suit
- 68 ☐ Flight or jump suit
- 69 ☐ Brush suit
- 71 ☐ Exposure suit
- 72 ☐ Self-contained underwater breathing apparatus (SCUBA)
- 73 ☐ Life preserver
- 74 ☐ Life belt or ladder belt
- 75 ☐ Personal alert safety system (PASS)
- 76 ☐ Radio distress device
- 77 ☐ Personal lighting
- 78 ☐ Fire shelter or tent
- 79 ☐ Vehicle safety belt
- 70 ☐ Special equipment, other
- 00 ☐ Protective equipment, other

Was the failure of more than one item of protective equipment a factor in the injury? If so, complete an additional page of this form for each piece of failed equipment.

K3 Protective Equipment Problem

Check one box to indicate the main problem that occurred.

- 11 ☐ Burned
- 12 ☐ Melted
- 21 ☐ Fractured, cracked or broken
- 22 ☐ Punctured
- 23 ☐ Scratched
- 24 ☐ Knocked off
- 25 ☐ Cut or ripped
- 31 ☐ Trapped steam or hazardous gas
- 32 ☐ Insufficient insulation
- 33 ☐ Object fell in or onto equipment item
- 41 ☐ Failed under impact
- 42 ☐ Face piece or hose detached
- 43 ☐ Exhalation valve inoperative or damaged
- 44 ☐ Harness detached or separated
- 45 ☐ Regulator failed to operate
- 46 ☐ Regulator damaged by contact
- 47 ☐ Problem with admissions valve
- 48 ☐ Alarm failed to operate
- 49 ☐ Alarm damaged by contact
- 51 ☐ Supply cylinder or valve failed to operate
- 52 ☐ Supply cylinder/valve damaged by contact
- 53 ☐ Supply cylinder—insufficient air/oxygen
- 94 ☐ Did not fit properly
- 95 ☐ Not properly serviced or stored prior to use
- 96 ☐ Not used for designed purpose
- 97 ☐ Not used as recommended by manufacturer
- 00 ☐ Other equipment problem
- UU ☐ Undetermined

K4 Equipment Manufacturer, Model and Serial Number

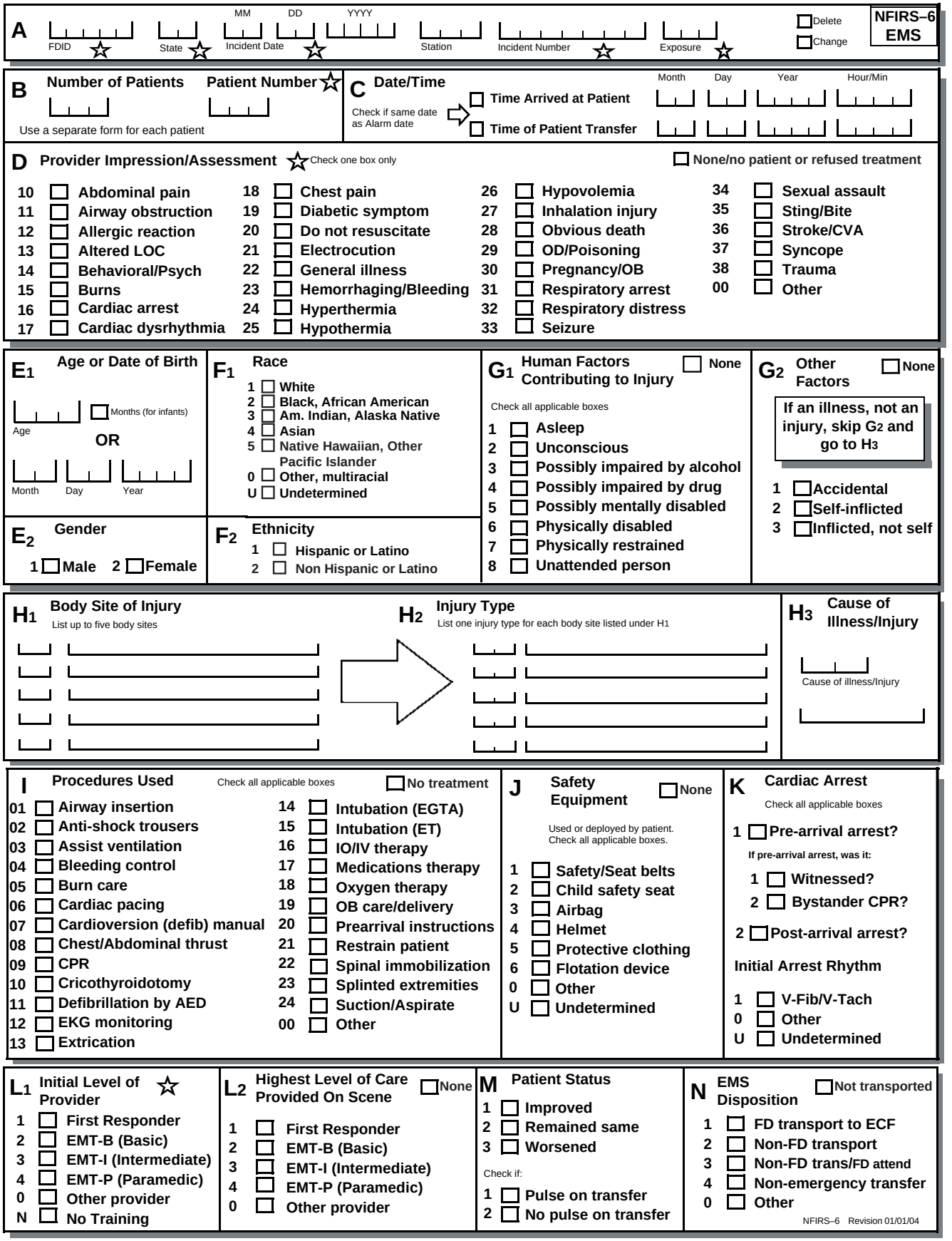
Manufacturer ⌊_____⌋

Model ⌊_____⌋

Serial Number ⌊_____⌋

NFIRS–5 Revision 05/01/03

FIGURE 3-9. NFIRS-6 Emergency Medical Services (EMS) Form



A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change | **NFIRS–6 EMS**

B Number of Patients | Patient Number ☆
Use a separate form for each patient

C Date/Time (Month Day Year Hour/Min)
Check if same date as Alarm date
☐ Time Arrived at Patient
☐ Time of Patient Transfer

D Provider Impression/Assessment ☆ Check one box only ☐ None/no patient or refused treatment

10 ☐ Abdominal pain	18 ☐ Chest pain	26 ☐ Hypovolemia	34 ☐ Sexual assault
11 ☐ Airway obstruction	19 ☐ Diabetic symptom	27 ☐ Inhalation injury	35 ☐ Sting/Bite
12 ☐ Allergic reaction	20 ☐ Do not resuscitate	28 ☐ Obvious death	36 ☐ Stroke/CVA
13 ☐ Altered LOC	21 ☐ Electrocution	29 ☐ OD/Poisoning	37 ☐ Syncope
14 ☐ Behavioral/Psych	22 ☐ General illness	30 ☐ Pregnancy/OB	38 ☐ Trauma
15 ☐ Burns	23 ☐ Hemorrhaging/Bleeding	31 ☐ Respiratory arrest	00 ☐ Other
16 ☐ Cardiac arrest	24 ☐ Hyperthermia	32 ☐ Respiratory distress	
17 ☐ Cardiac dysrhythmia	25 ☐ Hypothermia	33 ☐ Seizure	

E1 Age or Date of Birth
Age ☐ Months (for infants)
OR
Month Day Year

F1 Race
1 ☐ White
2 ☐ Black, African American
3 ☐ Am. Indian, Alaska Native
4 ☐ Asian
5 ☐ Native Hawaiian, Other Pacific Islander
0 ☐ Other, multiracial
U ☐ Undetermined

E2 Gender
1 ☐ Male 2 ☐ Female

F2 Ethnicity
1 ☐ Hispanic or Latino
2 ☐ Non Hispanic or Latino

G1 Human Factors Contributing to Injury ☐ None
Check all applicable boxes
1 ☐ Asleep
2 ☐ Unconscious
3 ☐ Possibly impaired by alcohol
4 ☐ Possibly impaired by drug
5 ☐ Possibly mentally disabled
6 ☐ Physically disabled
7 ☐ Physically restrained
8 ☐ Unattended person

G2 Other Factors ☐ None
If an illness, not an injury, skip G2 and go to H3
1 ☐ Accidental
2 ☐ Self-inflicted
3 ☐ Inflicted, not self

H1 Body Site of Injury
List up to five body sites

H2 Injury Type
List one injury type for each body site listed under H1

H3 Cause of Illness/Injury
Cause of illness/Injury

I Procedures Used Check all applicable boxes ☐ No treatment

01 ☐ Airway insertion	14 ☐ Intubation (EGTA)
02 ☐ Anti-shock trousers	15 ☐ Intubation (ET)
03 ☐ Assist ventilation	16 ☐ IO/IV therapy
04 ☐ Bleeding control	17 ☐ Medications therapy
05 ☐ Burn care	18 ☐ Oxygen therapy
06 ☐ Cardiac pacing	19 ☐ OB care/delivery
07 ☐ Cardioversion (defib) manual	20 ☐ Prearrival instructions
08 ☐ Chest/Abdominal thrust	21 ☐ Restrain patient
09 ☐ CPR	22 ☐ Spinal immobilization
10 ☐ Cricothyroidotomy	23 ☐ Splinted extremities
11 ☐ Defibrillation by AED	24 ☐ Suction/Aspirate
12 ☐ EKG monitoring	00 ☐ Other
13 ☐ Extrication	

J Safety Equipment ☐ None
Used or deployed by patient. Check all applicable boxes.
1 ☐ Safety/Seat belts
2 ☐ Child safety seat
3 ☐ Airbag
4 ☐ Helmet
5 ☐ Protective clothing
6 ☐ Flotation device
0 ☐ Other
U ☐ Undetermined

K Cardiac Arrest
Check all applicable boxes
1 ☐ Pre-arrival arrest?
If pre-arrival arrest, was it:
1 ☐ Witnessed?
2 ☐ Bystander CPR?
2 ☐ Post-arrival arrest?
Initial Arrest Rhythm
1 ☐ V-Fib/V-Tach
0 ☐ Other
U ☐ Undetermined

L1 Initial Level of Provider ☆
1 ☐ First Responder
2 ☐ EMT-B (Basic)
3 ☐ EMT-I (Intermediate)
4 ☐ EMT-P (Paramedic)
0 ☐ Other provider
N ☐ No Training

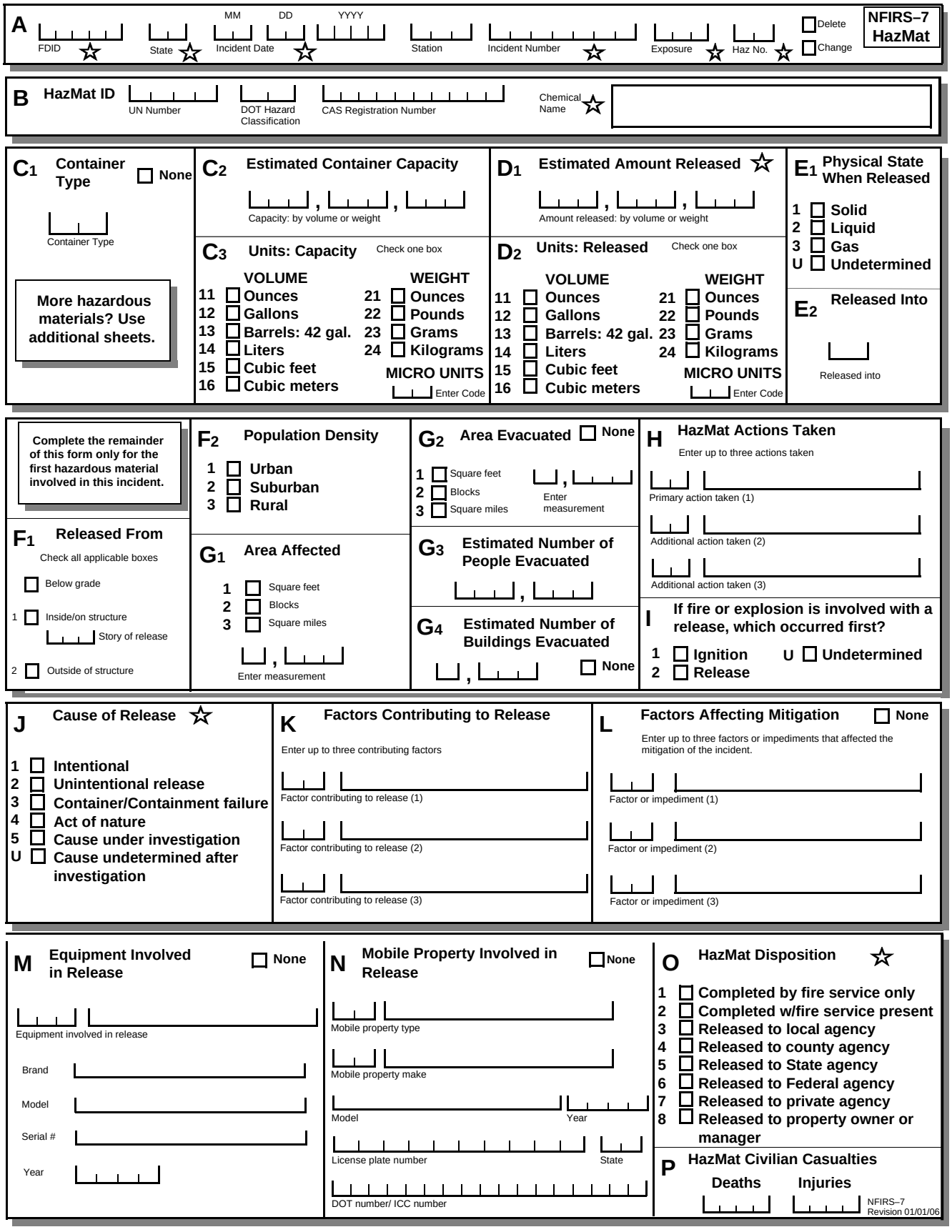
L2 Highest Level of Care Provided On Scene ☐ None
1 ☐ First Responder
2 ☐ EMT-B (Basic)
3 ☐ EMT-I (Intermediate)
4 ☐ EMT-P (Paramedic)
0 ☐ Other provider

M Patient Status
1 ☐ Improved
2 ☐ Remained same
3 ☐ Worsened
Check if:
1 ☐ Pulse on transfer
2 ☐ No pulse on transfer

N EMS Disposition ☐ Not transported
1 ☐ FD transport to ECF
2 ☐ Non-FD transport
3 ☐ Non-FD trans/FD attend
4 ☐ Non-emergency transfer
0 ☐ Other

NFIRS–6 Revision 01/01/04

FIGURE 3-10. NFIRS-7 Hazardous Materials (HazMat) Form



A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | Haz No. ☆ | ☐ Delete ☐ Change | **NFIRS–7 HazMat**

B HazMat ID — UN Number | DOT Hazard Classification | CAS Registration Number | Chemical Name ☆

C1 Container Type ☐ None — Container Type

More hazardous materials? Use additional sheets.

C2 Estimated Container Capacity — Capacity: by volume or weight

C3 Units: Capacity Check one box

VOLUME
11 ☐ Ounces
12 ☐ Gallons
13 ☐ Barrels: 42 gal.
14 ☐ Liters
15 ☐ Cubic feet
16 ☐ Cubic meters

WEIGHT
21 ☐ Ounces
22 ☐ Pounds
23 ☐ Grams
24 ☐ Kilograms

MICRO UNITS — Enter Code

D1 Estimated Amount Released ☆ — Amount released: by volume or weight

D2 Units: Released Check one box

VOLUME
11 ☐ Ounces
12 ☐ Gallons
13 ☐ Barrels: 42 gal.
14 ☐ Liters
15 ☐ Cubic feet
16 ☐ Cubic meters

WEIGHT
21 ☐ Ounces
22 ☐ Pounds
23 ☐ Grams
24 ☐ Kilograms

MICRO UNITS — Enter Code

E1 Physical State When Released
1 ☐ Solid
2 ☐ Liquid
3 ☐ Gas
U ☐ Undetermined

E2 Released Into — Released into

Complete the remainder of this form only for the first hazardous material involved in this incident.

F1 Released From Check all applicable boxes
☐ Below grade
1 ☐ Inside/on structure — Story of release
2 ☐ Outside of structure

F2 Population Density
1 ☐ Urban
2 ☐ Suburban
3 ☐ Rural

G1 Area Affected
1 ☐ Square feet
2 ☐ Blocks
3 ☐ Square miles
Enter measurement

G2 Area Evacuated ☐ None
1 ☐ Square feet
2 ☐ Blocks
3 ☐ Square miles
Enter measurement

G3 Estimated Number of People Evacuated

G4 Estimated Number of Buildings Evacuated ☐ None

H HazMat Actions Taken — Enter up to three actions taken
Primary action taken (1)
Additional action taken (2)
Additional action taken (3)

I If fire or explosion is involved with a release, which occurred first?
1 ☐ Ignition
2 ☐ Release
U ☐ Undetermined

J Cause of Release ☆
1 ☐ Intentional
2 ☐ Unintentional release
3 ☐ Container/Containment failure
4 ☐ Act of nature
5 ☐ Cause under investigation
U ☐ Cause undetermined after investigation

K Factors Contributing to Release — Enter up to three contributing factors
Factor contributing to release (1)
Factor contributing to release (2)
Factor contributing to release (3)

L Factors Affecting Mitigation ☐ None — Enter up to three factors or impediments that affected the mitigation of the incident.
Factor or impediment (1)
Factor or impediment (2)
Factor or impediment (3)

M Equipment Involved in Release ☐ None
Equipment involved in release
Brand
Model
Serial #
Year

N Mobile Property Involved in Release ☐ None
Mobile property type
Mobile property make
Model | Year
License plate number | State
DOT number/ ICC number

O HazMat Disposition ☆
1 ☐ Completed by fire service only
2 ☐ Completed w/fire service present
3 ☐ Released to local agency
4 ☐ Released to county agency
5 ☐ Released to State agency
6 ☐ Released to Federal agency
7 ☐ Released to private agency
8 ☐ Released to property owner or manager

P HazMat Civilian Casualties
Deaths | Injuries

NFIRS–7 Revision 01/01/06

FIGURE 3-11. NFIRS-8 Wildland Fire Form

A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change | **NFIRS–8 Wildland Fire**

B Alternate Location Specification

Enter Latitude/Longitude OR Township/Range/Section/Subsection Meridian if Section B on the Basic Module is not completed.

Latitude . | Longitude .

OR

Township . ☐ North ☐ South | Range ☐ East ☐ West

Section | Subsection | Meridian

C Area Type ☆

1 ☐ Rural, farms >50 acres
2 ☐ Urban (heavily populated)
3 ☐ Rural/Urban or suburban
4 ☐ Urban-wildland interface area

D1 Wildland Fire Cause ☆

1 ☐ Natural source
2 ☐ Equipment
3 ☐ Smoking
4 ☐ Open/Outdoor fire
5 ☐ Debris/Vegetation burn
6 ☐ Structure (exposure)
7 ☐ Incendiary
8 ☐ Misuse of fire
0 ☐ Other
U ☐ Undetermined

D2 Human Factors Contributing to Ignition ☐ None

Check as many boxes as are applicable.

1 ☐ Asleep
2 ☐ Possibly impaired by alcohol or drugs
3 ☐ Unattended person
4 ☐ Possibly mentally disabled
5 ☐ Physically disabled
6 ☐ Multiple persons involved
7 ☐ Age was a factor

D3 Factors Contributing to Ignition ☐ None

#1 | #2

D4 Fire Suppression Factors ☐ None

Enter up to three factors

#1 | #2 | #3

E Heat Source

F Mobile Property Type ☐ None

G Equipment Involved in Ignition ☐ None

H Weather Information

NFDRS Weather Station ID

Weather Type | Wind Direction

Wind Speed (mph) | Air Temperature F° ☐ Check if negative

Relative Humidity % | Fuel Moisture % | Fire Danger Rating

I1 Number of Buildings Ignited ☐ None

Number of buildings that were ignited in Wildland fire.

I2 Number of Buildings Threatened ☐ None

Number of buildings that were threatened by Wildland fire but were not involved.

I3 Total Acres Burned ☆

, , .

I4 Primary Crops Burned

Identify up to 3 crops if any crops were burned.

Crop 1

Crop 2

Crop 3

J Property Management

Indicate the percent of the total acres burned for *each* ownership type then check the ONE box to identify the property ownership at the origin of the fire. If the ownership at origin is Federal, enter the Federal Agency Code.

Ownership ⇩ | % Total Acres Burned ⇩

U ☐ Undetermined %

Private

1 ☐ Tax paying %
2 ☐ Non-tax paying %

Public

3 ☐ City, town, village, local %
4 ☐ County or parish %
5 ☐ State or province %
6 ☐ Federal % (Federal Agency Code)
7 ☐ Foreign %
8 ☐ Military %
0 ☐ Other %

K NFDRS Fuel Model at Origin

Enter the code and the descriptor corresponding to the NFDRS Fuel Model at Origin.

L1 Person Responsible for Fire

1 ☐ Identified person caused fire
2 ☐ Unidentified person caused fire
3 ☐ Fire not caused by person

If person identified, complete the rest of Section L.

L2 Gender of Person Involved

1 ☐ Male
2 ☐ Female

L3 Age or Date of Birth

Age in Years | OR | Date of Birth: Month Day Year

L4 Activity of Person Involved

Activity of Person Involved

M Type of Right-of-Way ☐ None

Required if less than 100 feet.

Feet (Horizontal distance from right-of-way) | Type of right-of-way

N Fire Behavior

These optional descriptors refer to observations made at the point of initial attack.

Feet — Elevation

Relative position on slope

Aspect

Feet — Flame length

Chains per Hour — Rate of spread

NFIRS–8 Revision 01/01/04

FIGURE 3-12. NFIRS-9 Apparatus or Resources Form

A FDID ☆ State ☆ MM DD YYYY Incident Date ☆ Station Incident Number ☆ Exposure ☆ ☐ Delete ☐ Change

NFIRS–9 Apparatus or Resources

B Apparatus or Resources (Use codes listed below)	Dates and Times (Midnight is 0000; Check if same date as Alarm date on the Basic Module (Block E1).) Month Day Year Hour/Min	Sent [X]	Number of People ☆	Apparatus Use ☆ (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus.)
1 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
2 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
3 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
4 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
5 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
6 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
7 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
8 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	
9 ID ☆ Type	Dispatch ☐ Arrival ☐ Clear ☐	☐		☐ Suppression ☐ EMS ☐ Other	

Apparatus or Resource Type

Ground Fire Suppression

- 11 Engine
- 12 Truck or aerial
- 13 Quint
- 14 Tanker and pumper combination
- 16 Brush truck
- 17 ARFF (aircraft rescue and firefighting)
- 10 Ground fire suppression, other

Heavy Ground Equipment

- 21 Dozer or plow
- 22 Tractor
- 24 Tanker or tender
- 20 Heavy ground equipment, other

Aircraft

- 41 Aircraft: fixed-wing tanker
- 42 Helitanker
- 43 Helicopter
- 40 Aircraft, other

Marine Equipment

- 51 Fire boat with pump
- 52 Boat, no pump
- 50 Marine equipment, other

Support Equipment

- 61 Breathing apparatus support
- 62 Light and air unit
- 60 Support apparatus, other

Medical and Rescue

- 71 Rescue unit
- 72 Urban search and rescue unit
- 73 High-angle rescue unit
- 75 BLS unit
- 76 ALS unit
- 70 Medical and rescue unit, other

Other

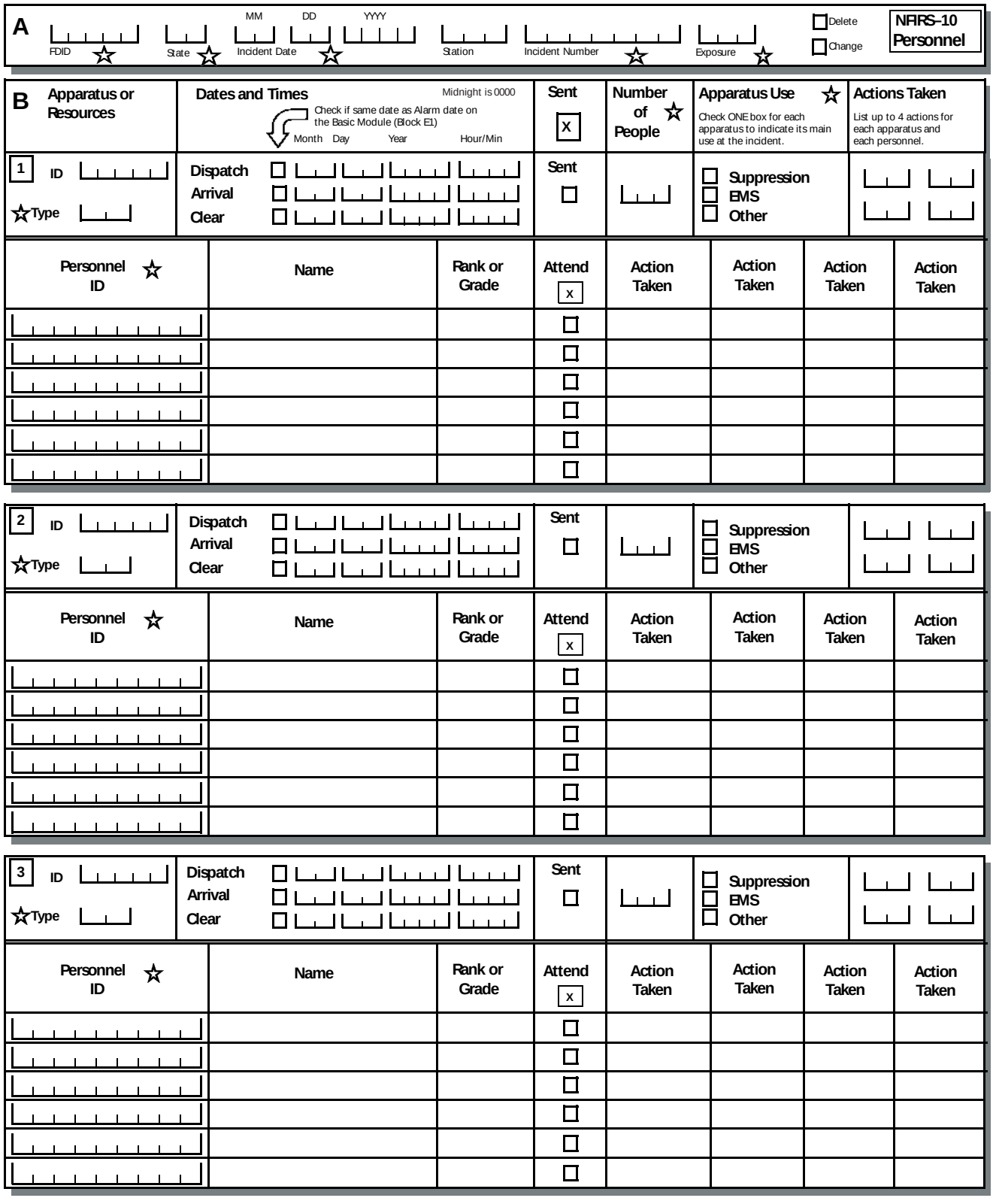
- 91 Mobile command post
- 92 Chief officer car
- 93 HazMat unit
- 94 Type I hand crew
- 95 Type II hand crew
- 99 Privately owned vehicle
- 00 Other apparatus/resources

More apparatus? Use additional sheets.

NN None
UU Undetermined

NFIRS–9 Revision 01/01/04

FIGURE 3-13. NFIRS-10 Personnel Form



A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change | **NFIRS–10 Personnel**

B Apparatus or Resources	Dates and Times (Midnight is 0000; Check if same date as Alarm date on the Basic Module (Block E1); Month Day Year Hour/Min)	Sent [X]	Number of People ☆	Apparatus Use ☆ (Check ONE box for each apparatus to indicate its main use at the incident.)	Actions Taken (List up to 4 actions for each apparatus and each personnel.)
1 ID ☆Type	Dispatch Arrival Clear	Sent ☐		☐ Suppression ☐ EMS ☐ Other	

Personnel ID ☆	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
			☐				
			☐				
			☐				
			☐				
			☐				
			☐				

2 ID ☆Type	Dispatch Arrival Clear	Sent ☐		☐ Suppression ☐ EMS ☐ Other	

Personnel ID ☆	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
			☐				
			☐				
			☐				
			☐				
			☐				
			☐				

3 ID ☆Type	Dispatch Arrival Clear	Sent ☐		☐ Suppression ☐ EMS ☐ Other	

Personnel ID ☆	Name	Rank or Grade	Attend [X]	Action Taken	Action Taken	Action Taken	Action Taken
			☐				
			☐				
			☐				
			☐				
			☐				
			☐				

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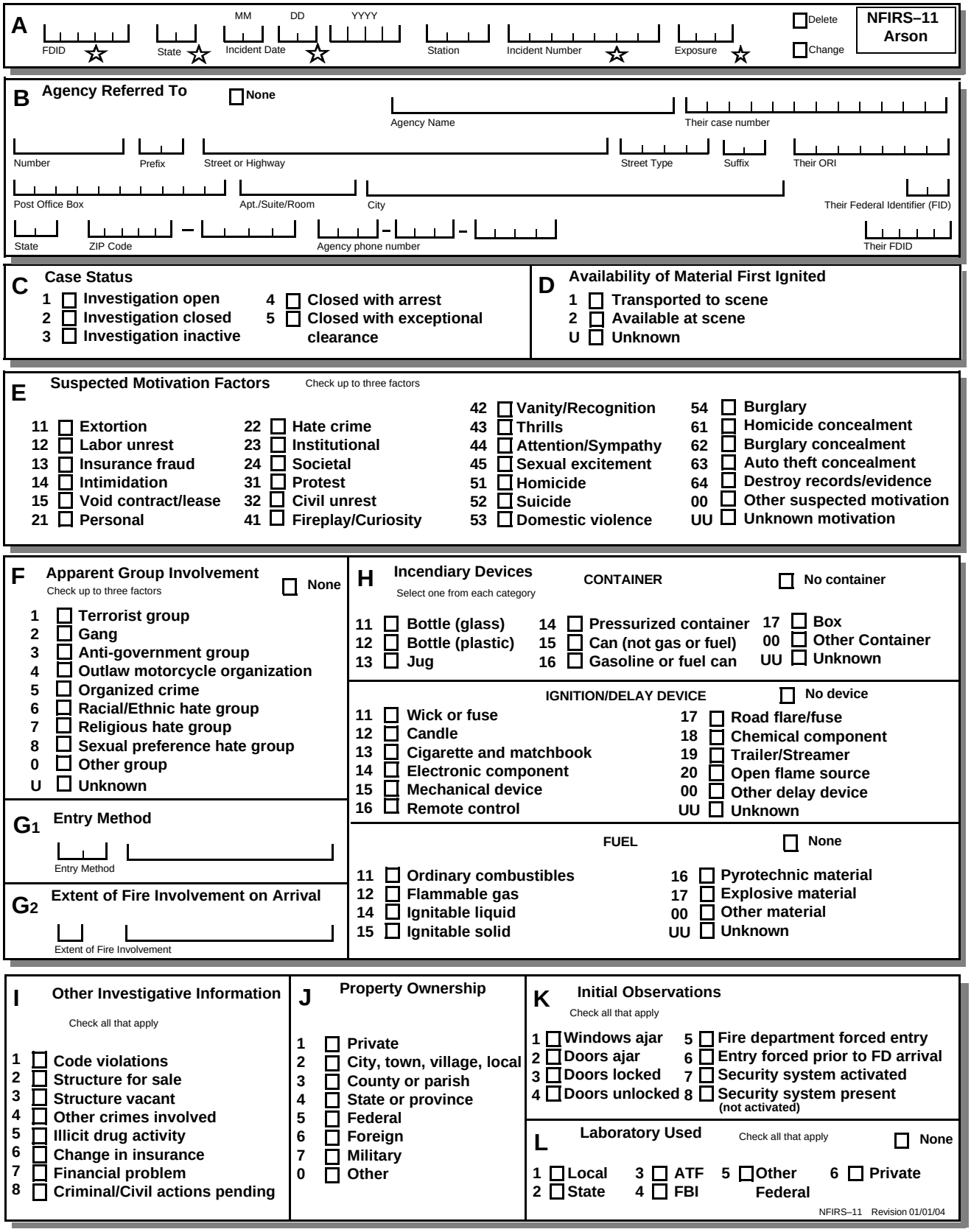
FIGURE 3-14. NFIRS-11 Arson Form



A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change | **NFIRS–11 Arson**

B Agency Referred To ☐ None
Agency Name | Their case number
Number | Prefix | Street or Highway | Street Type | Suffix | Their ORI
Post Office Box | Apt./Suite/Room | City | Their Federal Identifier (FID)
State | ZIP Code | Agency phone number | Their FDID

C Case Status
1 ☐ Investigation open
2 ☐ Investigation closed
3 ☐ Investigation inactive
4 ☐ Closed with arrest
5 ☐ Closed with exceptional clearance

D Availability of Material First Ignited
1 ☐ Transported to scene
2 ☐ Available at scene
U ☐ Unknown

E Suspected Motivation Factors Check up to three factors

11 ☐ Extortion	22 ☐ Hate crime	42 ☐ Vanity/Recognition	54 ☐ Burglary
12 ☐ Labor unrest	23 ☐ Institutional	43 ☐ Thrills	61 ☐ Homicide concealment
13 ☐ Insurance fraud	24 ☐ Societal	44 ☐ Attention/Sympathy	62 ☐ Burglary concealment
14 ☐ Intimidation	31 ☐ Protest	45 ☐ Sexual excitement	63 ☐ Auto theft concealment
15 ☐ Void contract/lease	32 ☐ Civil unrest	51 ☐ Homicide	64 ☐ Destroy records/evidence
21 ☐ Personal	41 ☐ Fireplay/Curiosity	52 ☐ Suicide	00 ☐ Other suspected motivation
		53 ☐ Domestic violence	UU ☐ Unknown motivation

F Apparent Group Involvement Check up to three factors ☐ None
1 ☐ Terrorist group
2 ☐ Gang
3 ☐ Anti-government group
4 ☐ Outlaw motorcycle organization
5 ☐ Organized crime
6 ☐ Racial/Ethnic hate group
7 ☐ Religious hate group
8 ☐ Sexual preference hate group
0 ☐ Other group
U ☐ Unknown

G1 Entry Method
Entry Method

G2 Extent of Fire Involvement on Arrival
Extent of Fire Involvement

H Incendiary Devices Select one from each category

CONTAINER ☐ No container

11 ☐ Bottle (glass)	14 ☐ Pressurized container	17 ☐ Box
12 ☐ Bottle (plastic)	15 ☐ Can (not gas or fuel)	00 ☐ Other Container
13 ☐ Jug	16 ☐ Gasoline or fuel can	UU ☐ Unknown

IGNITION/DELAY DEVICE ☐ No device

11 ☐ Wick or fuse	17 ☐ Road flare/fuse
12 ☐ Candle	18 ☐ Chemical component
13 ☐ Cigarette and matchbook	19 ☐ Trailer/Streamer
14 ☐ Electronic component	20 ☐ Open flame source
15 ☐ Mechanical device	00 ☐ Other delay device
16 ☐ Remote control	UU ☐ Unknown

FUEL ☐ None

11 ☐ Ordinary combustibles	16 ☐ Pyrotechnic material
12 ☐ Flammable gas	17 ☐ Explosive material
14 ☐ Ignitable liquid	00 ☐ Other material
15 ☐ Ignitable solid	UU ☐ Unknown

I Other Investigative Information Check all that apply
1 ☐ Code violations
2 ☐ Structure for sale
3 ☐ Structure vacant
4 ☐ Other crimes involved
5 ☐ Illicit drug activity
6 ☐ Change in insurance
7 ☐ Financial problem
8 ☐ Criminal/Civil actions pending

J Property Ownership
1 ☐ Private
2 ☐ City, town, village, local
3 ☐ County or parish
4 ☐ State or province
5 ☐ Federal
6 ☐ Foreign
7 ☐ Military
0 ☐ Other

K Initial Observations Check all that apply

1 ☐ Windows ajar	5 ☐ Fire department forced entry
2 ☐ Doors ajar	6 ☐ Entry forced prior to FD arrival
3 ☐ Doors locked	7 ☐ Security system activated
4 ☐ Doors unlocked	8 ☐ Security system present (not activated)

L Laboratory Used Check all that apply ☐ None

1 ☐ Local	3 ☐ ATF	5 ☐ Other Federal	6 ☐ Private
2 ☐ State	4 ☐ FBI		

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FIGURE 3-15. NFIRS-11 Arson Form (side 2)

A FDID ☆ | State ☆ | Incident Date (MM DD YYYY) ☆ | Station | Incident Number ☆ | Exposure ☆ | ☐ Delete ☐ Change

NFIRS–11 Juvenile Firesetter

Complete this section if the person involved in the ignition of the fire was a child or Juvenile under the age of 18.

M1 Subject Number
Complete a separate Section M form for each juvenile.
Subject Number

M2 Age or Date of Birth
Age (in years)
OR
Month | Day | Year

M3 Gender
1 ☐ Male 2 ☐ Female

M4 Race
1 ☐ White
2 ☐ Black, African American
3 ☐ American Indian, Alaska Native
4 ☐ Asian
5 ☐ Native Hawaiian, Other Pacific Islander
0 ☐ Other, multiracial
U ☐ Undetermined

M5 Ethnicity
1 ☐ Hispanic or Latino
0 ☐ Non Hispanic or Latino

M6 Family Type
1 ☐ Single parent
2 ☐ Foster parent(s)
3 ☐ Two-parent family
4 ☐ Extended family
N ☐ No family unit
0 ☐ Other family type
U ☐ Unknown

M7 Motivation/Risk Factors
Check only one of codes 1–3 and then all others (4–9) that apply.

1 ☐ Mild curiosity about fire
2 ☐ Moderate curiosity about fire
3 ☐ Extreme curiosity about fire
4 ☐ Diagnosed (or suspected) ADD/ADHD
5 ☐ History of trouble outside school
6 ☐ History of stealing or shoplifting
7 ☐ History of physically assaulting others
8 ☐ History of fireplay or firesetting
9 ☐ Transiency
0 ☐ Other
U ☐ Unknown

M8 Disposition of Person Under 18
1 ☐ Handled within department
2 ☐ Released to parent/guardian
3 ☐ Referred to other authority
4 ☐ Referred to treatment/counseling program
5 ☐ Arrested, charged as adult
6 ☐ Referred to firesetter intervention program
0 ☐ Other
U ☐ Unknown

N Remarks (local use)

FIGURE 3-16. NFIRS 1S - Supplemental Form

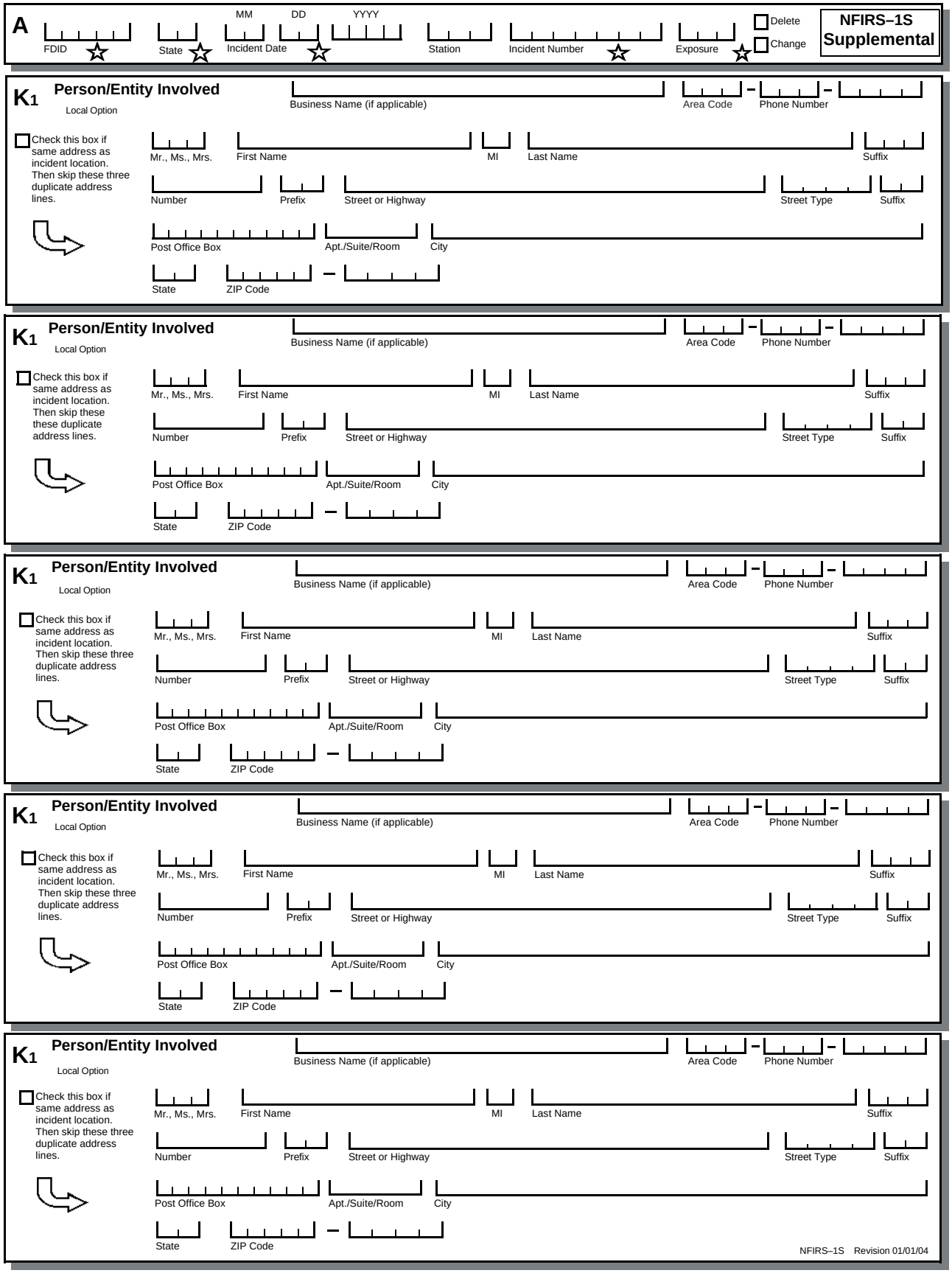
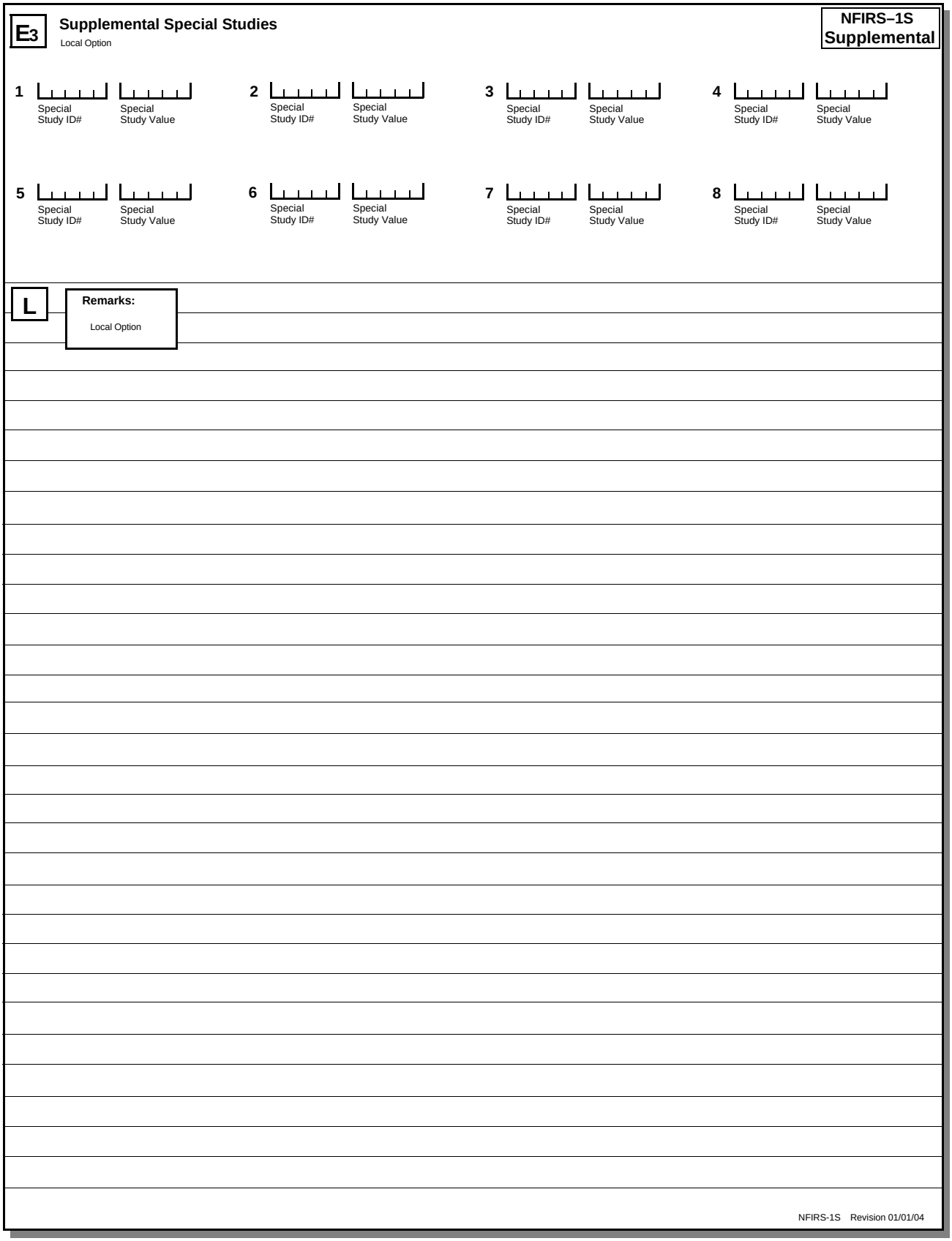


FIGURE 3-17. NFIRS 1S - Supplemental Form (side 2)



E3 **Supplemental Special Studies**
Local Option

NFIRS–1S Supplemental

1	Special Study ID#	Special Study Value	2	Special Study ID#	Special Study Value	3	Special Study ID#	Special Study Value	4	Special Study ID#	Special Study Value
5	Special Study ID#	Special Study Value	6	Special Study ID#	Special Study Value	7	Special Study ID#	Special Study Value	8	Special Study ID#	Special Study Value

L **Remarks:**
Local Option

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Module Logic Flow

This section provides a high level graphical overview of the system flow through each of the NFIRS system modules. Major field navigation and key instructional points are documented.

Each of the NFIRS 5.0 modules can be described as belonging to one of two categories; required or optional. Required modules must be completed when dictated by the type of incident. These module are:

The Basic Incident Module

Must be completed for every incident responded to.

The Fire Module

Must be completed for each fire responded to (except for confined fires).

The Structure Fire Module

Must be completed for all structure fires responded to (the first field only is required non-building structures).

Civilian Fire Casualty Module

Must be completed for each civilian fire casualty.

Fire Service Casualty Module

Must be completed for each fire service casualty.

The rest of the NFIRS 5.0 module are optional and their use or non use is decided on a state by state or department by department basis. They are:

EMS Module

Department use is optional. May be state required.

HazMat Module

Department use is optional. May be state required.

Wildland Module

Department use is optional. May be state required.

Apparatus Module

Department use is optional.

Personnel Module

Department use is optional.

Arson Module

Department use is optional. May be state required.

FIGURE 3-18. Basic Module Logic Flow

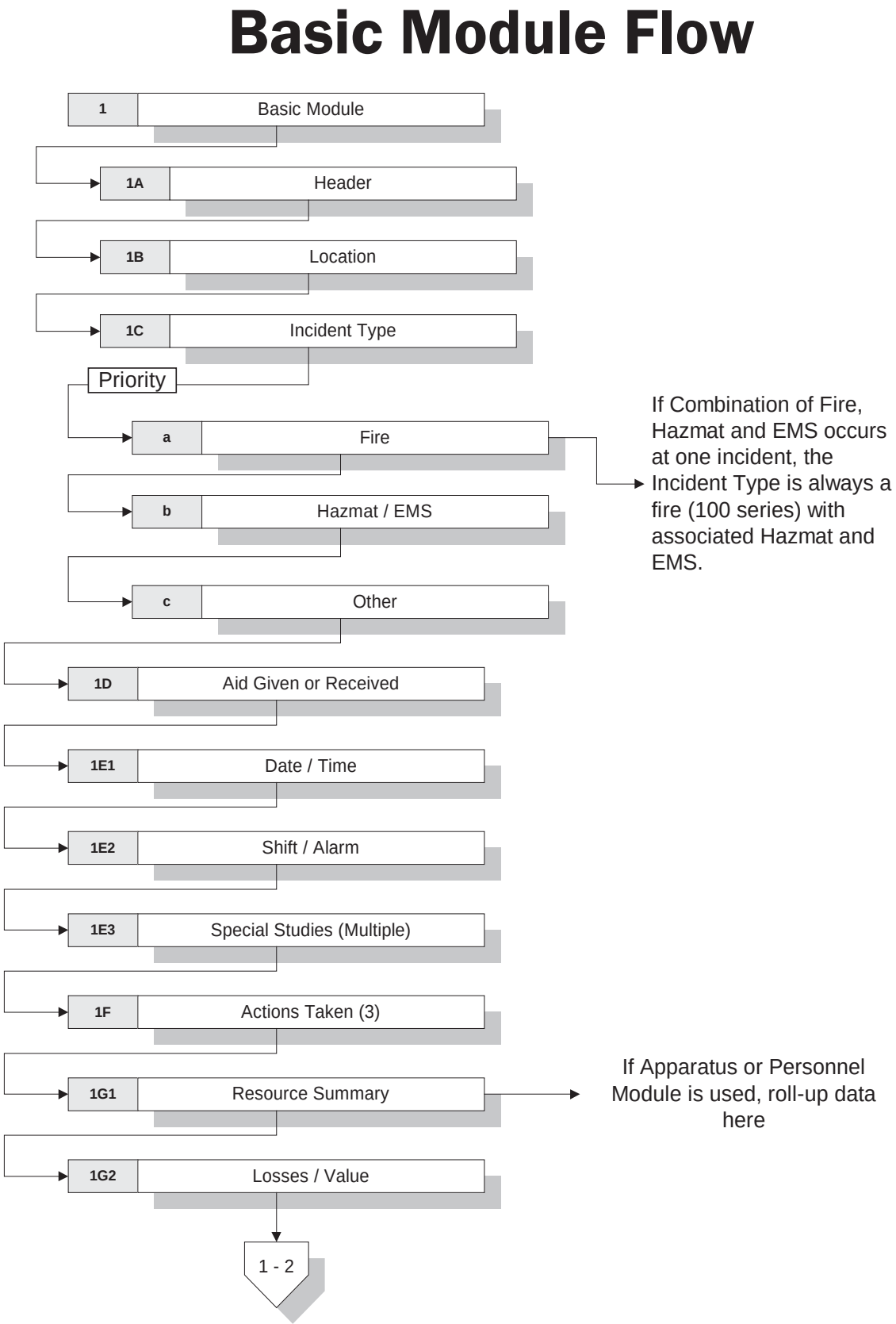


FIGURE 3-19. Basic Module Logic Flow (continued)

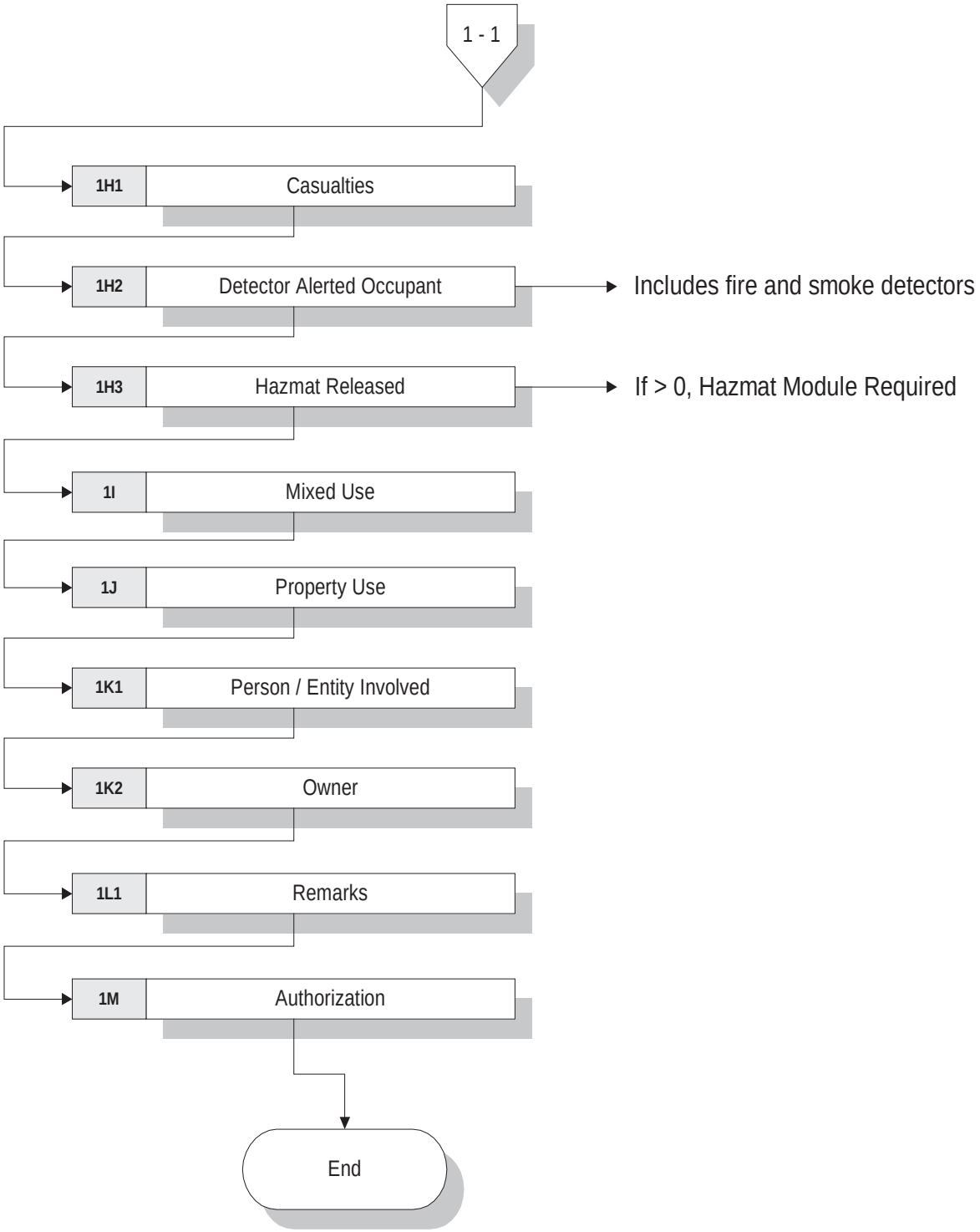


FIGURE 3-20. Fire Module Logic Flow

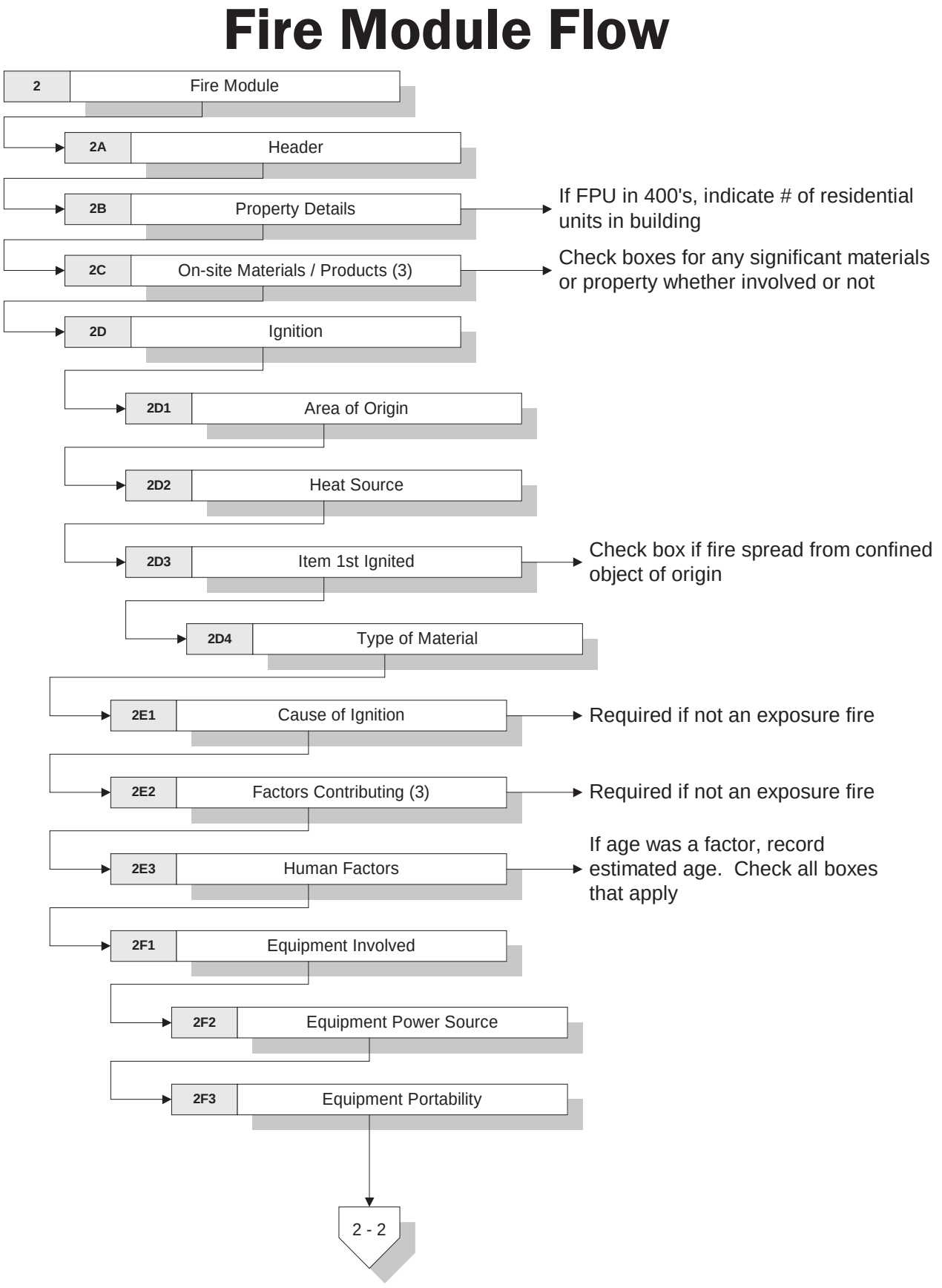


FIGURE 3-21. Fire Module Logic Flow (continued)

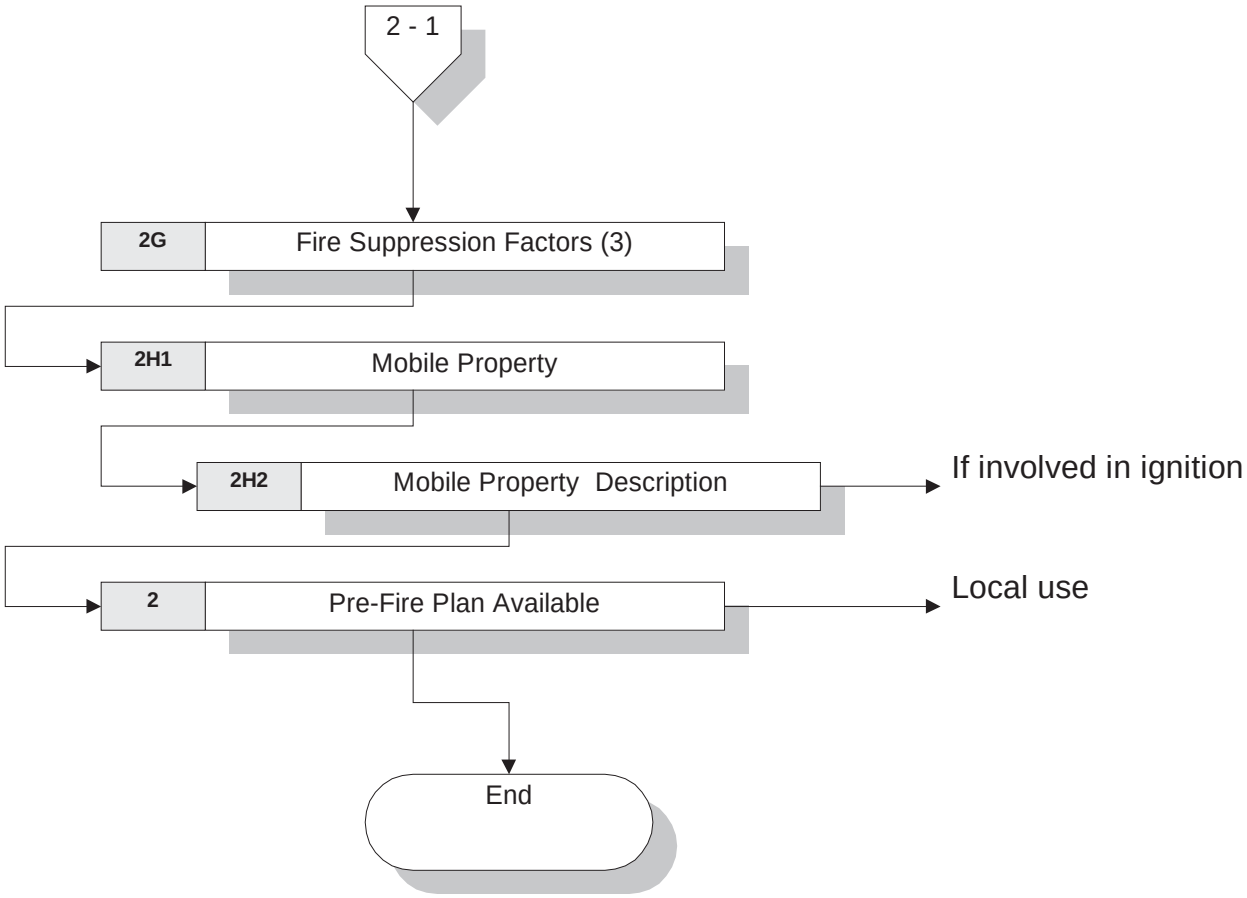


FIGURE 3-22. Structure Fire Module Logic Flow

Structure Fire Module Flow

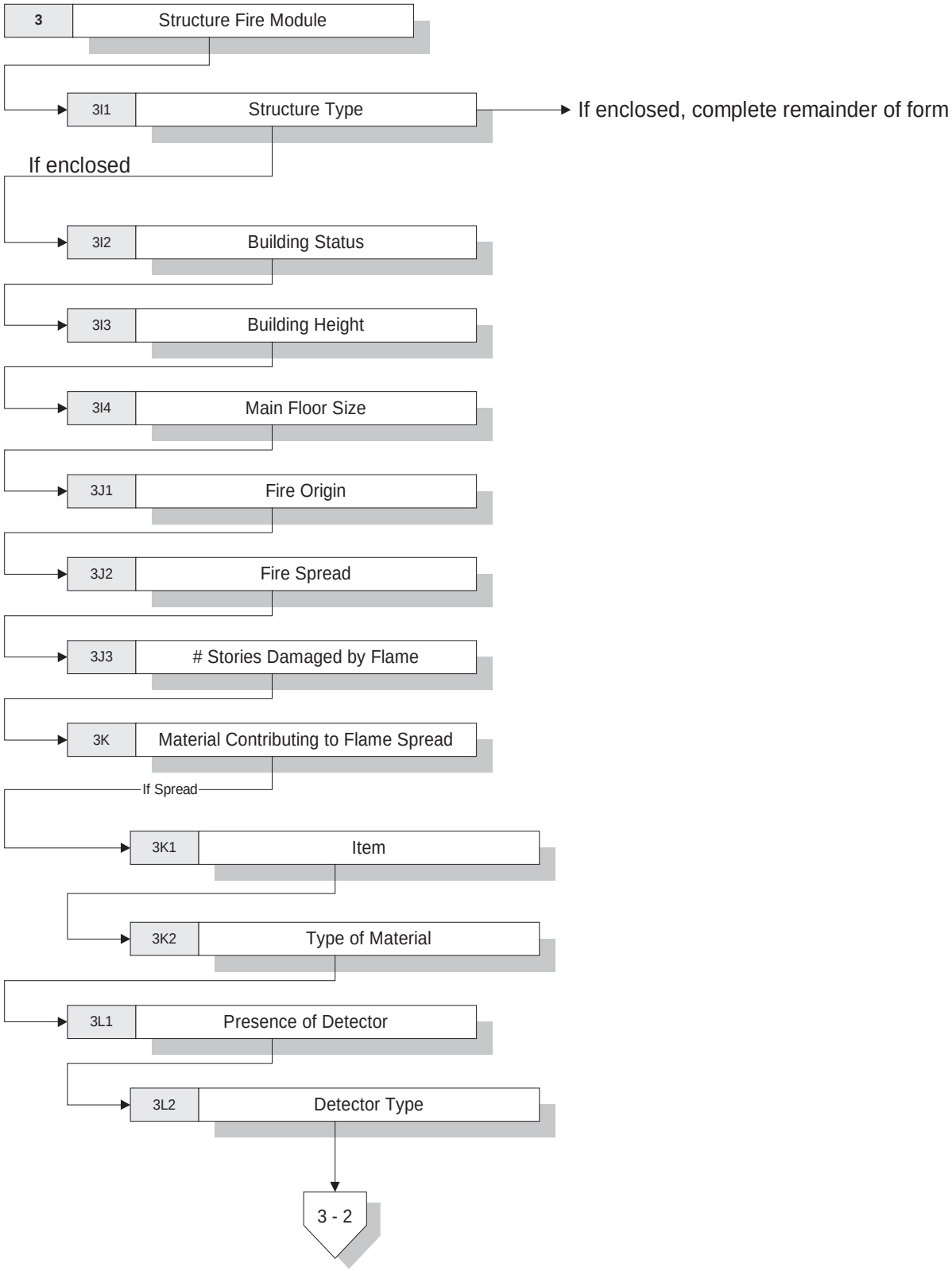


FIGURE 3-23. Structure Fire Module Logic Flow (continued)

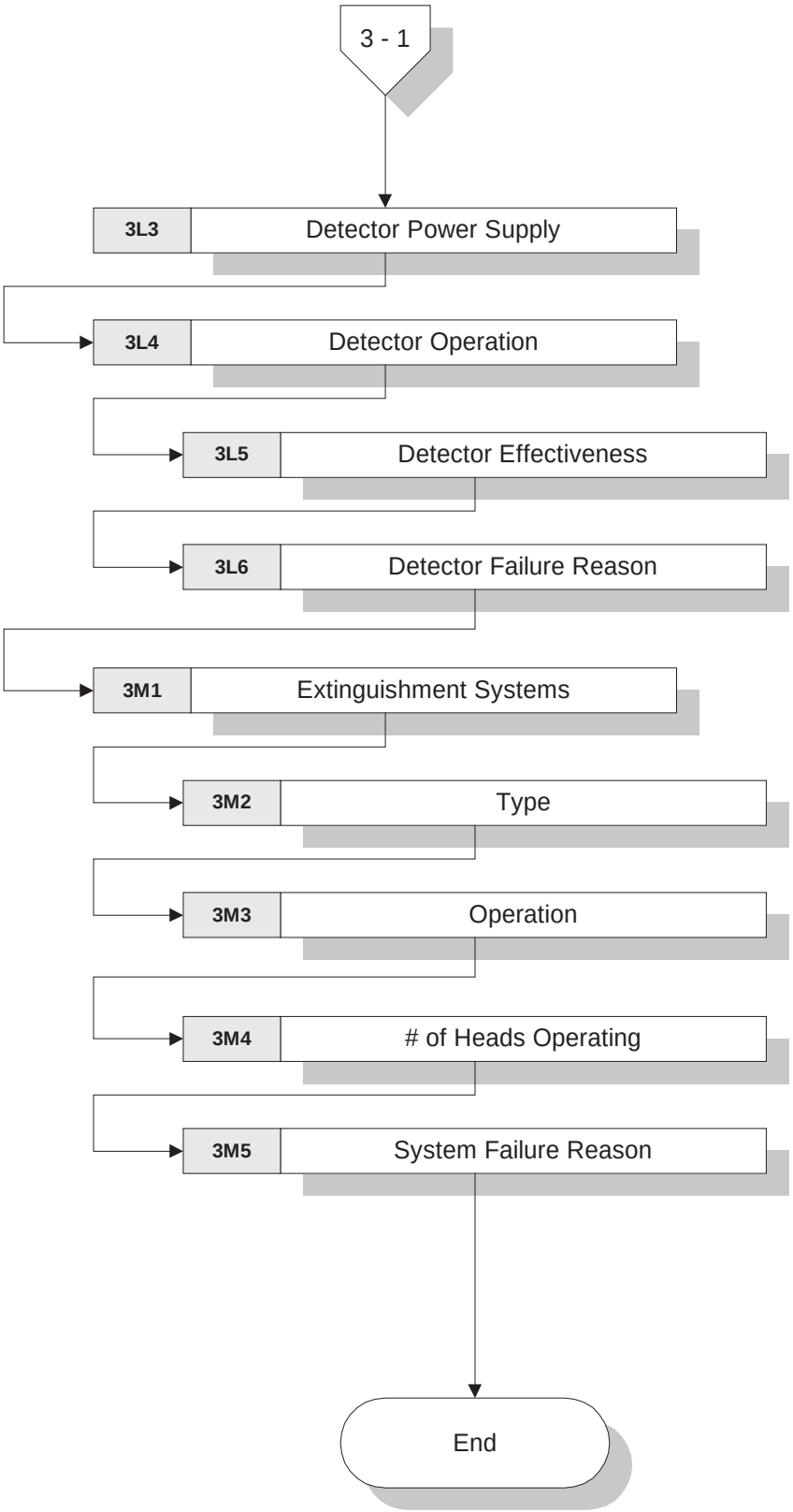


FIGURE 3-24. Civilian Fire Casualty Module Logic Flow

Civilian Fire Casualty Module Flow

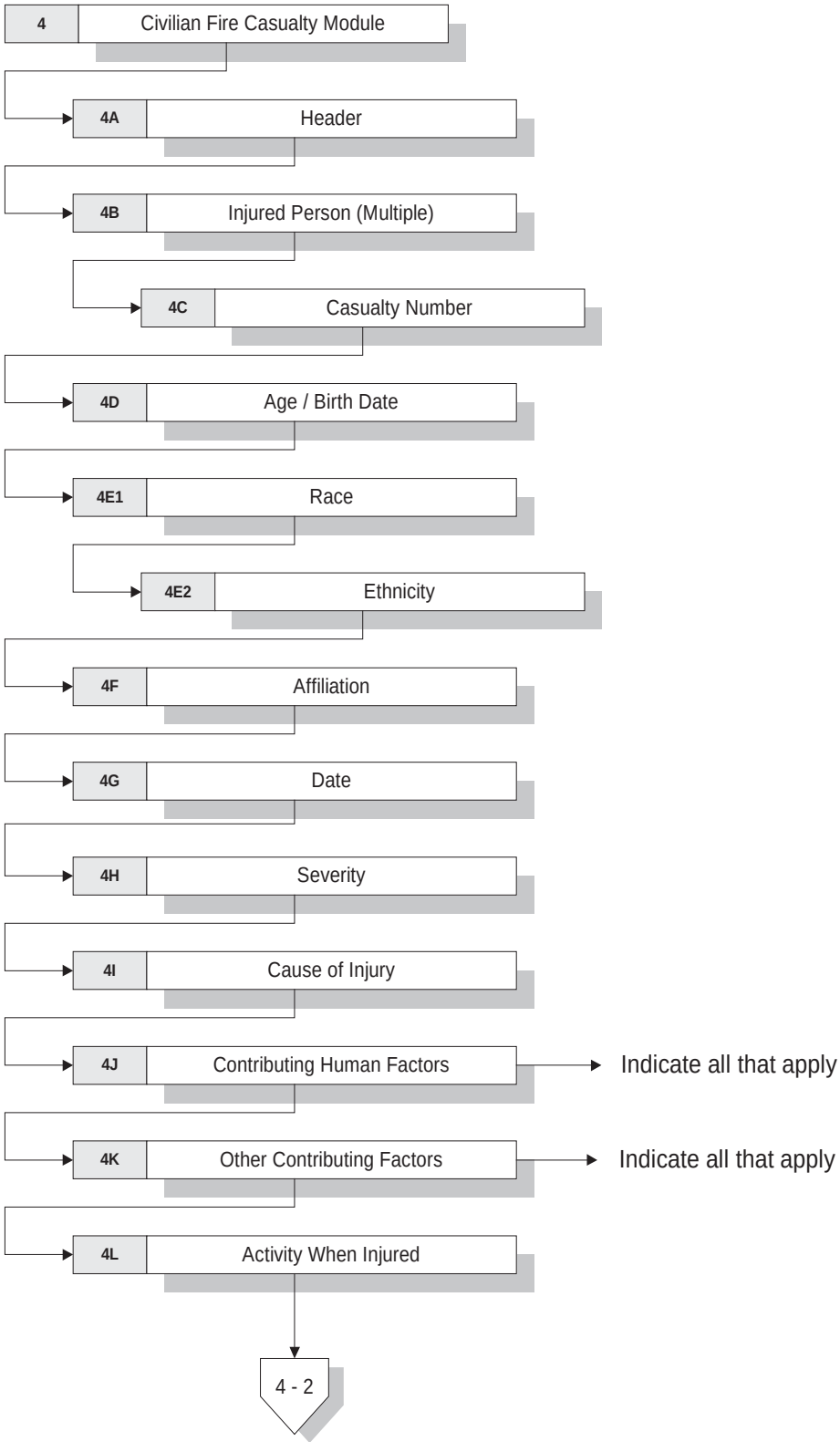


FIGURE 3-25. Civilian Fire Casualty Module Logic Flow (continued)

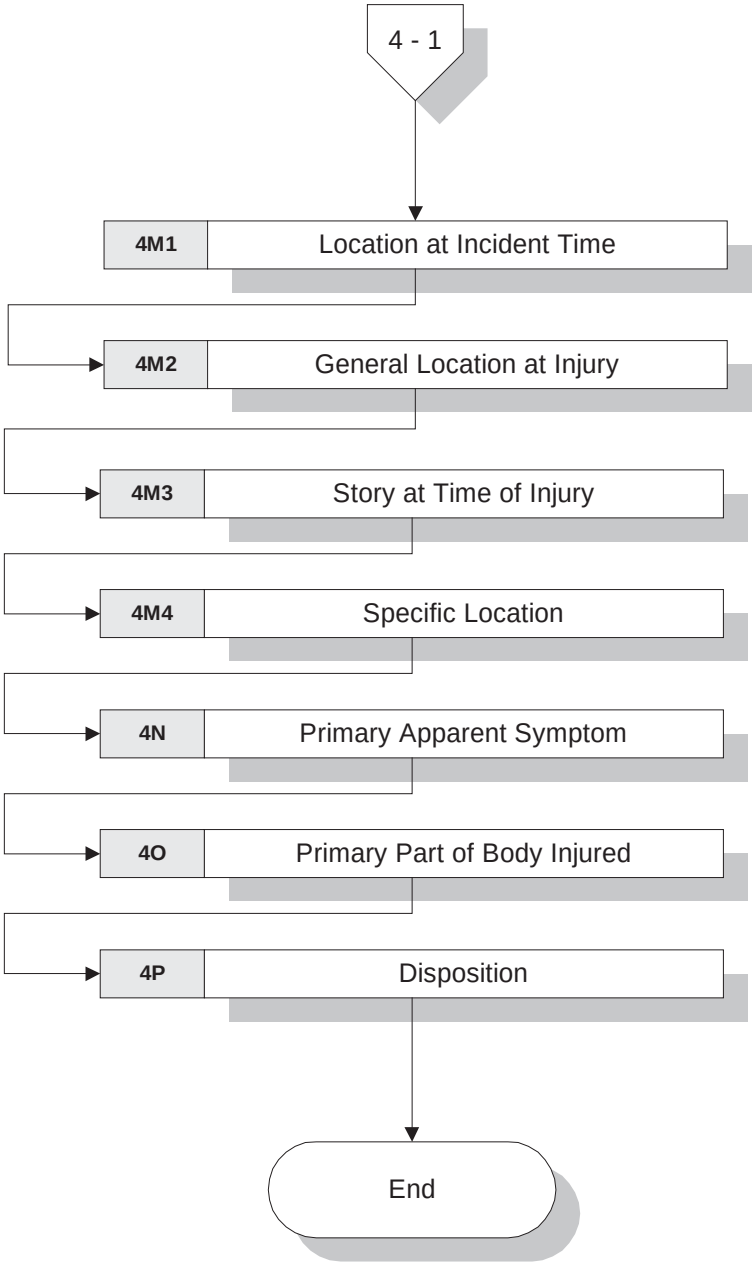


FIGURE 3-26. Fire Service Casualty Module Logic Flow

Fire Service Casualty Module Flow

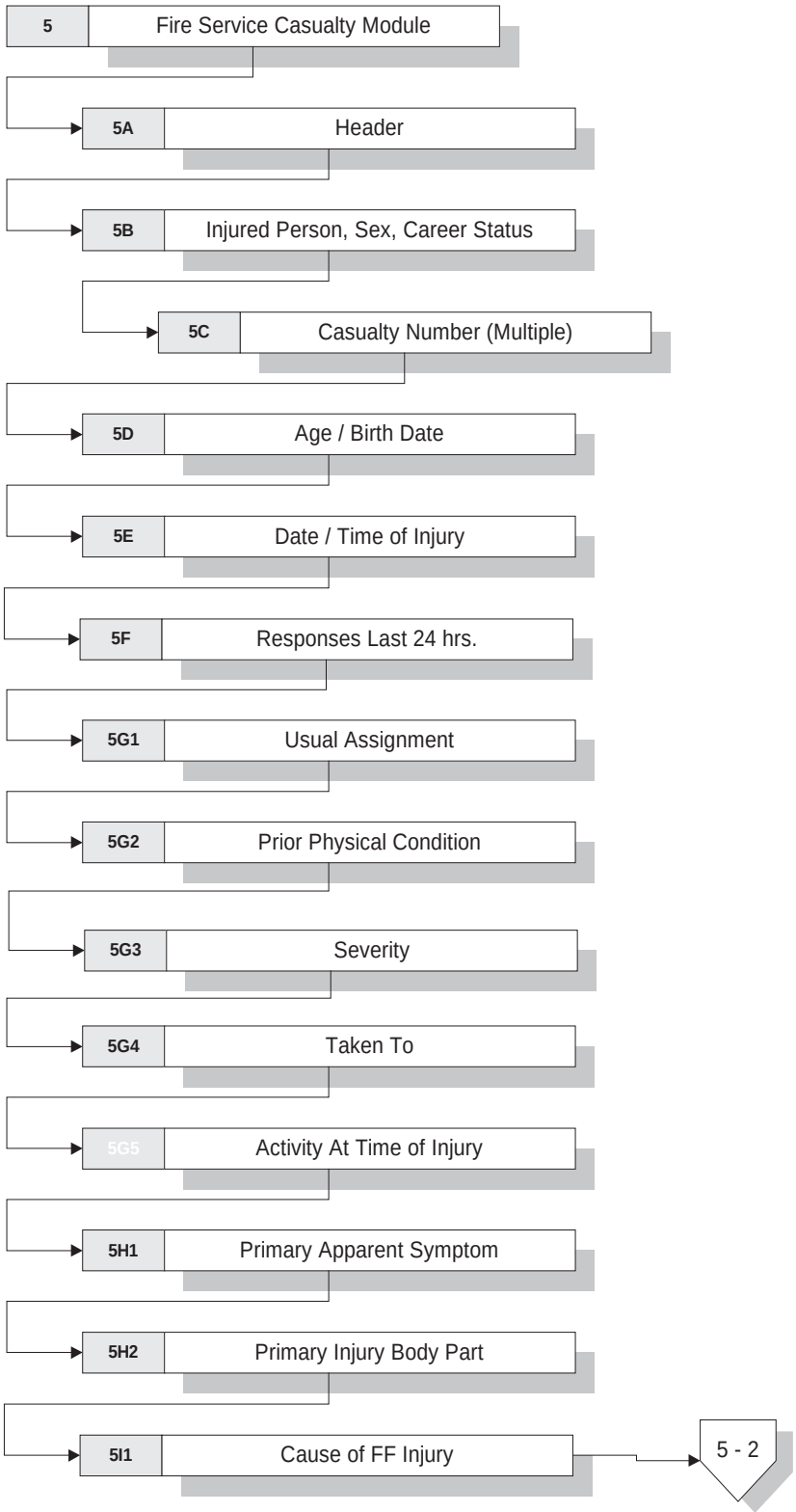


FIGURE 3-27. Fire Service Casualty Module Logic Flow (continued)

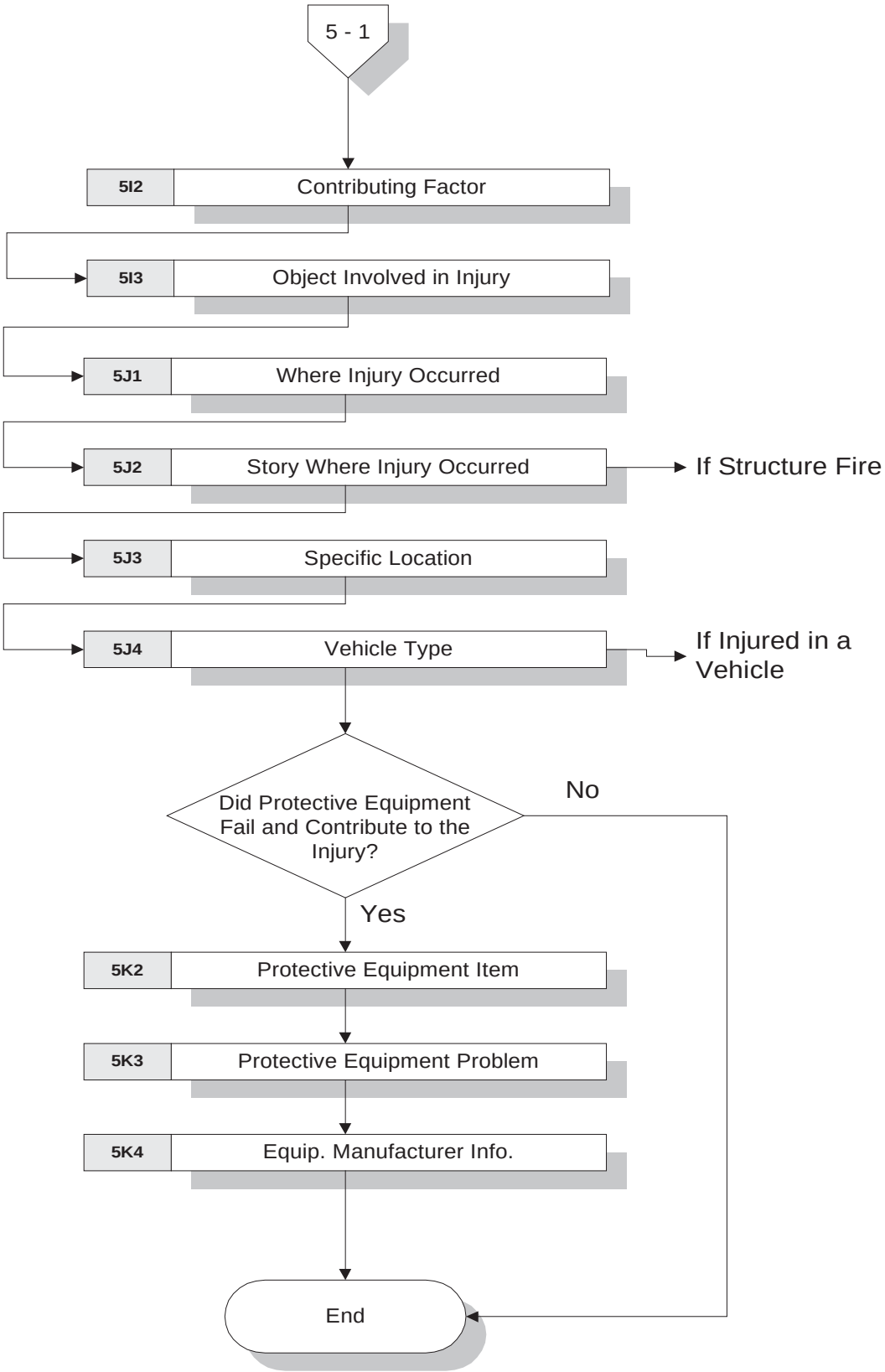


FIGURE 3-28. Emergency Medical Services Module Logic Flow

EMS Module Flow

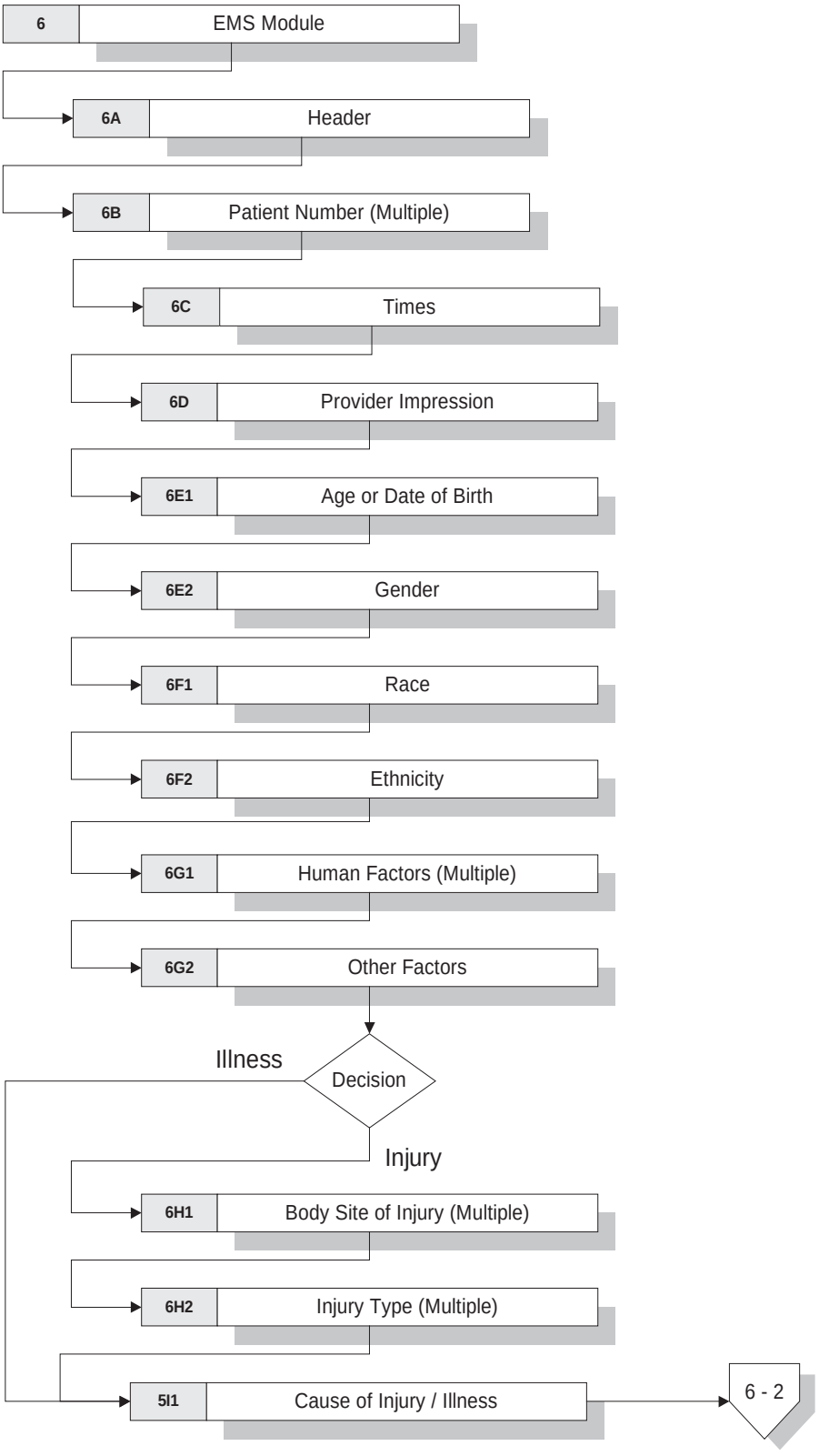


FIGURE 3-29. Emergency Medical Services Module Logic Flow (continued)

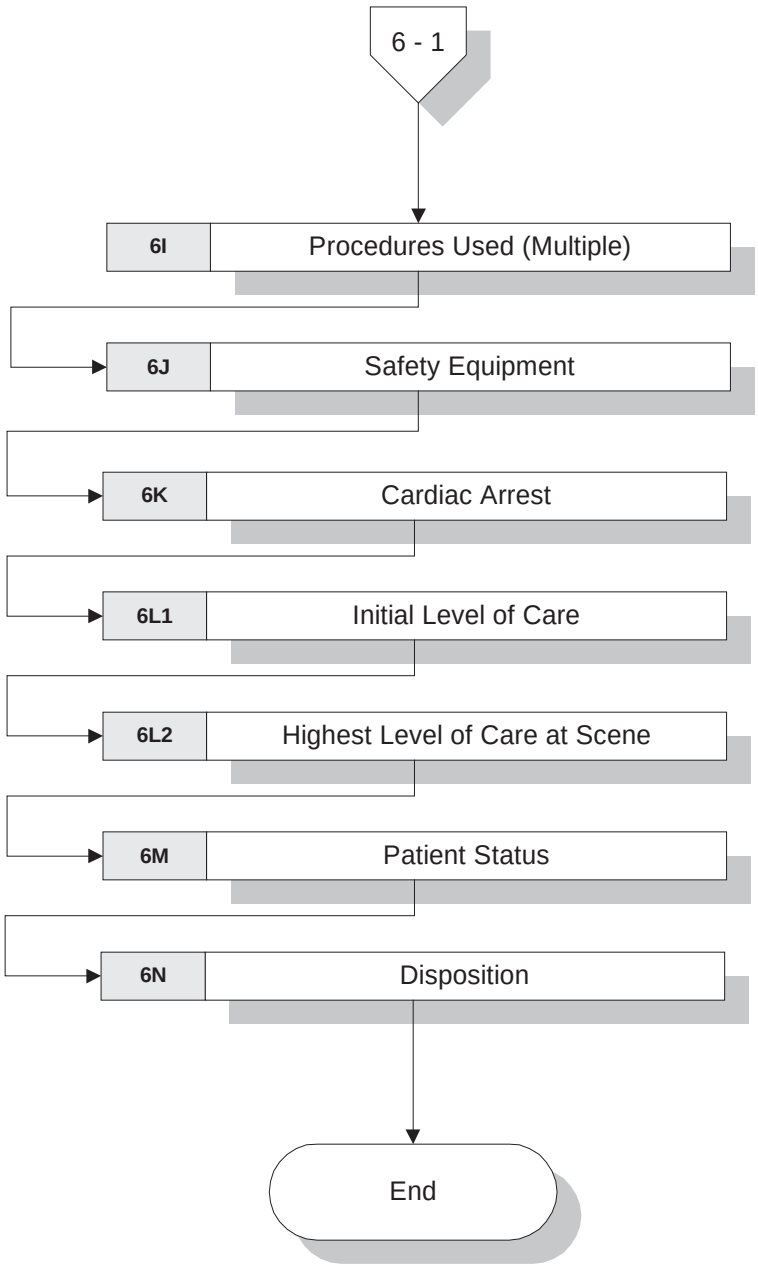


FIGURE 3-30. Hazardous Materials Module Logic Flow

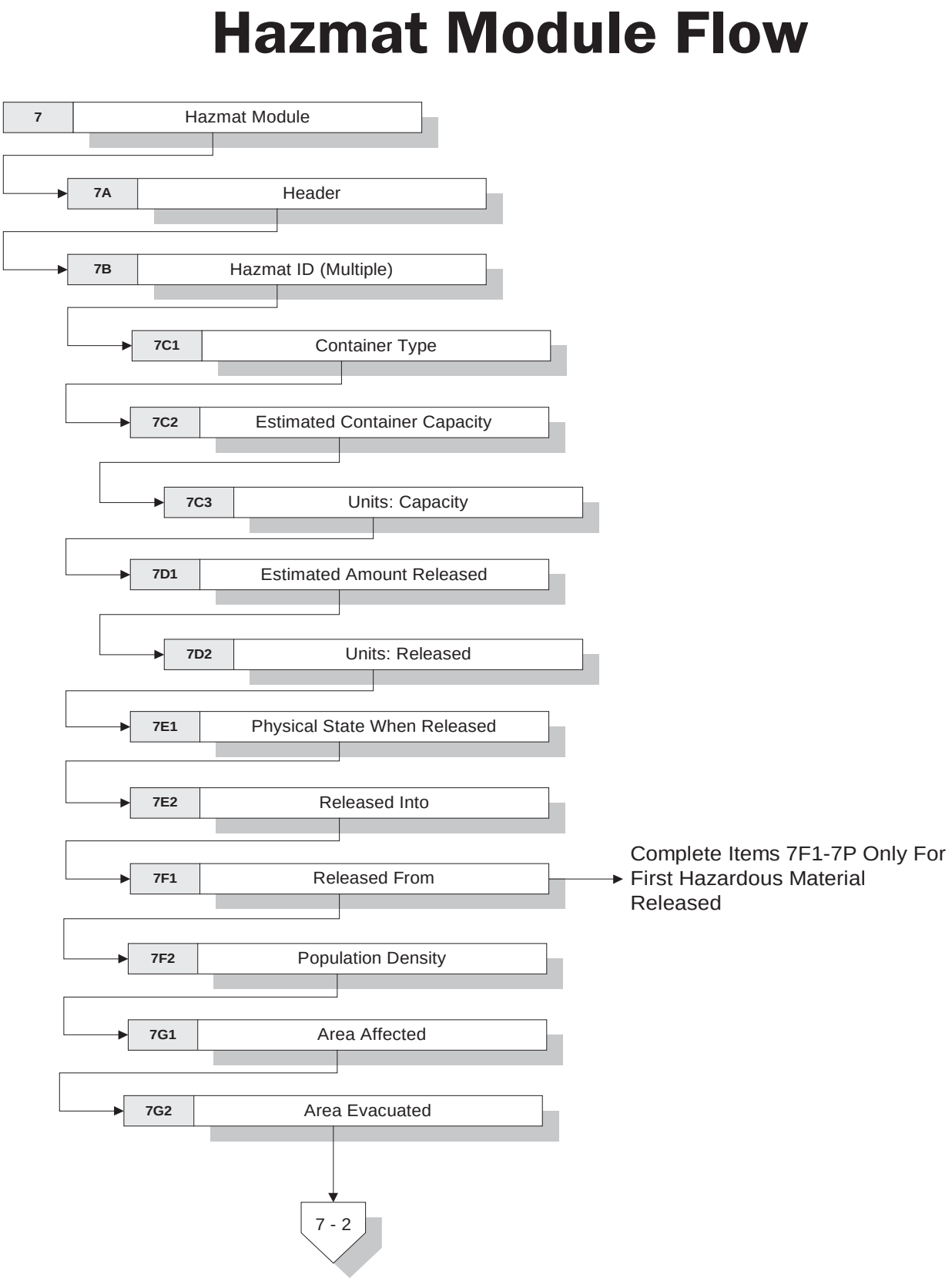


FIGURE 3-31. Hazardous Materials Module Logic Flow (continued)

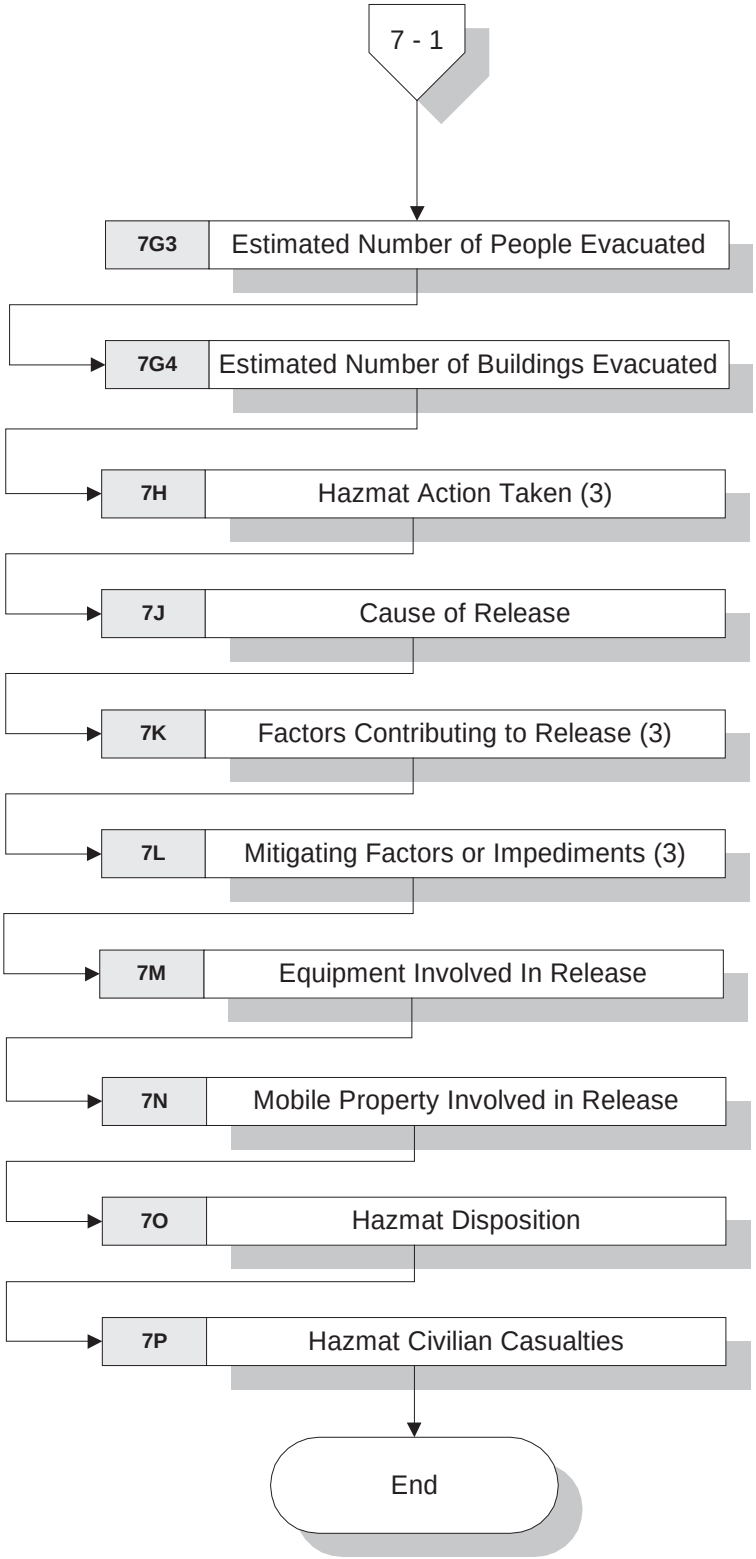


FIGURE 3-32. Wildland Fire Module Logic Flow

Wildland Fire Module Flow

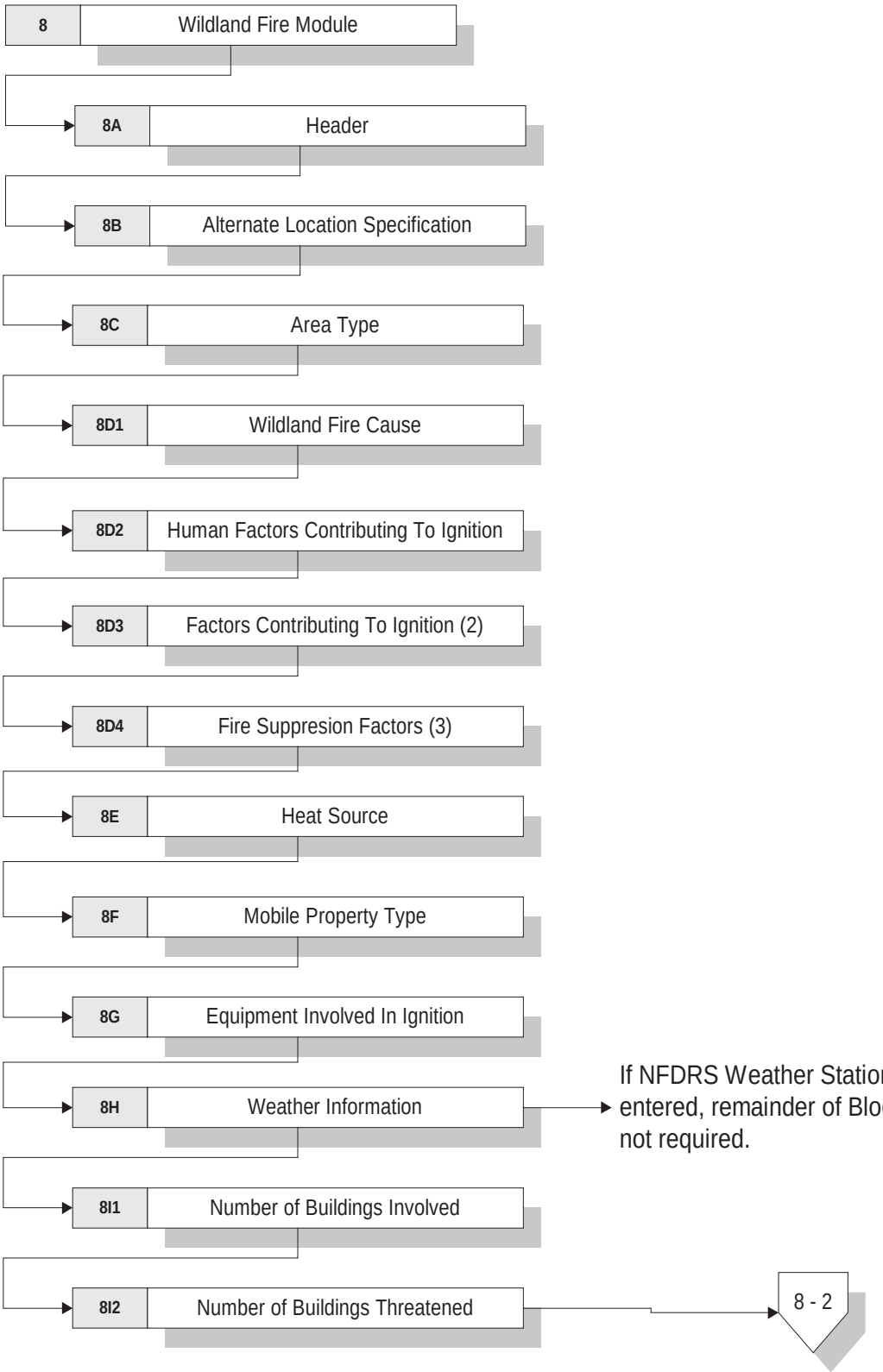


FIGURE 3-33. Wildland Fire Module Logic Flow (continued)

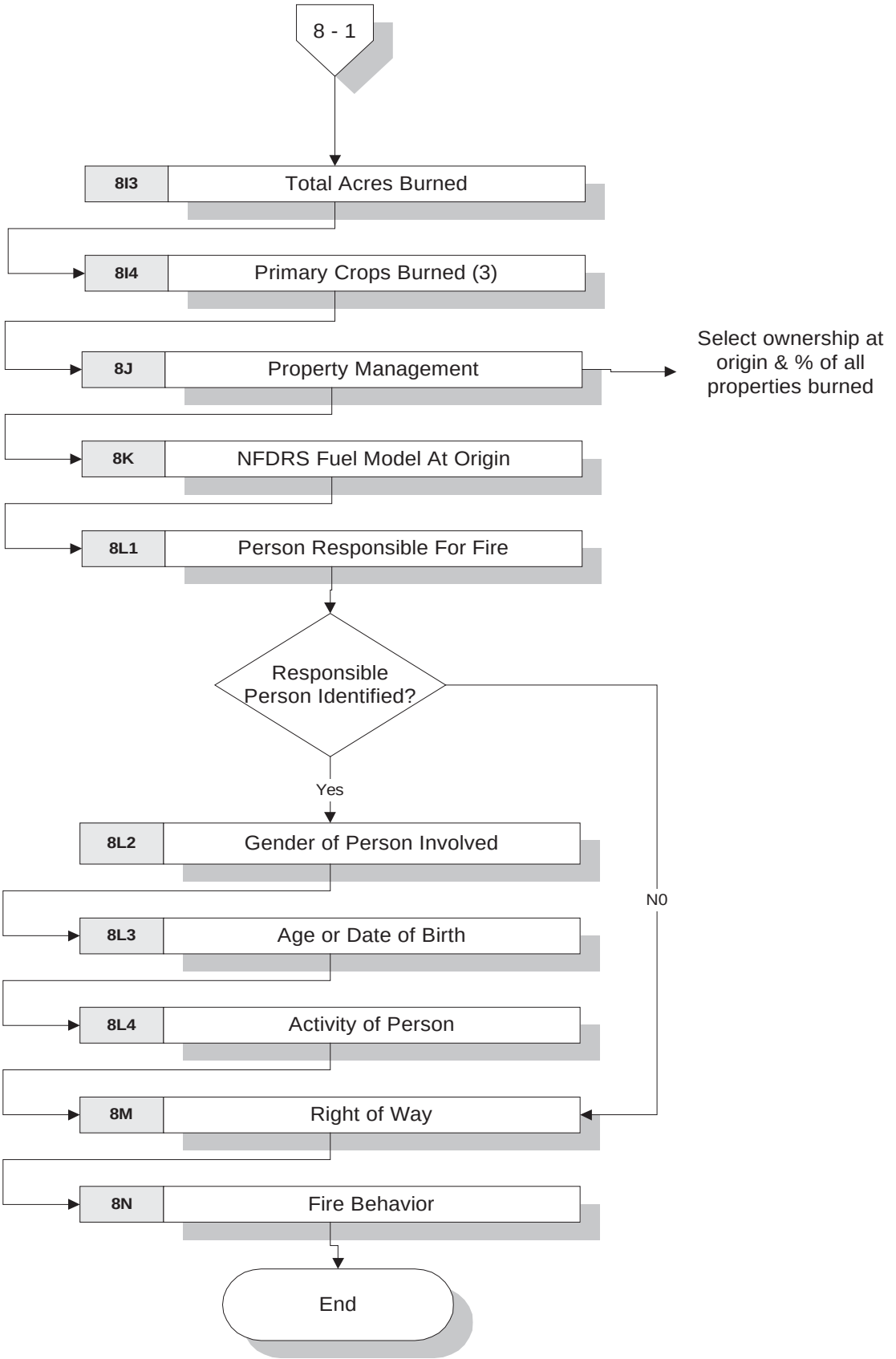


FIGURE 3-34. Apparatus or Resources Module Logic Flow

Apparatus Module Flow

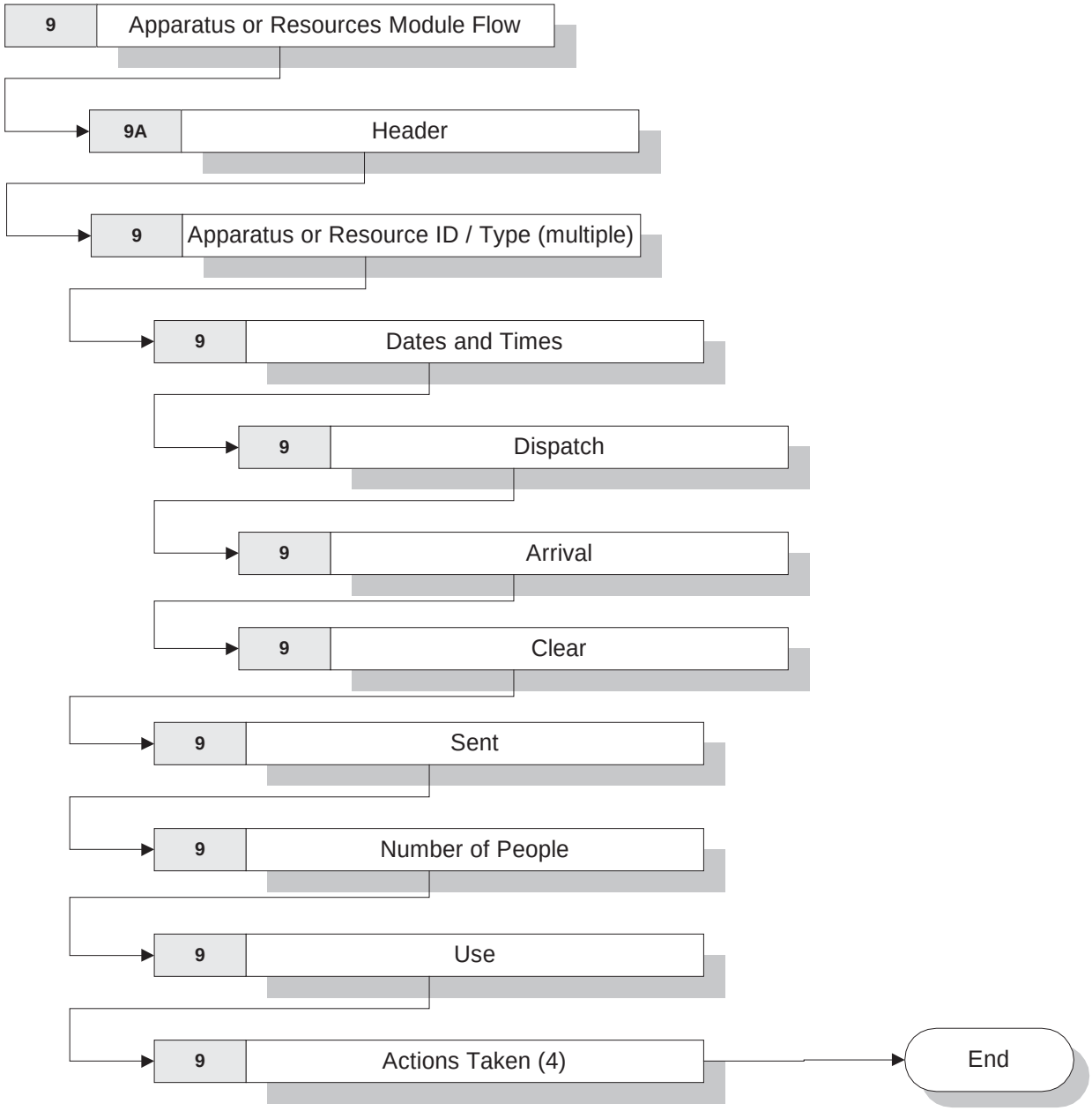


FIGURE 3-35. Personnel Module Logic Flow

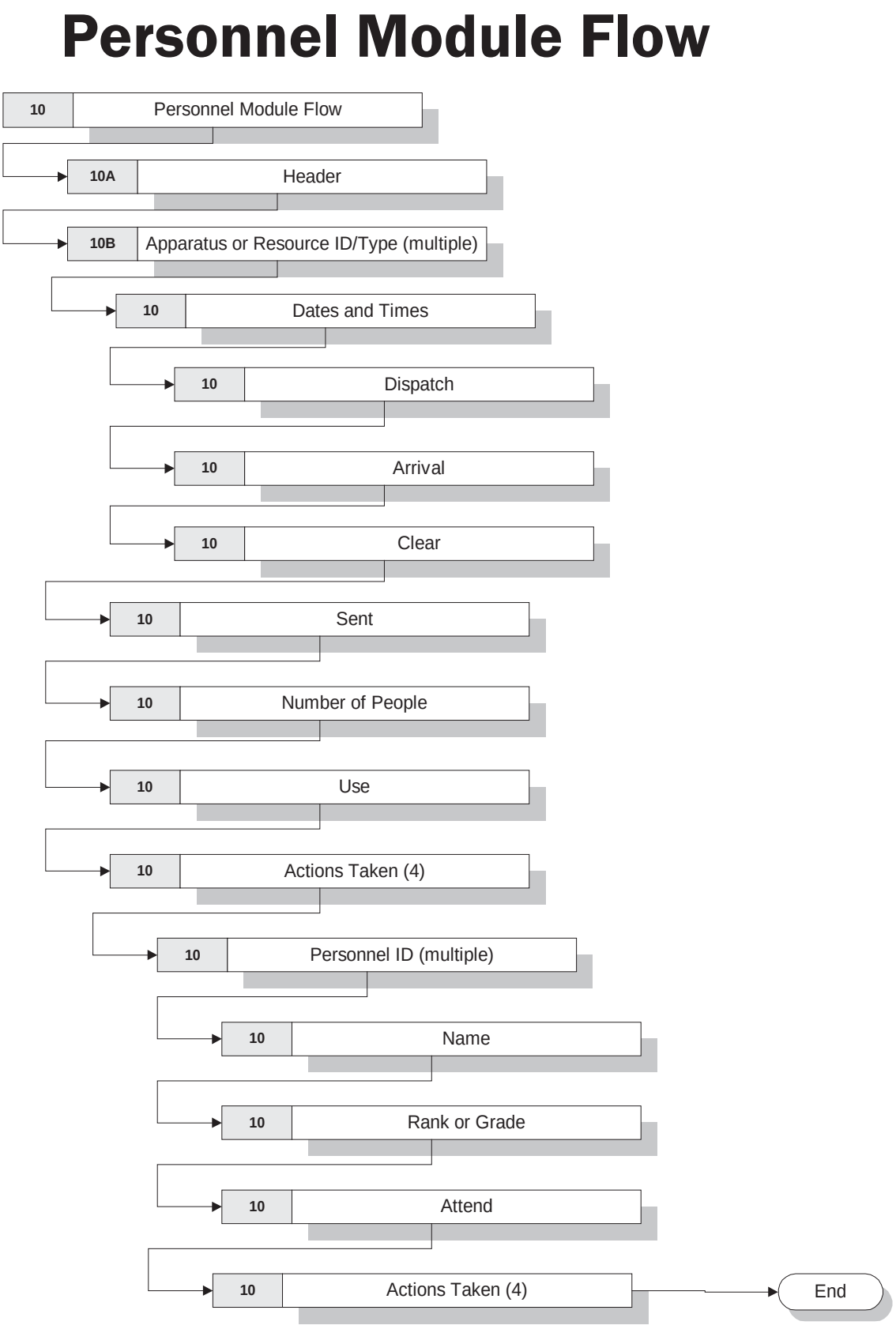


FIGURE 3-36. Arson Module Flow

Arson Module Flow

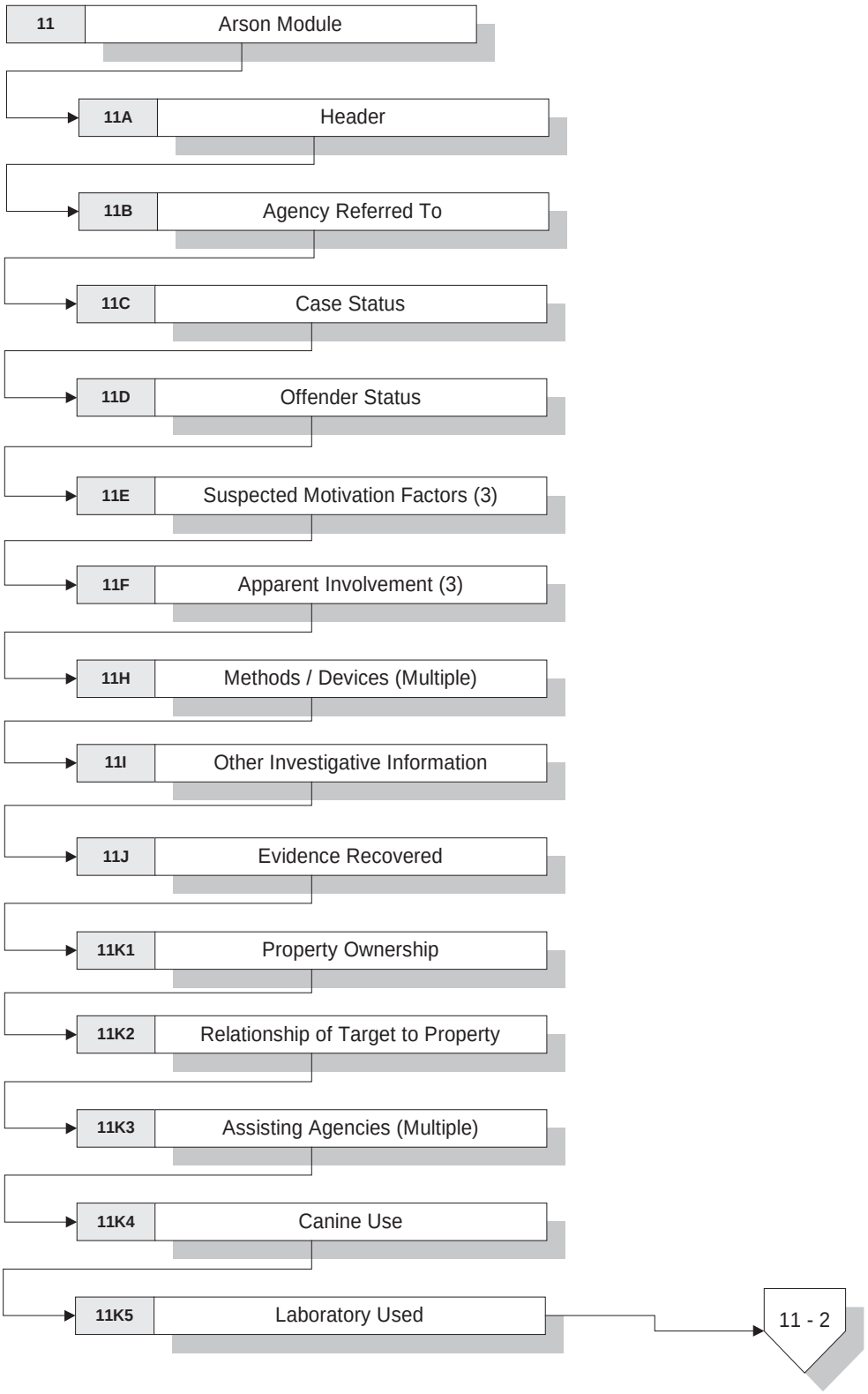


FIGURE 3-37. Arson Module Flow (continued)

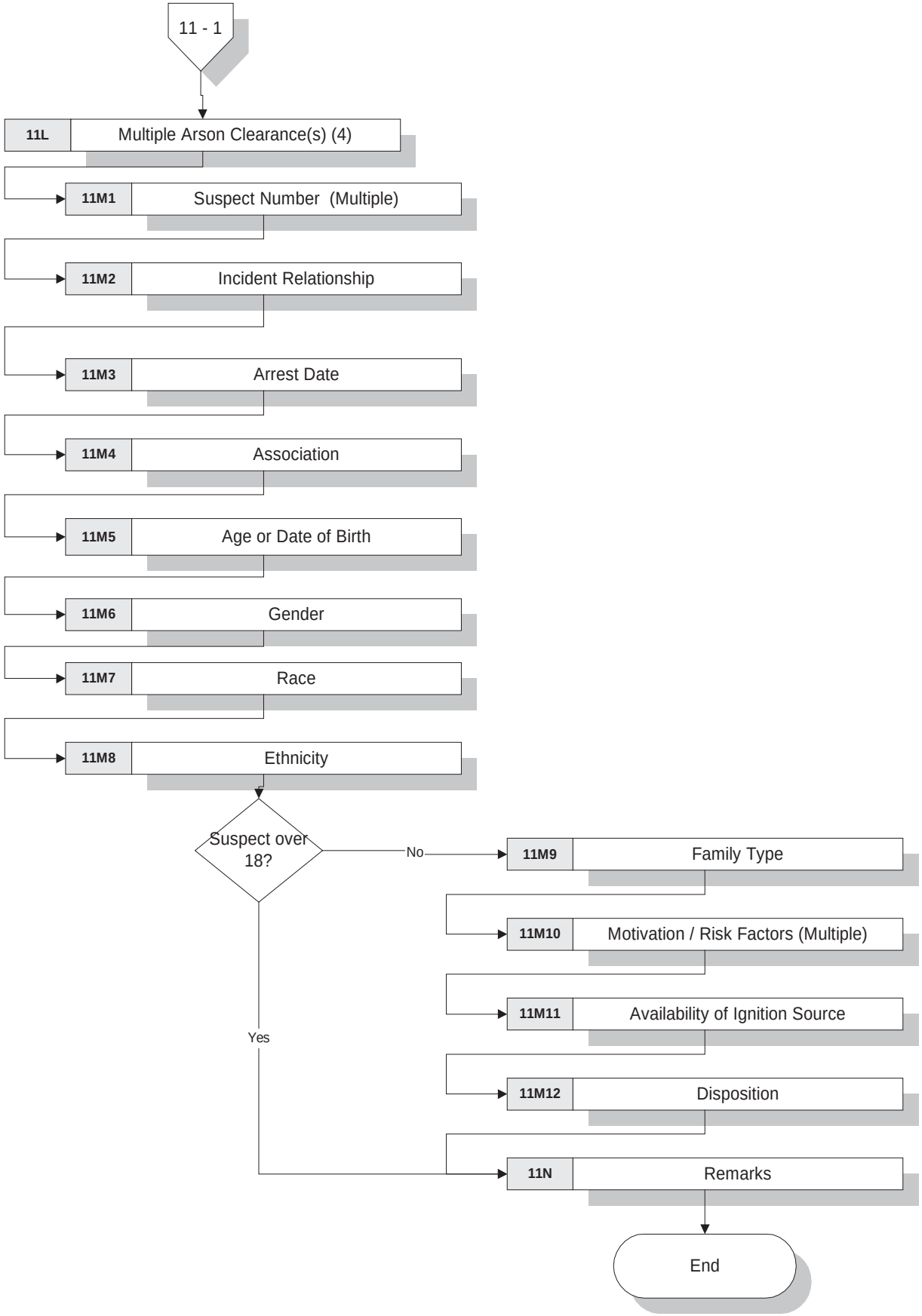
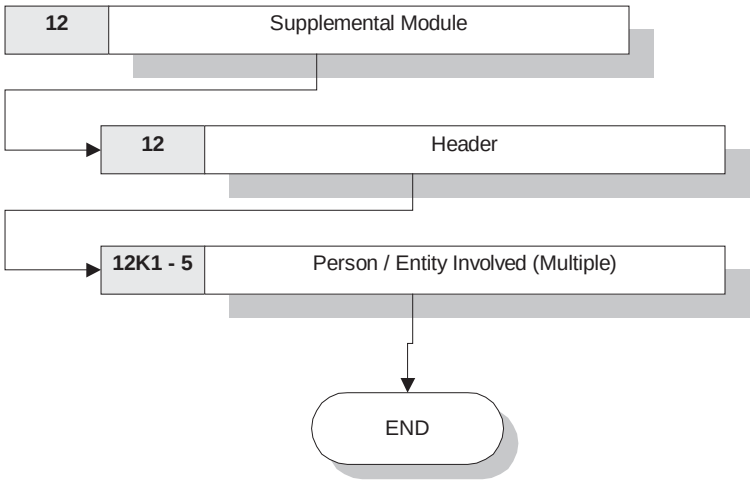


FIGURE 3-38. Supplemental Module Flow

Supplemental Module Flow



Edit Requirements

This section defines all edit requirements for the NFIRS 5.0 system.

The edit requirements are divided into two sections, the Base Edit Requirements, which begin on the following page, and the Relational Edit Requirements which begin on page 102.

Each field in the Base Edit Requirements that has an associated Relational Edit Requirement lists the number of the cross referenced edit in the "Cross Edits" column of the Base Edit Requirements.

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 1 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
1			**Basic Module**			**Y**					**Required for all incidents**
									1		
1			State	2	C	K	State ID	Valid code			
1			FDID	5	X	K	Dept. ID				
1	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field)
1	A	D	Station	3	X		Station				
1	A	D	Incident Number	7	N	K		Numeric			Record key must be unique
1	A	D	Exposure	3	N	K	0	Numeric, sequential	2		
1	A	D	Delete/Change/No Activity this Month	1	C		Blank	Blank, 1, 2, 3	3, 4		Blank = add; If code = 3 (No activity), then complete only key fields and alarm date
1	B		Location			Y					Select B should be left blank if Wildland - Alternate Location is used.
1	B	D	Wildland Address Elsewhere flag	1	Y	D	N	Y or N	5, 133	Module Wildland -Alternate Location Specification	
1	B	D	Location Type	1	C	Y	Blank	Blank; valid codes	6		
1	B	D	Census Tract	6	X		Blank	Valid Tract			Carry to USFA if collected
1	B	D	Number/Milepost	8	X		Blank				
1	B	D	Street Prefix Direction	2	C		Blank	Valid code			Use table
1	B	D	Street or Highway Name	30	X	Y	Blank	Alpha/numeric			Wildland flag <> true
1	B	D	Street Type	4	C		Blank				
1	B	D	Street Suffix	2	X		Blank	Valid code			
1	B	D	Apt or Suite	15	X		Blank	Alpha/numeric			
1	B	D	City	20		Y	Blank	Alphabetic			
1	B	D	State	2	C	Y	Blank	Valid table			
1	B	D	Zip	9	N	Y	Null	Numeric			
1	B	D	Cross Street, Directions or National Grid	30	X		Blank	Alpha/numeric		Address Type	Required when Street Type is “Intersection”.
1	C	D	Incident Type	4	C	Y	Blank	Valid codes	7-20, 106, 165		National codes plus one digit (NNNL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 2 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
1	D		Aid Given / Received								
1	D	D	Aid Type	1	C	Y	None	Valid 1, 2, 3, 4, 5, N	21		National codes plus one digit (NL).
1	D	D	FDID Receiving Aid	5	X		Blank		Aid Given or Received must be 3 or 4	Aid Type	
1	D	D	State	2	C		Current state code	Valid State Abbreviation	Aid Given or Received must be 3 or 4	Aid Type	
1	D	D	Incident Number of Receiving Aid	7	N		Blank		Aid Given or Received must be 3 or 4	Aid Type	Their Incident number.
1	E1		Dates & Times								
1	E1	D	Alarm Date	8	N	K	YYYYMDD/ Blank	YYYYMMDD	22 thru 24		
1	E1	D	Alarm Time	6	N	Y	HHMMSS	000000-235959	22 thru 24		Valid time; if seconds are not collected then they must be zero (00).
1	E1	S	Arrival Date flag	1	Y		Same date - true				
1	E1	D	Arrival Date	8	N	Y	YYYYMDD/ Blank	Valid date, Incident Type <> 611	25, 26		Incident Type 611 (canceled en route).
1	E1	D	Arrival Time	6	N	Y	HHMMSS	000000-235959	25, 26		Valid time; if seconds are not collected then seconds must be zero (00). Incident Type 611 (canceled en route).
1	E1	S	Controlled Date flag	1	Y		Same date - true			Incident Type	
1	E1	D	Controlled Date	8	N		YYYYMDD/ Blank	Valid date, Incident Type <> 611, Incident Type = 1XX or 561, 631, 632	27	Incident Type, Wildland Module	Required if Wildland Module present unless aid given.
1	E1	D	Controlled Time	6	N		HHMMSS	Valid time, Incident Type <> 611, Incident Type = 1XX or 561, 631, 632	27	Incident Type, Wildland Module	Required if Wildland Module present unless aid given. Valid time; if seconds are not collected then they must be zero (00).
1	E1	S	Last Unit Cleared Date Flag	1	Y		Same date - true			Incident Type	
1	E1	D	Last Unit Cleared Date	8	N		YYYYMDD/ Blank	YYYYMMDD	28	Incident Type	
1	E1	D	Last Unit Cleared Time	6	N		HHMMSS	000000-235959	29	Incident Type	Valid time; if seconds are not collected then they must be zero (00).
1	E2	D	Shifts or Platoon	1	X		Blank				

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 3 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
1	E2	D	Alarms	2	X		Blank				
1	E2	D	District	3	X		Blank				
1	E3	D	Special Study Sequence Number #1	3	N		Blank				When Needed
1	E3	D	Special Study ID #1	5	N		Blank				
1	E3	D	Special Study Code #1	5	C		Blank				
1	E3	D	Special Study Sequence Number #2	3	N		Blank				
1	E3	D	Special Study ID #2	5	N		Blank				
1	E3	D	Special Study Code #2	5	C		Blank				
1	F	D	Actions Taken #1	3	C	Y	Blank	Valid codes	30	Incident Type	Need to relate Actions Taken with Incident Type. National codes plus one digit (NNL): display national field lengths unless local option character is defined.
1	F	D	Actions Taken #2	3	C		Blank	Valid codes	31	Incident Type	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
1	F	D	Actions Taken #3	3	C		Blank	Valid codes	32	Incident Type	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
1	G1		Resources			Y					
1	G1	D	Resource Form Use flag	1	Y	D	Blank	Y, N, Blank		Apparatus or Personnel Modules	
1	G1	D	Suppression Apparatus	4	N	D	Null	Numeric		Resource flag	If Resource flag = true, then import totals from either Apparatus of Personnel Module.
1	G1	D	Suppression Personnel	4	N	D	Null	Numeric		Resource flag	If Resource flag = true, then import totals from either Apparatus of Personnel Module.
1	G1	D	EMS Apparatus	4	N	D	Null	Numeric		Resource flag	If Resource flag = true, then import totals from either Apparatus of Personnel Module.
1	G1	D	EMS Personnel	4	N	D	Null	Numeric		Resource flag	If Resource flag = true, then import totals from either Apparatus of Personnel Module.
1	G1	D	Other Apparatus	4	N	D	Null	Numeric		Resource flag	If Resource flag = true, then import totals from either Apparatus of Personnel Module.
1	G1	D	Other Personnel	4	N	D	Null	Numeric		Resource flag	If Resource flag = true, then import totals from either Apparatus of Personnel Module.
1	G1	D	Resource Count Includes Aid Received flag	1	Y		Blank	Y, N		Aid Received 1or 2	Aid = 1 or 2.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 4 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
1	G2		Estimated Dollar Losses & Values								
1	G2	D	Property $ Loss	9	N		Null	Numeric		Incident Type	Required for Incident Type = fire (1xx), confirm if $Loss > $500,000.
1	G2	S	Property Loss-None Flag	1	Y	D	Blank	Y or N			If true, then $Loss Value = 0.
1	G2	D	Contents $ Loss	9	N		Null	Numeric		Incident Type	Required for Incident Type = fire (1xx), confirm if $Loss Value > $500,000.
1	G2	S	Contents Loss-None Flag	1	Y	D	Blank	Y or N			If true, then $Loss Value = 0.
1	G2	D	Pre-Incident Property Value	9	N		Null	Numeric	33		
1	G2	S	Pre-Incident Property None Flag	1	Y	D	Blank	Y or N			If true, then $Loss Value = 0.
1	G2	D	Pre-Incident Contents Value	9	N		Null	Numeric	34		
1	G2	S	Pre-Incident Contents None Flag	1	Y	D	Blank	Y or N			If true, then $Loss Value = 0.
1	H	S	System Module flags - Fire	1	Y	D	N = No Information	Y or N		Fire Module	Information Only.
1	H	S	System Module flags - Structure	1	Y	D	N = No Information	Y or N		Structure Module	Information Only.
1	H	S	System Module flags - Hazmat	1	Y	D	N = No Information	Y or N		HazMat Module	Information Only.
1	H	S	System Module flags - Wildland	1	Y	D	N = No Information	Y or N		Wildland Module	Information Only.
1	H	S	System Module flags - Civilian Fire Casualty	1	Y	D	N = No Information	Y or N		Civilian Casualty Module	Information Only.
1	H	S	System Module flags - Fire Service	1	Y	D	N = No Information	Y or N		Fire Service Module	Information Only.
1	H	S	System Module flags - Apparatus	1	Y	D	N = No Information	Y or N		Apparatus Module	Information Only.
1	H	S	System Module flags - Personnel	1	Y	D	N = No Information	Y or N		Personnel Module	Information Only.
1	H	S	System Module flags - EMS	1	Y	D	N = No Information	Y or N		EMS Module	Information Only
1	H	S	System Module Flags - Arson	1	Y	D	N = No Information	Y or N		Arson Module	Information Only.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 5 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
1	H1		**Casualties**		Y						**Required Section**
1	H1	S	Casualties-None flag	1	Y	D	Blank	Y or N; no casualty module present	35	Casualty Modules	Civilian Fire Casualty Module is required only for Fire Incidents.
1	H1	D	Fire Service Deaths	3	N	D	Null	Numeric	93	Fire Service Module	
1	H1	D	Fire Service Injuries	3	N	D	Null	Numeric	93	Fire Service Module	
1	H1	D	Other Deaths	3	N	D	Null	Numeric		Civilian Casualty Module	
1	H1	D	Other Injuries	3	N	D	Null	Numeric		Civilian Casualty Module	
1	H2	D	Detector Alerted Occupants	2	C		Blank	Valid Code		Incident Type	National Codes plus one digit (NL): display National field lengths unless local option character is defined.
1	H3	D	HazMat Released	2	C		None	Valid code		HazMat Module	Trigger hazmat module for code 0 (zero) national codes plus one digit (NNL): display national field lengths unless local option character is defined.
1	I	D	Mixed Use	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
1	J	D	Property Use	4	C	Y	Blank	Valid code	36, 37		National Codes plus one digit (NNNL): display National field lengths unless local option character is defined. Not required when aid given.
1	K1		**Person/Entity Involved**								
1	K1	D	Business Name	25	X		Blank				
1	K1	D	Telephone Number	10	N		Blank				
1	K1	D	Name Prefix	3	C		Blank	Alphabetic			
1	K1	D	First Name	15	X		Blank				
1	K1	D	MI	1	X		Blank				
1	K1	D	Last Name	25	X		Blank				
1	K1	D	Name Suffix	3	C		Blank				
1	K1	S	Same Address as Incident flag	1	Y		No	Y or N		Location (B)	
1	K1	D	Number/Milepost	8	X		Blank				
1	K1	D	Prefix	2	C		Blank	Valid code			
1	K1	D	Street or highway	20	X		Blank				
1	K1	D	Street Type	4	C		Blank	Valid code			

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 6 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
1	K1	D	Street Suffix	2	C		Blank	Valid code			
1	K1	D	Apt. or Suite	15	X		Blank				
1	K1	D	City	20	X		Blank	Alphabetic			
1	K1	D	State	2	C		Blank	Valid code			
1	K1	D	Zip	9	N		Null	Numeric			
1	K1	D	P. O. Box	10	X		Blank				
1	K1	S	More People Involved Record flag	1	Y		No	Y or N			Additional Person/ Entity Involved Records needed.
1	K2		Owner								
1	K2	S	Same Person Involved flag	1	Y	D	No = Not Same	N		Person/Entity Involved (Line K1)	If flag = true, then fill Owner Involved fields with same values as Person/Entity Involved fields.
1	K2	D	Business Name	25	X		Blank				
1	K2	D	Telephone Number	10	N		Blank				
1	K2	D	Name Prefix	3	C		Blank				
1	K2	D	First Name	15	X		Blank				
1	K2	D	MI	1	X		Blank				
1	K2	D	Last Name	25	X		Blank				
1	K2	D	Name Suffix	3	C		Blank				
1	K2	S	Same Address as Incident flag	1	Y	D	No = Not Same	Y or N		Location (Line B)	If flag = true, then fill Owner Address fields with same values as Incident Address fields.
1	K2	D	Number/Milepost	8	X		Blank				
1	K2	D	Prefix	2	C		Blank	Valid code			
1	K2	D	Street or highway	20	X		Blank				
1	K2	D	Street Type	4	C		Blank	Valid code			
1	K2	D	Street Suffix	2	C		Blank	Valid code			
1	K2	D	Apt. or Suite	15	X		Blank				
1	K2	D	City	20	X		Blank	Alphabetic			
1	K2	D	State	2	C		Blank	Valid code			
1	K2	D	Zip	9	N		Blank	Numeric			
1	K2	D	P. O. Box	10	X		Blank				
1	L1	S	Remarks	255	X						This is just a pointer to the remarks data.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 7 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
1	L1	I	More remarks								Flag for paper system only.
1	L2	I	Fire Form Required?								Instructional Information only.
1	M		Authorization								
1	M	D	Officer in Charge ID	9	X		Blank				
1	M	D	Last Name, Officer in Charge	25	X		Blank				
1	M	D	First Name, Officer in Charge	15	X		Blank				
1	M	D	Middle Initial, Officer in Charge	1	X		Blank				
1	M	D	Position or rank, Officer in Charge	10	X		Blank				
1	M	D	Assignment, Officer in Charge	10	X		Blank				
1	M	D	Date, Officer in Charge	8	N		Alarm date	Valid date			
1	M	S	Same as Officer flag	1	Y		No	Y or N			
1	M	D	Member Making Report ID	9	X		Blank				
1	M	D	Last Name, Member Making Report	25	X		Blank				
1	M	D	First Name, Member Making Report	15	X		Blank				
1	M	D	Middle Initial, Member Making Report	1	X		Blank				
1	M	D	Position or rank, Member Making Report	10	X		Blank				
1	M	D	Assignment, Member Making Report	10	X		Blank				
1	M	D	Date, Member Making Report	8	N		Blank	YYYYMMDD			
1		S	Vender Identification Number	5	N		Blank				
1		D	NFIRS Version Number	2.2	F						
2			**Fire Module**					**Incident Type=1xx**	**38, 39**	**Incident Type**	**Required module if applicable; Incident Type Code must be a fire**
2	A	D	State	2	C	K	State ID	Valid code			

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 8 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
2	A	D	FDID	5	X	K	Dept. ID				
2	L	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
2	A	D	Station	3	X		Station				
2	A	D	Incident Number	7	N	K		Numeric			Record key must be unique.
2	A	D	Exposure	3	N	K	0	Numeric, sequential			
2	A	D	Delete/Change	1	X	K	Blank	Blank, 1,2,3			
2	B		Property Detail								
2	B1	D	Not Residential flag	1	Y	D	Blank	Y or N		# of residential units; Property Use	
2	B1	D	Number of Residential units	4	N	D	Null	Numeric	40		
2	B2	D	# of Bldg. Involved	3	N		Null	Numeric	41, 42		This field for exposure records must be zeroes.
2	B2	S	Bldg. not Involved flag	1	Y	D	Blank	Y or N		# of Buildings Involved	
2	B3	D	Acres Burned	6	N	D	Null	Numeric	43, 44, 136		Collected for each exposure fire (if any).
2	B3	D	Acres Burn None/Less than one acre	1	N		Blank	Blank or valid code		# of Acres Burned	
2	B3	S	Acres Burn from Wildland Form	1	Y	D	No = none	Y or N			Trigger the Wildland Form.
2	C		On-Site Materials or Products								
2	C	S	On Site Materials or Products None flag	1	Y	D	Blank	Y or N		On-site material #	None = 99 (See Notes).
2	C	D	Material # 1	4	C		Blank	Valid code	45	On-Site flag	If flag = false, then required. National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
2	C	D	Storage Use #1 (BPPR)	2	C		Blank	1,2,3,4	46	On-Site Material	If Flag = false then required. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	C	D	Material # 2	4	C		Blank	Valid code	45	On-Site flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
2	C	D	Storage Use #2 (BPPR)	2	C		Blank	1, 2, 3, 4	46	On-Site Material	If Flag = false then required. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	C	D	Material # 3	4	C		Blank	Valid code	45	On-Site flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 9 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
2	C	D	Storage Use #3 (BPPR)	2	C		Blank	1, 2, 3, 4	46	On-Site Material	If Flag = false then required. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2			Ignition								
2	D_1	D	Area of Fire Origin	3	C	Y	Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	D_2	D	Heat Source	3	C	Y	Blank	Valid code	47		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	D_3	D	Item First Ignited	3	C	Y	Blank	Valid code	48, 49		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	D_{3a}	S	Check box if fire is confined to object of origin	1	C		Blank	Valid Code			If this box is checked then add Code #1 to Module 3 J_2 Fire Spread. 1) If the Checkbox for Fire Confined to Object of Origin is left blank, then Structure Fire Module J_2 Fire Spread Code must be entered and Codes 2, 3, 4, 5 are available for the J_2 field. 2) If checked, the Structure Fire Module J_2 Fire Spread Code must be defaulted to "1".
2	D_4	D	Type of Material	3	C		Blank	Valid code	50	Item first ignited < 70 or = 00	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	E_1		Cause of Ignition								
2	E_1	S	Exposure Report flag	1	Y	D	Blank	Y or N			Check to see if Exposure is greater than 000.
2	E_1	D	Cause of Ignition	2	C	Y	Blank	Valid code	51, 52, 53	Factor Contributing	Blank when exposure is greater than 0. National codes plus one digit (NL): display national field lengths unless local option character is defined.
			Factor Contributing to Ignition								
2	E_2	S	Factor Contributing None	1	Y	D	Blank	Y or N		Exposure No.	
2	E_2	D	Factor Contributing to Ignition (1)	3	C	Y	Blank	Valid code	54, 55, 56	Factor flag	If Exposure > 0 then Code = 71 and Factor Contributing flag is true. National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	E_2	D	Factor Contributing to Ignition (2)	3	C		Blank	Valid code	54, 55, 56	Factor flag	If Exposure > 0 then Code = Blank and Factor Contributing flag is true. National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	E_3		Human Factors			Y					At least one entry (including "none") is required.
2	E_3	D	Human Factors Contributing None	1	C	D	Blank	Code = N	57, 58	Human Factors Contributing	
2	E_3	D	Human Factor - Asleep	2	C	D	Blank	Code = 1		Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	E_3	D	Human Factor - Impaired by Alcohol	2	C	D	Blank	Code = 2		Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 10 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
2	E3	D	Human Factor - Unattended person	2	C	D	Blank	Code = 3		Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	E3	D	Human Factor - Mentally disabled	2	C	D	Blank	Code = 4		Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	E3	D	Human Factor - Physically disabled	2	C	D	Blank	Code = 5		Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	E3	D	Human Factor - Multiple persons.	2	C	D	Blank	Code = 6		Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	E3	D	Human Factor - Estimated Age related	2	C	D	Blank	Code = 7	59	Human Factors flag	Human Factor Flag = true. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
2	E3	D	Estimated Age of Person Involved	3	N		Null	Numeric entry <150	59		
2	E3	D	Sex of Person Involved	1	C		Blank	Valid Code	59		
2	F		**Equipment Involved**								
2	F1	D	Equipment Involved in Ignition flag	1	Y	D	Blank	Y or N	60	Equip Involved	
2	F1	D	Equipment Involved	4	C		Blank	Valid code	60	Equip flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
2	F1	D	Brand	25	X		Blank			Equip flag	
2	F1	D	Model	25	X		Blank			Equip flag	
2	F1	D	Serial #	25	X		Blank			Equip flag	
2	F1	D	Year	4	X		Null	Numeric		Equip flag	Upper entry range is limited to the current year + 1
2	F2	D	Equipment Power Source	3	C		Blank	Valid code	60	Equip flag	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	F3	D	Equipment Portability	2	C		Blank	Valid code	60	Equip flag	1 = portable; 2 = stationary National codes plus one digit (NL): display national field lengths unless local option character is defined.
2	G		**Suppression flag Factors**								
2	G	D	Suppression None flag	1	Y	D	Blank	Y or N	61, 63	Fire Suppression/Incident Type	
2	G	D	Factor #1	4	C		Blank	Valid code	62	Fire Suppression flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
2	G	D	Factor #2	4	C		Blank	Valid code	62	Fire Suppression flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
2	G	D	Factor #3	4	C		Blank	Valid code	62	Fire Suppression flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 11 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
2	H		Mobile Property								
2	H1	S	Mobile Property None flag	1	C	D	Blank		64		If true, Mobile Property Involved Code = "N"
2	H1	D	Mobile Property Involve & Type	2	C		Blank	Valid code	65		National codes plus one digit (NL): display national field lengths unless local option character is defined.
2	H2	D	Mobile Property Type	3	C		Blank	Valid code	65		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	H2	D	Mobile Property Make	3	C		Blank	Valid code	65		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
2	H2	D	Year	4	N		Null	Numeric			Upper entry range is limited to the current year + 1
2	H2	D	Model	25	X		Blank				
2	H2	D	License plate #	10	X		Blank				Max at state is 8 with 2 for growth.
2	H2	D	State	2	C		Blank	Valid code			
2	H2	D	VIN #	17	X		Blank				
3			**Structure Fire Module**					**Incident Type = 111, 112 or 12x; Structure Type = 1 or 2**			**Required module if applicable, Incident Type Code must be a structure file**
3	I1	D	Structure Type	2	C	Y	Blank		66, 67, 68	Incident Type	If enclosed building, complete the rest of the module. National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	I2	D	Building Status	2	C	Y	Blank	Valid code	67, 68		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	I3		Building Height								
3	I3	D	Number of Stories at/ above grade	3	N	D	Null	Numeric	67, 90, 92		
3	I3	D	Number of Stories below grade	2	N	D	Null	Numeric	67		
3	I4		Size of Main Floor Area								
3	I4	D	Sq. Feet	8	N	Y	Null	Numeric	67		
3	I4	D	Length	4	N		Null	Numeric	67	Sq. Feet	Convert to square feet.
3	I4	D	Width	4	N		Null	Numeric	67	Sq. Feet	Convert to square feet.
3	J1	D	Floor of Origin	3	N	Y	Blank				
3	J1	D	Story of Origin, Below grade flag	1	Y	D	Blank	Y or N	67	Fire Origin	

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 12 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
3	J2	D	Fire Spread	2	C	Y	Blank	Valid code	67, 69		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	J3		Number of Stories Damaged Flame								
3	J3	D	Minor Damage	3	N		Null	Numeric	67, 71	Minor Damage flag	
3	J3	D	Significant Damage	3	N		Null	Numeric	67, 71	Significant Damage flag	
3	J3	D	Heavy Damage	3	N		Null	Numeric	67, 71	Heavy Damage flag	
3	J3	D	Extreme Damage	3	N		Null	Numeric	67, 71	Extreme Damage flag	
3			Material Contributing to Flame Spread								
3	K	D	Material Contributing None flag	1	Y	D	Blank	Y or N		X1 or X2	
3	K1	D	Item Contributing Most to Spread	3	C		Blank	Valid code	67, 72		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
3	K2	D	Type of Material Contributing Most to Spread	3	C		Blank	Valid code	67, 72, 73		Flag; Item Con. < 70; different materials national codes plus one digit (NNL): display national field lengths unless local option character is defined.
3			Detector Performance								
3	L1	D	Presence of Detectors	2	C	Y	Blank	1, N, U	67, 74		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	L2	D	Type of Detection System	2	C		Blank	Valid code	74		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	L3	D	Detector Power Supply	2	C		Blank	Valid code	74		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	L4	D	Detector Operation	2	C		Blank	Valid code	75, 76		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	L5	D	Detector Effectiveness	2	C		Blank	Valid code	75		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	L6	D	Detector Failure Reason	2	C		Blank	Valid code	76		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	M		Automatic Extinguishment Systems								

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 13 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
3	M1	D	Presence of AES	2	C	Y	Blank	1, 2, N, U	67, 79		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	M2	D	Type of AES	2	C		Blank	Valid code	79		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	M3	D	Operation of Automatic Extinguishing System	2	C		Blank	Valid code	79, 80, 81		National codes plus one digit (NL): display national field lengths unless local option character is defined.
3	M4	D	Number of Sprinkler Heads Operating	3	N		Null	Numeric	79, 80		
3	M5	D	Reason for AES Failure	2	C		Blank	Valid code	79, 81		National codes plus one digit (NL): display national field lengths unless local option character is defined.
4			**Civilian Fire Casualty Module**								**Required module if civilian fire casualty.**
4	A	D	State	2	C	K	State ID	Valid code			
4	A	D	FDID	5	X	K	Dept. ID				
4	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
4	A	D	Station	3	X		Station				
4	A	D	Incident Number	7	N	K	Blank	Numeric			Record key must be unique.
4	A	D	Exposure	3	N	K	0	N, sequential			
4	A	D	Delete/Change	1	A	K	Blank	Blank, 1,2			Blank = add
4	B		Injured Person								
4	B	D	Gender	1	C	Y	Blank	1, 2			
4	B	D	First Name	15	X		Blank				
4	B	D	Middle Initial	1	X		Blank				
4	B	D	Last Name	25	X		Blank				
4	B	D	Name Suffix	3	C		Blank				
4	C	D	Casualty Number	3	N	K	1 Incre-mented	Numeric; Sequential			Increment by one for each casualty.
4			Age or Date of Birth								
4	D	D	Age	6	N	Y	Null	Numeric	82	DOB, Months	Age will be NNN.NN
4	D	S	Months for Infants	1	Y		Blank	Y or N			Store months as year.
4	D	S	Date of Birth	8	N		Blank	Valid date		Age	Convert date to age & store
4	E1	D	Race	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 14 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
4	E2	D	Ethnicity, Hispanic	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	F	D	Affiliation	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	G	D	Date of Injury	8	N		Blank	YYYYMMDD	83		Standard date edits.
4	G	D	Time of Injury	6	N		0	0000-235959			Standard time range, if seconds are not provided, then seconds are set to "00".
4	H	D	Severity	2	C	Y	Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	I	D	Cause of Injury	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	J		Human Factors Contributing								
4	J	D	Human Factors None	1	C		Blank		84	If true all other factors must be false	
4	J	D	Asleep	2	C			Code = 1	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Unconscious	2	C		Blank	Code = 2	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Possible Alcohol Involved	2	C		Blank	Code = 3	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Possible Drugs Involved	2	C		Blank	Code = 4	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Mentally Challenged	2	C		Blank	Code = 5	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Physically Challenged	2	C		Blank	Code = 6	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Physically restrained	2	C		Blank	Code = 7	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	J	D	Unattended person	2	C		Blank	Code = 8	84		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
4	K		Factors Contributing to Injury								
4	K	D	Contributing Factors None Box	1	Y		Blank	Y or N	85	Contributing Factor 1	If false than at least one contributing factor.
4	K	D	Contributing Factors 1	3	C		Blank	Valid code	85		National codes plus one digit (NNL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 15 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
4	K	D	Contributing Factors 2	3	C		Blank	Valid code	85, 86		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
4	K	D	Contributing Factors 3	3	C		Blank	Valid code	85, 87		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
4	L	D	Activity When Injured	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	M1	D	Location at Time of Incident	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	M2	D	General Location at Time of Injury	2	C		Blank	Valid code	87, 88, 90, 91	M3, M4	National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	M3	D	Story at Start of Injury	3	N		Null	Numeric	89, 90	M2	
4	M3	D	Story at Start of Injury Below Grade flag	1	Y		Blank	Y or N		M2	
4	M4	D	Story where Injury Occurred	3	N		Null	Numeric	91, 92	M2 & Previous field	
4	M4	D	Story where Injury Occurred Below Grade flag	1	Y		Blank	Y or N		M2 & Previous field	
4	M5	D	Specific Location at Time of Injury	3	C		Blank	Valid code	88	M2	Use Area of Origin for valid codes. National codes plus one digit (NNL): display national field lengths unless local option character is defined.
4	N	D	Primary Apparent Symptom	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
4	O	D	Primary Part of Body Injured	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
4	P	D	Disposition	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
5			**Fire Service Casualty Module**								**Required module if fire service fire casualty.**
5	A	D	State	2	C	K	State ID	Valid code			
5	A	D	FDID	5	X	K	Dept. ID				
5	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
5	A	D	Station	3	X		Station				
5	A	D	Incident Number	7	N	K		Numeric			Record key must be unique.
5	A	D	Exposure	3	N	K	0	Numeric, sequential			
5	A	D	Delete/Change	1	X		Blank	Blank, 1, 2			Blank = add

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 16 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
			Injured Person								
5	B	D	Identification Number	9	X		Blank				
5	B	D	Gender	1	C	Y	Blank	1, 2			
5	B	D	Career/Volunteer	2	C		Blank	1, 2, Blank			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
5	B	D	First Name	15	X		Blank				
5	B	D	Middle Initial	1	X		Blank				
5	B	D	Last Name	25	X		Blank				
5	B	D	Name Suffix	3	C		Blank				
5	C	D	Casualty Number	3	N	K	1 Incre-mented	Sequence Number	93		Increment by one for each casualty.
5	D	D	Age	3	N	Y	Null	Numeric	94	DOB	
5	D	S	Date of Birth	8	N		Blank	Valid date	94	Age	
5	E	D	Date of Injury	8	N	Y	Blank	YYYYMMDD	95		Standard date edit.
5	E	D	Time of Injury	6	N	Y	0	0000-235959	95		Standard time range, if seconds are not provided, then seconds are set to “00”.
5	F	D	Number of Responses during past 24 hours	2	N		Null	Numeric			
5	G_1	D	Usual Assignment	2	C		Blank	Valid codes			National codes plus one digit (NL): display national field lengths unless local option character is defined.
5	G_2	D	Physical Condition Just Prior to Injury	2	C		Blank	Valid codes			National codes plus one digit (NL): display national field lengths unless local option character is defined.
5	G_3	D	Severity	2	C	Y	Blank	Valid codes			National codes plus one digit (NL): display national field lengths unless local option character is defined.
5	G_4	D	Taken to	2	C		Blank	Valid codes			National codes plus one digit (NL): display national field lengths unless local option character is defined.
5	G_5	D	Activity at Time of Injury	3	C		Blank	Valid codes			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	H_1	D	Primary Apparent Symptom	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	H_2	D	Primary Injured Body Part	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	I_1	D	Cause of Firefighter Injury	3	C		Blank	Valid code	96		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	I_2	D	Contributing Factor	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 17 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
5	I3	D	Object Involved in Injury - None	1	Y		No	Y or N	96		
5	I3	D	Object Involved in Injury	3	C		Blank	Involved in Injury None = Blank; Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	J1	D	Where Injury Occurred	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
5	J2	D	Below Grade flag	1	Y	D	No	Y or N		J2	
5	J2	D	Stories or Floor where injury occurred	3	N		Blank		97		
5	J3	D	Specific Location	3	C		Blank	Valid code	98	Vehicle Type J4	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	J4	D	Vehicle Type	2	C		Blank	Valid code	98, 99	J3 > 60	National codes plus one digit (NL): display national field lengths unless local option character is defined.
5	K	D	Did Protective Equip fail and/or cont. to injury?	1	C	D	Blank	Y or N	100	Section K	If K is true then an equip record is required.
			Equipment Involved in Injury								
5	K1	D	Equipment Involved in Injury Sequence Number	3	N		1 Incre-mented	Numeric	100		Unique number(s) for each casualty, incremented for each piece of failed equipment.
5	K2	D	Equipment Item	3	C		Blank	Valid codes	100	K flag	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	K3	D	Equipment Problem	3	C		Blank	Valid code	100	K flag	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
5	K4	D	Equipment Manufacturer	12	X		Blank		100	K flag	
5	K4	D	Equipment Model	12	X		Blank		100	K flag	
5	K4	D	Equipment Serial Number	12	X		Blank		100	K flag	
6			**EMS Module**					**If EMS Involvement indicated in Module 1**	**117**	**Basic Incident Module**	**Optional Module**
6	A	D	State	2	C	K	State ID	Valid code			
6	A	D	FDID	5	X	K	Dept. ID				

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 18 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
6	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
6	A	D	Station	3	X		Station				
6	A	D	Incident Number	7	N	K		Numeric	117		Record key must be unique.
6	A	D	Exposure	3	N	K	0	N, sequential			
6	A	D	Delete/Change	1	X		Blank	Blank, 1,2			Blank = add: see note for code 3.
6			Casualty Information								
6	B	D	Number of Patients	3	N		Null	Numeric			Must be > zero (0).
6	B	D	Patient Number	3	N	K	1 Incre-mented	Numeric	117		Must be > zero (0), Incremented by one for each patient for the incident.
6			Dates & Times								
6	C	D	Arrived at Patient Date	8	N		YYYYMMDD/ Blank	Valid date	118, 119		
6	C	D	Arrived at Patient Time	6	N		HHMMSS	000000-235959	118, 120		Midnight is 0000
6	C	D	Patient Transfer Date	8	N		YYYYMMDD/ Blank	Valid date	120		
6	C	D	Patient Transfer Time	6	N		HHMMSS	000000-235959	120		Midnight is 0000
6	D	D	Provider Impression/ Assessment	3	C	Y	Blank	Valid code	121		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6			Age/Date of Birth								
6	E_1	D	Age	6	N		Null	Numeric		DOB	Age will be NNN.NN
6	E_1	S	Months for Infants	1	Y		No	Y or N			
6	E_1	S	Date of Birth	8	N		Blank	Valid date		Age	Not required if Age field entered.
6	E_2	D	Gender	1	C		Blank	Valid code: 1,2, blank			
6	F_1	D	Race	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	F_2	D	Ethnicity	2	C		Blank				National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	G_1	D	Human Factors								See field notes
6	G_1	D	Human Factors None	1	Y		Blank	N	57		
6	G_1	D	Asleep	2	C		Blank	Code = 1	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 19 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
6	G1	D	Unconscious	2	C		Blank	Code = 2	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G1	D	Possibly Impaired by Alcohol	2	C		Blank	Code = 3	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G1	D	Possibly Impaired by Drugs	2	C		Blank	Code = 4	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G1	D	Mentally Disabled	2	C		Blank	Code = 5	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G1	D	Physically Disabled	2	C		Blank	Code = 6	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G1	D	Physically Restrained	2	C		Blank	Code = 7	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G1	D	Unattended person	2	C		Blank	Code = 8	57		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	G2	D	Other Factors	2	C		Blank	Valid code			
6	H1		Body Site of Injury								
6	H1	D	Body Site # 1	2	C		Blank	Valid codes	122		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	H1	D	Body Site # 2	2	C		Blank	Valid codes	122		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	H1	D	Body Site # 3	2	C		Blank	Valid codes	122		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	H1	D	Body Site # 4	2	C		Blank	Valid codes	122		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	H1	D	Body Site # 5	2	C		Blank	Valid codes	122		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	H2		Injury Type								
6	H2	D	Injury Type # 1	3	C		Blank	Valid codes	122		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6	H2	D	Injury Type # 2	3	C		Blank	Valid codes	122		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6	H2	D	Injury Type # 3	3	C		Blank	Valid codes	122		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6	H2	D	Injury Type # 4	3	C		Blank	Valid codes	122		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6	H2	D	Injury Type # 5	3	C		Blank	Valid codes	122		National codes plus one digit (NNL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 20 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
6	H3		Cause of Illness/Injury								
6	H3	D	Cause of Illness/Injury # 1	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
6	K	D	Cardiac Arrest	1	C		Blank	Provider Imp. =16	122, 124, 125, 126	Provider Imp.	
6	K	D	Pre-Arrival Arrest Details	1	C		Blank	Provider Imp. =16	122, 124, 125, 126		
6	K	D	Initial Arrest Rhythm	1	C		Blank	Valid code	122, 125, 126		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	J	D	Safety Equipment	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	I	D	Procedures Used	3	C		Blank	Valid code			Enter as many as apply. National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
6	L1	D	Initial Level of Provider	2	C	Y	Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	L2	D	Highest Level of Provider at Scene	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	M	D	Patient Status	2	C		Blank	Valid code	129		National codes plus one digit (NL): display national field lengths unless local option character is defined.
6	M	D	Pulse on Transfer	2	C		Y	1, 2	130		National Codes plus one digit (NL): display National field lengths unless local option character is defined.
6	N	D	Disposition	2	C		Blank	Valid code	131		National codes plus one digit (NL): display national field lengths unless local option character is defined.
7			**HazMat Module**					**Hazardous Materials Released = 9**		**Basic Incident Module**	**Optional Form**
7	A	D	State	2	C	K	State ID	Valid code			
7	A	D	FDID	5	X	K	Dept. ID				
7	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
7	A	D	Station	3	X		Station				
7	A	D	Incident Number	7	N	K		N			Record key must be unique.
7	A	D	Exposure	3	N	K	0	N, sequential			
7	A	D	Hazmat Number	2	N	K	1	N, sequential			Increment by one.
7	A	D	Delete/Change	1	X		Blank	Blank, 1, 2			Blank = add.
7	B		Hazmat ID								

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 21 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
7	B	D	UN Number	4	X		Blank				
7	B	D	DOT Hazard Classification	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	B	D	CAS Registration Number	10	C		Blank	Valid code			
7	B	D	Name of Chemical or Material (Code)	7	C	Y	Blank	Select from table			If table does not contain the chemical or paper form entry, direct enter the chemical name (maximum of 50 characters)
7	B	D	Chemical Name	50	X	Y	Blank				Only directly enter by users if table does not contain the chemical or if a paper form entry is used.
7	C1	D	Container Type	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	C2	D	Estimated Container Capacity	9	N		0				
7	C3	D	Capacity Units	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	D1	D	Estimated Amount Release	9	N	Y	0		101		
7	D2	D	Released Units	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	E1	D	Physical State When Released	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	E2	D	Released Into	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
7	F1		Released From								
7	F1	D	Story of Release	3	N			If Release = inside			
7	F2	D	Population Density	2	C		Blank	Valid code			National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	G1	D	Area Affected	4	N		Blank	N			If zero is marked then “Area Affected Units” is set to Sq. feet (1).
7	G1	D	Area Affected Unit	2	C		Blank	Valid code, Area Affected is not Blank		Area Affected or Evacuated	National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	G2	D	Area Evacuated	4	N		Blank	N	102		If None is marked then Area Evacuated is set to zero (0) and Area Evacuated Units is set to Sq. Feet (1). Number of people evacuated and number of buildings evacuated should be set to zero as well.
7	G2	S	Area Evacuated - None	1	Y		Blank	Y or N			

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 22 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
7	G2	D	Area Evacuated Unit	2	C		Blank	Valid code, Area Affected is not blank		Area Affected or Evacuated	National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	G3	D	Estimated Number of People Evacuation	6	N		Blank	N	102		
7	G3	D	Estimated Number - None	1	Y		Blank	Y or N		If true need #	
7	G4	D	Estimated Number of Building Evacuated	4	N		Blank		102		
7	G4	S	Estimated Number of bldg. - None	1	Y		Blank	Y or N		If true need #	
7	H	D	HazMat Actions Taken # 1	3	C		Blank	Valid code	105	Actions Taken	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	H	D	HazMat Actions Taken # 2	3	C		Blank	Valid code	103, 105	Actions Taken	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	H	D	HazMat. Actions Taken # 3	3	C		Blank	Valid code	104	Actions Taken	National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	I	D	If fire or explosion is involved with incident, Which Occurred First?	2	C		Blank	Valid code	106		National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	J	D	Cause of Release	2	C	Y	Blank	Valid code	107		National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	K		Factors Contributing to Release								
7	K	D	Factors #1	3	C		Blank	Valid code	110		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	K	D	Factors #2	3	C		Blank	Valid code	108, 110		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	K	D	Factors #3	3	C		Blank	Valid code	109, 110		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
	L		Factors Affecting Mitigation								
7	L	D	Mitigating Factors #1	3	C		Blank	Valid code	113		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	L	D	Mitigating Factors #2	3	C		Blank	Valid code	111, 113		National codes plus one digit (NNL): display national field lengths unless local option character is defined.
7	L	D	Mitigating Factors #3	3	C		Blank	Valid code	112, 113		National codes plus one digit (NNL): display national field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 23 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
7	M		Equipment Involved in Release								
7	M	S	No Equipment Involved in Release flag	1	Y		Blank	Y or N	114	Equip Involved	T = none, Equipment Involved In Release code set to “NNN”
7	M	D	Equipment Involved	4	C		Blank	Valid code	114	Equip flag	National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
7	M	D	Brand	25	X		Blank		114	Equip flag	
7	M	D	Model	25	X		Blank		114	Equip flag	
7	M	D	Serial #	25	X		Blank		114	Equip flag	
7	M	D	Year	4	N		Null	Numeric	114	Equip flag	Upper entry range is limited to the current year + 1
7	N	S	Mobile Property None flag	1	Y		Blank	Y or N	115	N section	T = none, Mobile Property Type set to “NN”
7	N	D	Mobile Property Involved	2	C		Blank	Valid code	115	N flag	National codes plus one digit (NL): display national field lengths unless local option character is defined.
7	N	D	Make	2	C		Blank	Valid code	115	N flag	
7	N	D	Year	4	N		Null	Numeric	115	N flag	Upper entry range is limited to the current year + 1
7	N	D	Model	25	X		Blank		115	N flag	
7	N	D	License plate #	10	X		Blank		115	N flag	
7	N	D	State	2	C		Blank	Table	115	N flag	
7	N	D	DOT Number / ICC Number/VIN #	17	X		Blank		115	N flag	
7	O	D	Disposition	2	C	Y	Blank	Valid code	116		National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
7	P	D	HazMat Deaths	4	N		Null	Numeric			
7	P	D	HazMat Injuries	4	N		Null	Numeric			
8			**Wildland Module**					**Wildland Involvement indicated on Module 1**		**Basic Incident Module**	**Optional Form used in place of Fire Module.**
8	A	D	State	2	C	K	State ID	Valid code			
8	A	D	FDID	5	X	K	Dept. ID				
8	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
8	A	D	Station	3	X		Station				
8	A	D	Incident Number	7	N	K		N			Record key must be unique.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 24 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
8	A	D	Exposure	3	N	K	0	N, sequential			
8	A	D	Delete/Change	1	X		Blank	Blank, 1, 2			Blank = add
8	B		Alternate Location Specification								
8	B	D	Latitude	5	N		Null	Valid Latitude	132, 133	Latitude & Longitude	
8	B	D	Longitude	6	N		Null	Valid Longitude	132, 133	Latitude & Longitude	
8	B	D	Township	3.1	F		Blank		132, 133		
8	B	D	Township Direction	1	C		Blank	N or S	132, 133		
8	B	D	Range	3	X		Blank		132, 133		
8	B	D	Range Direction	1	C		Blank	E or W	132, 133		
8	B	D	Section	2	N		Blank		132, 133		
8	B	D	Subsection	4	X		Blank		132, 133		
8	B	D	Meridian	2	C		Blank	Valid code	132, 133		
8	C	D	Area Type	2	C	Y	Blank	Valid code			Codes 1,2,3,4. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D1	D	Wildland Fire Cause	1	C	Y	Blank	Valid code			
8	D2		Human Factors			Y					Completion of at least one human factor is required (including 'none').
8	D2	D	Human Factors Contributing None	1	C	D	Blank	Code = N	57, 58	Human Factors Contributing	
8	D2	D	Human Factor - Asleep	2	C	D	Blank	Code = 1	57	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D2	D	Human Factor - Impaired by Alcohol	2	C	D	Blank	Code = 2	57	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D2	D	Human Factor - Unattended person	2	C	D	Blank	Code = 3	57	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D2	D	Human Factor - Mentally disabled	2	C	D	Blank	Code = 4	57	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D2	D	Human Factor - Physically disabled	2	C	D	Blank	Code = 5	57	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D2	D	Human Factor - Multiple persons.	2	C	D	Blank	Code = 6	57	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	D2	D	Human Factor - Age was a factor	2	C	D	Blank	Code = 7	59	Human Factors Contributing	Human Factors not = "N". National Codes plus one digit (NL): display National field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 25 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
			Factor Contributing to Ignition			Y					Completion of the first Human Factors Contributing to Ignition field is required.
8	D3	D	Factor Contributing to Ignition (1)	3	C	Y	Blank	Valid code	54, 55		If Exposure > 0 then Code = 71. National codes plus one digit (NL): display national field lengths unless local option character is defined.
8	D3	D	Factor Contributing to Ignition (2)	3	C		Blank	Valid code	54, 55		If Exposure > 0 then Code = 71. National codes plus one digit (NL): display national field lengths unless local option character is defined.
8	D4	D	Fire Suppression Factor # 1	4	C		Blank	Valid code	61		National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
8	D4	D	Fire Suppression Factor # 2	4	C		Blank	Valid code	62		National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
8	D4	D	Fire Suppression Factor # 3	4	C		Blank	Valid code	62		National codes plus one digit (NNNL): display national field lengths unless local option character is defined.
8	E	D	Heat Source	3	C	Y	Blank	Valid code	47		National codes plus one digit (NL): display national field lengths unless local option character is defined.
8	F	D	Mobile Property Type	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
8	G	D	Equipment Involved	4	C		Blank	Valid code			National Codes plus one digit (NNNL): display National field lengths unless local option character is defined.
8	H	D	Weather Station ID	6	X		Blank				
8	H	D	Weather Type	3	C		Blank	Valid code			National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
8	H	D	Wind Direction	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	H	D	Wind Speed	3	N		Null	Numeric			
8	H	D	Temperature	4	N		Null	Numeric			Allowing for negative values.
8	H	S	Negative Temp. flag	1	X		Blank				
8	H	D	Humidity	3	N		Null	0-100%		< = 100%	
8	H	D	Fuel Moisture	2	N		Null				
8	H	D	Fire Danger Rating	2	C		Blank	Valid code			Codes 1-5 & U. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	I1	S	Number of Bldg. Ignited flag	1	N		Blank				
8	I1	D	Number of Bldg. Ignited	3	N		Null	Numeric			
8	I2	S	Number of Bldg. Threatened flag	1	N		Blank				

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 26 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
8	I2	D	Number of Bldg. Threatened flag	3	N		Null	Numeric			
8	I3	D	Total Acres Burned	9.2	N	Y	Null	Numeric	134		
8	I4	D	Primary Crops Burned - Crop 1	25	X		Blank		135		
8	I4	D	Primary Crops Burned - Crop 2	25	X		Blank				
8	I4	D	Primary Crops Burned - Crop 3	25	X		Blank				
8			Property Management								
8	J	D	Property Mgmt. - Code	2	C		Blank				National codes plus one digit (NL): display national field lengths unless local option character is defined.
8	J	D	% of Total Acres Burned - Undetermined	3	N		Null	Numeric	136		
8	J	D	% of Total Acres Burned - Tax paying	3	N		Null	Numeric	136		
8	J	D	% of Total Acres Burned - Non tax paying	3	N		Null	Numeric	136		
8	J	D	% of Total Acres Burned - City town, village, local	3	N		Null	Numeric	136		
8	J	D	% Total Acres Burned - County or Parish	3	N		Null	Numeric	136		
8	J	D	% of Total Acres Burned - State or province	3	N		Null	Numeric	136		
8	J	D	Federal Agency Code	5	X		Blank	Valid Code	137		
8	J	D	% of Total Acres Burned - Federal	3	N		Null	Numeric	136, 137		
8	J	D	% of Total Acres Burned - Foreign	3	N		Null	Numeric	136		
8	J	D	% of Total Acres Burned - Military	3	N		Null	Numeric	136		
8	J	D	% of Total Acres Burned - Other	3	N		Null	Numeric	136		

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 27 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
8	K	D	NFDRS Fuel Model At Origin	3	C		Blank	Valid code; 01-21 & UU			National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
8	L1	D	Person Responsible for Fire	2	C		Blank	Valid code	138	Blocks L2, L3 & L4	National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	L2	D	Person Involved Gender	1	C		Blank	Valid code, Person Resp. for Fire = 1	139	Person Resp. for Fire	
8	L3	D	Age	6	N		NNN.NN	Person Resp. for Fire = 1		Person Resp. for Fire	
8	L3	S	Date of Birth	8	N		Blank	Valid date, Person Resp. for Fire = 1		Person Resp. for Fire	
8	L4	D	Activity of Person	3	C		Blank	Valid code, Person Resp. for Fire = 1		Person Resp. for Fire	National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
8	M	D	Horizontal Distance from Right of Way	2	N		Null	less than 100 ft.	140		
8	M	D	Type of Right of Way	4			Blank	Valid code	140		National Codes plus one digit (NNNL): display National field lengths unless local option character is defined.
8			Fire Behavior								
8	N	D	Elevation in Feet	5	N		Null	Numeric			
8	N	D	Relative Slope Position	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	N	D	Aspect	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
8	N	D	Flame Length	2	N		Null	Numeric			
8	N	D	Rate of spread (Chains per hour)	3	N		Null	Numeric			
9			**Apparatus Module**								**Optional Form; Personnel Module not used.**
9	A	D	State	2	C	K	State ID	Valid code			
9	A	D	FDID	5	X	K	Dept. ID				
9	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
9	A	D	Station	3	X		Station				
9	A	D	Incident Number	7	N	K		Numeric			
9	A	D	Exposure	3	N	K	0	N, sequential			

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 28 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
9	B	D	Apparatus or Resource Record Number	4	N	K	0	N, sequential			System generated.
9	B	D	Delete/Change	1	X		Blank	Blank, 1, 2			Blank = add
9	B	D	ID of Apparatus or Resource	5	X		Blank				
9	B	D	Type of Apparatus or Resource	2	C	Y	Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
9	B	S	Dispatch flag	1	Y		Blank	Y or N			
9	B	D	Dispatch Date	8	N		Blank	Valid date	141		
9	B	D	Dispatch Time	4	N		Blank	000000-235959	141		Valid time, if seconds are not collected then they must be zero (00).
9	B	S	Clear flag	1	Y		Blank	Y or N			
9	B	D	Clear Date	8	N		Blank	Valid date	143		
9	B	D	Clear Time	4	N		Blank	000000-235959	143		Valid time, if seconds are not collected then they must be zero (00).
9	B	S	Arrive flag	1	Y		Blank	Y or N			
9	B	D	Arrive Date	8	N		Blank	Valid date	142		
9	B	D	Arrive Time	4	N		Blank	000000-235959	142		Valid time, if seconds are not collected then they must be zero (00).
9	B	I	Sent								
9	B	D	Number of People	3	N	Y	Null	N, < 999		I	Number entered match the number of Personnel Modules entered (if that module is used)
9	B	D	Use	2	X	Y	Blank	Table			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
9	B	D	Action#1	3	C		Blank	Valid code			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
9	B	D	Action#2	3	C		Blank				National codes plus one digit (NNL): display national field lengths unless local option character is defined.
9	B	D	Action#3	3	C		Blank				National codes plus one digit (NNL): display national field lengths unless local option character is defined.
9	B	D	Action#4	3	C		Blank				National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10			**Personnel Module**								**Optional Form; Apparatus Module not used.**
10	A	D	State	2	C	K	State ID	Valid code			
10	A	D	FDID	5	X	K	Dept. ID				
10	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 29 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
10	A	D	Station	3	X		Station				
10	A	D	Incident Number	7	N	K		Numeric			
10	A	D	Exposure	3	N	K	0	N, sequential			
10	B	D	Personnel Record Number	4	N	K		N, sequential			System generated.
10	B	D	Delete/Change	1	X		Blank	Blank, 1, 2			Blank = add
10	B	D	ID of Apparatus or Resource	5	X		Blank				
10	B	D	Type of Apparatus or Resource	3	C	Y	Blank	Valid code			
10	B	S	Dispatch flag	1	Y		Blank	Y or N			
10	B	D	Dispatch Date	8	N		Blank	Valid date	144		
10	B	D	Dispatch Time	4	N		Blank	000000-235959	144		Valid time, if seconds are not collected then they must be zero (00).
10	B	S	Arrival flag	1	Y		Blank	Y or N			
10	B	D	Arrival Date	8	N		Blank	Valid date	145		
10	B	D	Arrival Time	4	N		Blank	000000-235959	145		Valid time, if seconds are not collected then they must be zero (00).
10	B	S	Clear flag	1	Y		Blank	Y or N			
10	B	D	Clear Date	8	N		Blank	Valid date	146		
10	B	D	Clear Time	4	N		Blank	000000-235959	146		Valid time, if seconds are not collected then they must be zero (00).
10	B	I	Sent								
10	B	D	Number of People	3	N	Y	Null	N, < 999			Number of People will be rolled up to the basic form.
10	B	D	Use	1	C	Y	Blank	Table			
10	B		Apparatus or Resource Actions Taken								
10	B	D	Action #1	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Action #2	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Action #3	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Action #4	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Personnel ID	9	X	Y	Blank				

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 30 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
7	B	D	First Name	15	X		Blank				
8	B	D	Middle Initial	1	X		Blank				
9	B	D	Last Name	25	X		Blank				
10	B	D	Name Suffix	3	C		Blank				
10	B	D	Rank or Grade	10	X		Blank				
10	B	I	Attend								
10	B		Personnel Actions Taken								
10	B	D	Action #1	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Action #2	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Action #3	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
10	B	D	Action #4	3	C		Blank	Code table			National codes plus one digit (NNL): display national field lengths unless local option character is defined.
11			Arson Module						147		
11	A	D	State	2	C	K	State ID	Valid code			
11	A	D	FDID	5	X	K	Dept. ID				
11	A	D	Incident Date	8	D	K	YYYYMMDD/ Blank	YYYYMMDD	22 thru 24		This field is the Alarm Date (is the same field).
11	A	D	Station	3	X		Station				
11	A	D	Incident Number	7	N	K		Numeric			
11	A	D	Exposure	3	N	K	000	N, sequential			
11	A	D	Delete/Change	1	X		Blank	Blank, 1, 2			Blank = add
11	B		Agency Referred to								
11	B	D	Agency Name	30	X		Agency Name				
11	B	D	Agency Street Number	8	N		Blank				
11	B	D	Agency Street Prefix	2	C		Blank	Valid code			Use Table
11	B	D	Agency Street or High-way Name	30	X	Y	Blank	Alpha/numeric			
11	B	D	Agency Street Type	4	C		Blank	Valid code			Use Table
11	B	D	Agency Street Suffix	2	X		Blank	Valid Code			

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 31 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
11	B	D	Agency Apt or Suite	15	X		Blank	Alpha/numeric			
11	B	D	Agency City	20	A		Blank	Alphabetic			
11	B	D	Agency State	2	C		Blank	Valid state abbrev.			
11	B	D	Agency Zip Code	9	N		Blank				
11	B	D	Their case #	12	X		Blank				
11	B	D	Their ORI	5	X		Blank				
11	B	D	Their FID	2	X		Blank				
11	B	D	Their FDID	5	X		Blank				
11	C	D	Case Status	2	C			Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	D	D	Availability of Material First Ignited	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	E	D	Suspected Motivation Factors	3	C		Blank	Valid code	148		Select up to 3 factor codes. National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
11	F	D	Apparent Group Involvement	2	C		Blank	Valid code	149		Select up to 3 factor codes. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	G_1	D	Entry Method	3	C		Blank	Valid code			National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
11	G_2	D	Extent of Fire Involvement on Arrival	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	H	D	Incendiary Devices								
11	H	D	Container	3	C		Blank	Valid code			Select all that apply. National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
11	H	D	Ignition/Delay Device	3	C		Blank	Valid code			Select all that apply. National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
11	H	D	Fuel	3	C		Blank	Valid code			Select all that apply. National Codes plus one digit (NNL): display National field lengths unless local option character is defined.
11	I	D	Other Investigative Information	2	C		Blank	Valid code			Select all that apply. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	J	D	Property Ownership	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	K	D	Initial Observations	2	C		Blank	Valid code	150		Select all that apply. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	L	D	Laboratory Used	2	C		Blank	Valid code			Select all that apply. National Codes plus one digit (NL): display National field lengths unless local option character is defined.

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 32 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
11	M1	S	Subject Number	3	N			Numeric; sequential			
11	M2	D	Age	6	N		000.00	Numeric	151		
11	M2	D	Date of Birth	8	N		Blank	Valid date			
11	M3	D	Gender	2	C		Blank	1, 2, Blank			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	M4	D	Race	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	M5	D	Ethnicity	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	M6	D	Family Type	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	M7	D	Motivation, Risk Factors	2	C		Blank	Valid code	152, 153		Select all that apply, codes 1 through 3 are mutually exclusive. National Codes plus one digit (NL): display National field lengths unless local option character is defined.
11	M8	D	Disposition	2	C		Blank	Valid code			National Codes plus one digit (NL): display National field lengths unless local option character is defined.
X			**Supplemental Module**								
			Same as K1 on Module #2								
X			**Fire Department Identification Record**								
		D	FDID	5	X	K	Blank	Alphanumeric			
		D	State Code	2	C	Y	Blank	Valid code			
		D	FIPS County code	3	X	Y	Blank	Numeric			
		D	Department Name	30	X	Y	Blank				
		D	Number of Stations	3	N	D	0				
		D	Address	25	X	Y	Blank				
		D	City	20	X	Y	Blank				
		D	State	2	C	Y	Blank	Valid code			
		D	Zip	9	N	Y	Null	Numeric			
		D	Number of Paid	4	N	Y	Null	Numeric			
		D	Number of Volunteer, Paid per Call	4	N	Y	Null	Numeric			
		D	Number of Volunteer, not paid	4	N	Y	Null	Numeric			

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

TABLE 3.1. NFIRS 5.0 Edit Requirements (Sheet 33 of 33)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	REQ	DEFAULT	ACCEPTABLE CONDITIONS	RELATIONAL EDIT	CROSS FIELDS	NOTES
		D	Telephone Number	10	N		Blank				
		D	Fax Number	10	N		Blank				
		D	E-Mail Address	45	X		Blank				

Key

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag
3. Required: (Y) - required, (K) - required and part of record key, (D) required by default (all logical and numeric fields)
4. All coded fields in the database will carry one more additional space than defined above for user defined code expansion.
5. Validity check will be performed on all date fields in the form of YYYYMMDD
6. Validity check will be performed on all time fields (00:00:00 to 23:59:59)

Relational Edits

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 1 of 10)

EDIT	FORM	BLOCK	FIELD	RELATIONAL EDIT
1	Basic	A	Record Key	This must be unique. The key is the following elements: State, FDID, Alarm Date, Incident Number, Exposure Number.
2	Basic	A	Exposure Number	This number must be ascending, incrementally 1, beginning with 000 (NOTE: A main fire incident with an exposure of 000 MUST exist in the system before exposures (> 000) are allowed). If Incident Type is not in the 100 series (fires), Exposure Number cannot be greater than zero.
3	Basic	A	Transaction Type	If Transaction Type = blank (add) then no duplicate record should be found. If Transaction Type = 1 (change), then existing record must be retrieved and displayed for modification.
4	Basic	A		If Transaction Type = 2 (delete) then duplicate should be found and only the data elements in the key should be provided. If Transaction Type = 3 (no monthly activity), then Alarm Date (YYYYMM), incident number (0), exposure number (0) are all that is required.
5	Basic	B	Location	If Alternate Wildland Location box is not selected, Location on Basic form is required.
6	Basic	B	Location	If intersection is checked, then Street/Highway Name and Cross Street Name must be complete.
7	Basic	C	Incident Type	If Incident Type not = 100 series, then the Fire Form and the Structure Fire Form are not allowed.
8	Basic	C	Incident Type	If Incident Type not = 100 series and Incident Type not = 561, 631, 632, then F Block (Actions Taken) fields 1, 2, or 3 cannot be an 11 or 13, 14, 15, 16, or 17.
9	Basic	C	Incident Type	If Incident Type = 111-112, then Structure Fire form is required.
10	Basic	C	Incident Type	If Incident Type = 113-118 then completion of the fire form is optional, not required and Block H_2, Detector Alerted Occupants, is required.
11	Basic	C	Incident Type	If Incident Type = 120 series, then the Structure Fire form is required.
12	Basic	C	Incident Type	If Incident Type = 150 series, then the Fire Form is optional, not required.
13	Basic	C	Incident Type	If used, the EMS module is only allowed for Incident Types: 100-243, 311, 320-323, 351-381, 400-431, 451, 900.
14	Basic	C	Incident Type	Incident Type 54x valid Actions Taken all of 20's & > 50's or Actions Taken = 00. If Incident Type is 542 then allow Action Taken 52
15	Basic	C	Incident Type	Incident Type 71x valid Actions Taken >= 50 and < 90 or Actions Taken = 00.
16	Basic	C	Incident Type	Incident Type 72x valid Actions Taken <>1X, <>40's.
17	Basic	C	Incident Type	Incident Type 73x valid Actions Taken <>1x, <>40's, < 90.
18	Basic	C	Incident Type	Incident Type 74x valid Actions Taken <>1x, <>40's, < 90.
~~19~~	~~Basic~~	~~C~~	~~Incident Type~~	This Incident Module Rule has been deleted.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 2 of 10)

EDIT	FORM	BLOCK	FIELD	RELATIONAL EDIT
20	Basic	C	Incident Type	Incident Type 9xx valid Actions Taken >= 50 & < 90 or Actions Taken = 00.
21	Basic	D	Aid Given or Received	If aid is given (codes 3 or 4), then only the information on the Basic module through block G1 (Resources) must be completed by the department giving aid. The remainder of the Basic module and any other modules associated with the incident may be optionally completed but is not required. The information not captured by the department giving aid is captured by the department that receives aid for that incident.
22	Basic	E1	Alarm Time	Alarm Date/Time cannot be later than Arrival Date/Time.
23	Basic	E1	Alarm Time	Alarm Date/Time cannot be later than Date/Time Controlled.
24	Basic	E1	Alarm Time	Alarm Date/Time cannot be later than Last Unit Cleared Date/Time.
25	Basic	E1	Arrival Time	Arrival Date/Time cannot be later than Date/Time Controlled.
26	Basic	E1	Arrival Time	Arrival Date/Time cannot be later than Last Unit Cleared Date/Time.
27	Basic	E1	Control Time	Control Date/Time cannot be later than Last Unit Cleared Date/Time.
28	Basic	E1	Last Unit Cleared	Last Unit Cleared Date/Time cannot be less than Alarm Date/Time.
29	Basic	E1	Last Unit Cleared	Last Unit Cleared Date/Time must be entered if the Wildland module is not completed.
30	Basic	F	Action Taken	Cannot be duplicate, except for blanks.
31	Basic	F	Action Taken	Action Taken 1 must be entered before Action Taken 2.
32	Basic	F	Action Taken	Action Taken 2 must be entered before Action Taken 3.
33	Basic	G2	Dollar Loss	If Pre-Incident Property value entered, then it must be >= Property Losses.
34	Basic	G3	Dollar Loss	If Pre-Incident Contents value entered, then it must be >= Contents Losses.
35	Basic	H1	Civilian Fire Casualty	If Incident Type > 100 series, then Civilian Casualty Form is not available.
36	Basic	J	Property Use	If Property Use = 400 series and Incident Type = 100 series, except 113 thru 118, then Property Details, Block B1 on the Fire form (# living units) must be entered.
37	Basic	J	Property Use	If Property Use = 500 - 800 series and Incident Type = 100 series, except 113 thru 118, then On Site Materials, Block C on the Fire form must be entered (none is valid entry) else the field is optional.
38	Fire		Fire Module	If the Incident Type is 140-143 or 160,170-173, then either the Fire module or the Wildland module is required. One of the two must be completed. If the Incident Type is 561,631 or 632, the Fire Module is not allowed but the Wildland Module may be optionally completed in addition to the Basic Module for these incidents.
39	Fire		Fire Module	This module must be present if the Incident Type is 100 series, except for Incident Types 113-118 and Incident types 150-155. When the Incident type is 140-143, 160, 170-173, 561, 631-632 then the Wildland Module may be used instead of the Fire Module.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 3 of 10)

EDIT	FORM	BLOCK	FIELD	RELATIONAL EDIT
40	Fire	B1	Property Details	If Residential flag not blank, then residential units must be zero (0) and the converse is also true.
41	Fire	B2	Property Details	If Bldg. flag > blank, then Bldg. Involved must be zero (0) and the converse is also true.
42	Fire	B2	Property Details	If Exposure Number > zeroes then this field cannot be greater than Zero (totals for the incident are carried in the zero exposure)
43	Fire	B3	Property Details	If acres Burned None/Less than one acre is > blank, then Acres Burned must be Blank.
44	Fire	B3	Acres Burned	If Incident Type = 140, 170 series then required unless Open/ Wildland form is used.
45	Fire	C	On-Site Material	If None is checked, then no On-Site Materials are allowed.
46	Fire	C	On-Site Material	For each On-Site Material entered, one (and only one) of the Storage Uses for that material must be selected.
~~47~~	~~Fire~~	~~D2~~	~~Heat Source~~	This edit has been removed.
48	Fire	D3	Item First Ignited	This data element series 10 should be used only for Structure Fires.
49	Fire	D3	Flame Spread	If Confined to Object of Origin is checked, then J2 and K Blocks on the Structure Report are not available.
50	Fire	D4	Type of Material 1st Ignited	Required only if Item First Ignited 0 or < 70.
51	Fire	E1	Cause of Ignition	If Exposure Number > zero (0) this element should be set to Other.
52	Fire	E1	Cause of Ignition	If Cause of Ignition = 2 (Unintentional) then Block E2 and Block E3 (Factors Contributing and Human Factors) are required (none is valid answer).
53	Fire	E1	Cause of Ignition	If Cause of Ignition = 3 or 4 (Failure of Equipment or Heat Source, Act of Nature), then Block E2 (Factors Contributing) is required (none is valid answer).
54	Fire	E2	Factors Contributing	If None is checked then no data may be entered. If "NN" or "UU" are entered as the first factor contributing to ignition, a second factor cannot be entered.
55	Fire	E2	Factors Contributing	If Exposure Number > zero (0) then Factor Contributing #1 will be set to 71, Factor #2 will be blank.
56	Fire	E2	Factors Contributing	Factor Contributing #1 cannot be = to Factor #2.
57	Fire	E3	Human Factors	If None is checked no data may be entered.
58	Fire	E3	Human Factors	If Exposure Number > zero (0) this element is not available.
59	Fire	E3	Human Factors	If Age Was Factor is checked, then age must be greater than zero (0), and gender must be present.
60	Fire	F1	Equipment Involved	If F1 (Equipment Involved) is not = none then F2 Block (Equipment Power Source) and F3 Block (Equipment Portability) are required.
61	Fire	G1	Fire Suppression	If None is checked no data entry is allowed.
62	Fire	G1	Fire Suppression	Each of the Fire Suppression Factors must not duplicate other Fire Suppression factors entered.
63	Basic	C	Incident Type	If Incident Type = 130 (vehicle fire) series, then H1 (Mobile Property Involved) on the fire form cannot be "none".

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 4 of 10)

EDIT	FORM	BLOCK	FIELD	RELATIONAL EDIT
64	Fire	H_1	Mobile Prop Involved	If None is checked no data entry is allowed.
65	Fire	H_1	Mobile Prop Involved	If Code = 2 or 3 then H_2 (Mobile Property Type and Make) entry is required.
66	Structure Fire	I_1	Structure Type	If Structure Type not = 1 or 2, then the rest of the module is not required.
67	Structure Fire	I_2	Structure Type	If Structure Type = 1 or 2 then I_2, I_3, I_4, J_1, J_2, L_1 and M_1 Blocks are required, otherwise it is optional.
68	Structure Fire	I_4	Structure Type	If Total Square Feet is present then Length/Width must be Blank, and the converse is also True.
69	Structure Fire	J_2	Object of Origin	If J_2 = 1, 2 or 3 then J3 Total cannot exceed 1.
~~70~~	~~Structure Fire~~	~~J_2~~	~~Fire Spread~~	This edit has been removed.
71	Structure Fire	J_3	Number of Stories Damaged	J_3 Total cannot exceed the Total of I3 + 1.
72	Structure Fire	K	Material Contributing	If No Flame Spread or Same Material is checked then K_1 and K_2 are not available.
73	Structure Fire	K_2	Type of Material Contributing to Flame Spread.	Required only if Item Contributing Code is 00 or < 70.
74	Structure Fire	L_1	Presence of Detector	If Presence of Detectors is YES, then L_2, L_3 and L_4 are required. If Presence of Detectors is left blank, then L_2, L_3 and L_4 are not available.
75	Structure Fire	L_4	Detector Operation	If Detector Operation = 2 Then L_5 is required. If Detector Operation not = 2 Then L_5 Detector Effectiveness entry is not allowed.
76	Structure Fire	L_4	Detector Operation	If Detector Operation = 3 Then L_6 is required. If Detector Operation = 2 Then L_6 Detector Failure Reason is not allowed.
77	Structure Fire	L_6	Detector Operation	If Detector Failure Reason = 1, then Detector Power Supply can not be equal to 1 or 6.
78	Structure Fire	L_6	Detector Operation	If Detector Failure Reason = 5 or 6, then Detector Power Supply can not be equal to 2, 3, or 6.
79	Structure Fire	M_1	Pres. of Automatic Extinguishment Systems.	If not present (code not = 1 or 2) then, M_2, M_3, M_4 and M_5 are not available.
80	Structure Fire	M_4	Number of Heads	If M_3 = 1 or 2, then this data element is available and must be greater than zero (0).
81	Structure Fire	M_5	AES Failure	If M_3 = 1, then M_5 is not available.
82	Civilian	D	Age or DOB	If DOB is present, then Age is calculated. If Age is present, then DOB is not available.
83	Civilian	G	Date of Injury	Cannot be later than the Date/Time of Last Unit Cleared on the Basic Form.
84	Civilian	J	Human Factors Cont.	If None is checked, then other codes are not available.
85	Civilian	K	Factors Contributing	If NONE is checked, then other codes are not available. If "NN" or "UU" are entered as the first factor contributing, a second factor cannot be entered.
86	Civilian	K	Factors Contributing	These codes must be unique, except for blanks.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 5 of 10)

EDIT	FORM	BLOCK	FIELD	RELATIONAL EDIT
87	Civilian	M_2	General Location	If General Location (M_2) = 1 then Blocks M_3, M_4 and M_5 are not required.
88	Civilian	M_2	General Location	If General Location = 2 or 3, then Block M_5 is required and entry of code 2 or 3 under block M_1 is required.
89	Civilian	M_3	Story at Start of Inc.	This is required only if M_2 = 2.
90	Civilian	M_3	Story at Start of Inc.	If the Structure Fire Module exists and the Building Height there is not equal to zero, then M_3 cannot be greater than the Building Height on the Structure Fire Form.
91	Civilian	M_4	Story at Start of Inc.	This is required only if M_2 = 2.
92	Civilian	M_4	Story Where Injury Occurred	If the Structure Fire Module exists and the Building Height there is not equal to zero, then M_4 cannot be greater than the Building Height on the Structure Fire Form.
93	FireFighter	C	Casualty Number	This data element cannot exceed the Total number of Injuries and Deaths from H_1 on Basic Form.
94	FireFighter	D	Age or DOB	If DOB is present, then Age is calculated. If Age is present, then DOB is not available.
95	FireFighter	E	Date & Time of Injury	The Date & Time cannot precede the Alarm Date/Time nor exceed the Date/Time of Last Unit Cleared.
96	FireFighter	I_1	Cause of Injury	If Cause of Injury = 5 or 6, then I_3 (Object involved) is required entry.
97	FireFighter	J_2	Story Where Injury Occurred	If injured inside/On Structure then the Story of Injury must be entered.
98	FireFighter	J_3	Specific Location	If Specific Location = 61, 63, 64 or 65, then J_4 (Vehicle Type) is required.
99	FireFighter	J_4	Vehicle Type	If Specific Location = 61, 63, 64 or 65, then J_4 is required.
100	FireFighter	K_1	Did Equipment Fail	If No, then K_2, K_3, K_4 not required.
101	HazMat	D_1	Est. Amount Release	If D_2 = C_3, then the Estimated Amount of Release cannot exceed the Estimated Container Capacity.
102	HazMat	G_2	Area Evacuated	If Area Evacuated is None, then G_3 and G_4 must be zero (0).
103	HazMat	H	HazMat Action Taken	Action Taken 2 cannot be present without a Primary Action Taken.
104	HazMat	H	HazMat Action Taken	Action Taken 3 cannot be present without an Action Taken 2.
105	HazMat	H	HazMat Action Taken	Actions Taken 1, 2, 3 cannot be duplicates.
106	HazMat	I	Fire/Explosion?	If I Block = 1 or 2 (a fire or explosion was involved), then Incident type must be 100 or 200 series.
107	HazMat	J	Cause of Release	If Cause of release = 2, then K Block (Factors Contributing) is required.
108	HazMat	K	Factor Contributing	Factor Contributing #2 cannot present without a Factor Contributing #1. If "NN" or "UU" are entered as the first factor contributing, a second factor cannot be entered.
109	HazMat	K	Factor Contributing	Factor Contributing #3 cannot present without a Factor Contributing #2.
110	HazMat	K	Factor Contributing	Factor Contributing #'s 1, 2, 3 cannot be duplicates.
111	HazMat	L	Mitigating Factors	Mitigating Factors #2 cannot be present without a Mitigating Factor #1.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 6 of 10)

EDIT	FORM	BLOCK	FIELD	RELATIONAL EDIT
112	HazMat	L	Mitigating Factors	Mitigating Factors #3 cannot be present without a Mitigating Factor #2.
113	HazMat	L	Mitigating Factors	Mitigating Factors #'s 1, 2, 3 must be unique.
114	HazMat	M	Equipment Involved	If None is checked, then data entry is not available.
115	HazMat	N	Mobile Property	If None is checked, then data entry is not available.
116	HazMat	O	Disposition	Data Entry is required.
117	EMS	B	Record Key	This must be unique. The key is the following elements: State, FDID, Alarm Date, Incident Number, Exposure Number and Patient Number. Patient Number must begin with 001 and be unique. Patient Number cannot exceed the number of patients.
118	EMS	C	Time arrived at Patient	Arrived at Patient Date/Time must be equal or less than Patient Transfer Date/Time.
~~119~~	~~EMS~~	~~C~~	~~Time Arrived at Patient~~	This edit has been removed
120			Time of Patient Transfer	Time of Patient Transfer must be equal or greater than Alarm Date/Time.
121	EMS	D	Provider Impression	If Impression Code = 16, then Block K is required
122	EMS	H1	Body Site & Inj Type	Each Body Site must have an Injury type. Body Site may be repeated up to five times. Injury Type may be repeated, however the Body Site & Injury Type combination may not be repeated.
123	EMS	I	Procedures Used	At least one procedure must be selected, but they are not mutually exclusive; except no treatment.
124	EMS	K	Pre-Arrival Arrest	If this is true, then Bystander CPR and Witnessed should be available. Pre-Arrival Arrest and Post-Arrival Arrest are mutually exclusive. Either Data Element requires an Initial Arrest Rhythm.
125	EMS	K	Post-Arrival Arrest	Pre-Arrival Arrest and Post-Arrival Arrest are mutually exclusive. This requires an Initial Arrest Rhythm.
126	EMS	K	Initial Arrest Rhythm	These data elements require either Pre-Arrival or Post-Arrival Arrest.
~~127~~	~~EMS~~	~~L1~~	~~Initial Level of Provider~~	This edit has been removed.
~~128~~	~~EMS~~	~~L2~~	~~Highest Level of Provider at Scene~~	This edit has been removed.
~~129~~	~~EMS~~	~~M~~	~~Patient Status~~	This edit has been removed
~~130~~	~~EMS~~	~~M~~	~~Pulse on Transfer~~	This edit has been removed
~~131~~	~~EMS~~	~~N~~	~~Disposition~~	This edit has been removed
132	Wildland	B	Alt Location Spec	This data element is required if the Alternate Location Box on the Basic Form is checked.
133	Wildland	B	Alt Location Spec	If Section B on the Basic Form is not complete, then this Relational Edit is True. If Latitude/Longitude is completed, then the Township, Range, Section, Subsection and Meridian may be blank; if Latitude/Longitude is blank, then the Township, Range, Section, Subsection and Meridian must be completed.
134	Wildland	I3	Total Acres Burned	This value must be greater than 0.0.
135	Wildland	I4	Primary Crops Burned	Primary crop #1 must completed before crop #2 and crop #2 before crop #3.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 7 of 10)

EDIT	FORM	BLOCK	FIELD	RELATIONAL EDIT
136	Wildland	J	Property Management	If entered, Percentages of acres burned must total 100%.
137	Wildland	J	Property Management	If Federal Ownership the Federal Agency code must be entered
138	Wildland	L_1	Person Responsible	If L_1 =1, then L_2, L_3, L_4 must be entered.
139	Wildland	L_2	Gender	This is valid only when L_1- Person Responsible = 1.
140	Wildland	M	Right of Way	If Distance From Right of Way is entered, then Type of Right of Way is required.
141	Apparatus		Dispatch Time	Dispatch Date/Time cannot be earlier than the Alarm Date/Time and cannot be later than the Arrival Date/Time, the Clear Date/Time or the Last Unit Cleared Date/Time.
142	Apparatus		Arrival Time	Arrival Date/Time cannot be earlier than the Alarm Date/Time, the Arrival Date/Time or later than the Clear Date/Time or Last Unit Clear Date/Time. Since there are separate arrival times captured for each piece of apparatus on the Apparatus/Personnel module, the Cleared Time of any unit/apparatus cannot be earlier than the Arrival Time entered on the Basic Module unless the unit/apparatus was cancelled en-route.
143	Apparatus		Clear Time	Clear Date/Time cannot be earlier than the Alarm Date/Time, the Dispatch Date/Time.
144	Personnel		Dispatch Time	Dispatch Date/Time cannot be earlier than the Alarm Date/Time and cannot be later than the Arrival Date/Time, the Clear Date/Time or the Last Unit Cleared Date/Time.
145	Personnel		Arrival Time	Arrival Date/Time cannot be earlier than the Alarm Date/Time, the Arrival Date/Time or later than the Clear Date/Time or Last Unit Clear Date/Time. Since there are separate arrival times captured for each piece of apparatus on the Apparatus/Personnel module, the Cleared Time of any unit/apparatus cannot be earlier than the Arrival Time entered on the Basic Module unless the unit/apparatus was cancelled en-route.
146	Personnel		Clear Time	Clear Date/Time cannot be earlier than the Alarm Date/Time, the Dispatch Date/Time, the Arrival Date/Time or later than the Last Unit Cleared Date/Time.
147	Arson			This module is active only if the Cause of Ignition field in the Fire Module is equal to 1,2, 5, or U or the Wildland Fire Cause = 7 (If the Wildland Module is used instead of the Fire Module). If the Fire Module's Cause of Ignition = 2 then only Block A and Block M fields are allowed and active.
148	Arson	E	Suspected Motivation Factors	If either code 00 or UU is selected, no other codes may be selected.
149	Arson	F	Apparent Group Involvement	If either code 0 or U is selected, no other codes may be selected.
150	Arson	K	Initial Observations	If code 3 or 4 is chosen, only one of the two codes may be selected. They are mutually exclusive.
151	Arson	M_2	Age	If subject Age is greater than 17, then Arson Module blocks M_1 through M_8 (except for M_2) are not allowed.
152	Arson	M_7	Motivation/Risk Factors	If either code 0 or U is selected, no other codes may be selected.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 8 of 10)

EDIT	FORM	BLOCK	FIELD	RELATIONAL EDIT
153	Arson	M7	Motivation/Risk Factors	If codes 1, 2, or 3 is chosen, only one of the three codes may be selected. They are mutually exclusive. Any of the other codes may be chosen if they apply.
154	All		Fire Service Casualties	A critical error is generated for ALL incident types if the number of Fire Service Casualty Forms filled out does not equal the number of Fire Service Injuries and Deaths reported on the Basic Module unless the EMS module is also present. If the EMS module is completed as well, and the count of EMS and Fire Service Casualties on the Basic Module exceeds the sum of EMS and Fire Service Casualty records, then only a warning is generated (since both modules may record the same casualty).
155	All		Civilian Casualties	If the number of Civilian Fire Casualty Forms filled out does not equal the number of Civilian Injuries and Deaths reported on the Basic Module AND the incident is a fire incident AND no HazMat or EMS is involved THEN a warning error is generated.
~~156~~	~~All~~		~~Civilian Casualties~~	This edit has been removed
157	All		Civilian Casualties	[If the number of Civilian Fire Casualty Forms filled out does not equal the number of Civilian Injuries and Deaths reported on the Basic Module and the incident is a fire incident and the EMS module is present] (OR) [If the number of Civilian Fire Casualty Forms filled out plus the number of EMS forms filled out does not equal the number of Civilian Injuries and Deaths reported on the Basic Module and the incident is a fire incident and the EMS module is present] (THEN) A warning is generated
158	All		Civilian Casualties	[If the number of Civilian Fire Casualty Forms filled out does not equal the number of Civilian Injuries and Deaths reported on the Basic Module plus the totals reported on the HazMat form AND the incident is a fire incident AND the HazMat module is present AND the EMS module is present] OR [If the number of Civilian Fire Casualty Forms filled out plus the number of EMS forms filled out does not equal the number of Civilian Injuries and Deaths reported on the Basic Module plus the totals reported on the HazMat form AND the incident is a fire incident AND the HazMat module is present AND the EMS module is present] THEN A warning is generated
159	Basic	G1	Resources	If Apparatus or Personnel Module used, populate the Block G1 Resources fields on the Basic Module with the totals from the Apparatus or Personnel Module fields
160	Basic	G2	Estimated Dollar Losses	If Incident Type = 1xx (fire) then generate a validation warning if either the Property or the Contents Dollar Loss loss value is greater than $2,000,000
161	Basic	B	Location	If the "Directions" location type is checked then the Street Name field is not required and the "Cross Street or Directions" field is required.
162	All		Dates/Times	For all NFIRS 5.0 date and time fields, if the date field is completed, the associated hours and minutes fields must also be entered and cannot be left blank.

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 9 of 10)

EDIT	FORM	BLOCK	FIELD	RELATIONAL EDIT
163	Fire	H_1	Mobile Property Involved	If Fire Module Block H_1 "Mobile Property Involved" is not equal to 1, None or Blank AND Block F_1 Equipment Involved in Ignition is not equal to Blank or None, a error is generated because there cannot be BOTH Mobile Property Involved and Equipment Involved in the ignition of the fire.
164	Basic, Apparatus, Personnel	F	Actions Taken	"00 Other Action Taken" is always a valid entry. This supersedes any limits on the entry of Actions Taken defined in relational edits 14-20.
165	Basic	C	Incident Type	If Incident Type is "611 Cancelled en-route" then the Property Use and Casualty fields are not required on the Basic Module.
166	System		State Code	A State code of 'OO Other' is never allowed as a valid state code entry for the Fire Department Header Transactions (transaction types 2000, 2010, 2020).
167	Fire	E_2	Factors Contributing to Ignition	Do not allow the entry of code 71 (Exposure) in the Factors Contributing to Ignition field on the Fire Module if the basic incident's main Exposure Number field is 0.
168	Basic	F	Actions Taken	Generate a critical error message, "Action Taken Cancelled En-Route, Incident Type not Cancelled En-Route", if one of the Basic incident Action Taken codes is 93 (Cancelled en-route). This critical error should only be enforced for incidents with an alarm date on or after 1/1/2012.
169	System		Age	If any Age field value in any module > 125, a non-critical warning message is generated.
170	Basic	B	Location Type	If the "US National Grid" location type is checked then the Street Name field is not required and the "Cross Street or Directions" field is required.
171	Basic	C	Incident Type	If Incident Type Between 113-118 (inclusive) Then (Property Loss cannot be > $5,000 or Civilian Deaths cannot be > 0 or Fire Service Deaths cannot be > 0).
172	Basic	E_1	Arrival Time (Year)	The Year in Arrival Time cannot be greater than the Year in Alarm Time unless the Incident Date is 12/31
173	Basic	H_2	Detector	If Detector = 1 Then Presence of Detectors (Structure Fire Module) must = 1 if the Structure Fire Module exists for the incident
174	System		Age	If any Age field value in any module < 0, a critical error is generated.
175	Basic	C	Incident Type	If Incident Type = 112, the Structure Type field entry on the Structure Fire module cannot be a 1 or a 2.
176	Basic	J	Property Use	If Property Use = 464 then the Mixed Use Property field is required
177	Basic	E_1	Arrival Time	If Arrival Time is 20 minutes or more after the Alarm Time, generate a general warning level error that reads "The total response time for this incident exceeds the NFPA standard. Please check your times. If the incident times are correct, no further action is required."

TABLE 3-2. NFIRS 5.0 Relational Edits (Sheet 10 of 10)

EDIT	FORM	BLOCK	FIELD	RELATIONAL EDIT
178	Import / Conversion	System	4.1 Record Types	NFIRS 4.1 formatted incidents (4.1 transaction file format and 4.1 Master File format) with an incident date later than 12/31/2008 are rejected from conversion/import with a critical error. Any converted 4.1 incidents with an incident date later than 12/31/2008 are rejected from import with a critical error.
179	Basic	C	Incident Type	If Incident Type is 611 and Actions Taken is not 93, then generate a critical error message "Incident Cancelled En-Route/Incident Action Taken not Cancelled En-Route." This rule should only be enforced for incidents with an alarm date on or after 1/1/2012.
180	Basic	C	Incident Type	If Incident Type is 111 or 113-118 then Structure Type may only be 1 or 2 (if the Structure Fire Module is present). The consistency between the two fields should only be enforced for incidents with an alarm date on or after 1/1/2012.
182				Reserved for future use
183	Basic	E1	Last Unit Cleared	If the Incident Type is not in the 800 series and the Last Unit Cleared Date/Time occurs 24 hours or more after the Alarm Date/Time then the system shall generate a warning message. This rule should take effect only after 1/1/2012. Warning Message: "Incident duration of one day or more for a non severe weather or natural disaster incident. Please check incident times. If accurate, no further action required"
184	Basic	C	Incident Type	If Incident Type = 1xx (fire) and either or both of the fields Contents Loss and Property Loss is/are not entered then the system shall generate the following warning message: "Estimated dollar losses are required for all fires. If there was no loss or no pre-incident value, check or mark the appropriate None boxes. If loss cannot be estimated, do not enter a loss value and no further action is required."

Incident Module Rules

TABLE 3-3. NFIRS 5.0 Incident Module Rules

REFERENCE #	RULE
1	The Basic Module is always required for Incident Types: 100-911
2	If Incident Type = 571 (stand by) and if Aid Given or Received = codes 3, 4 , then only the information on the Basic module through Block D (Aid Given or Received) need be completed by the department giving aid. The rest of the Basic Module and the other modules as applicable are optional.
3	If Incident Type = any other Incident Type than 571 and if Aid Given or Received = codes 3 or 4, and the "THEIR FDID" information in Block D is entered, then only the information on the Basic module through block G1 (Resources) and the Fire Fighter Casualty Module (when there is a casualty which, including additionally Block H1 on Basic) must be completed by the department giving aid. The remainder of the Basic module and any other modules associated with the incident may be optionally completed but are not required. The information not captured by the department giving aid will be captured by the department that receives aid for that incident.
4	Aid Giving Departments and Aid Receiving Departments always track their own Fire Service casualties separately. If a Fire Service Casualty occurs in a department giving aid, they should also complete the H1 Casualties block on the Basic Module in addition to the FS Casualty Module.
5	The department receiving aid is responsible for tracking and entering all of the civilian casualty information for the incident.
6	If aid is given (codes 3, 4), then only the information on the Basic module through block G1 (Resources) must be completed by the department giving aid unless a fire service casualty also occurs, then the giving department must also complete the Fire Service Casualty Module. The remainder of the Basic module and any other modules associated with the incident may be optionally completed but are not required. The information not captured by the department giving aid is captured by the department that receives aid for that incident.
7	The Fire Module is always required for the following Incident Types (with the exception of aid given incidents): 100, 110-112, 120-138, 161-164 (160 is not included here because that code can be a wildland fire)
8	The Fire Module for is never (ever) allowed for: 200-911
9	The Fire Module is optional for the following Incident Types: 113-118, 150-155
10	If the Wildland Module is not used in place of the Fire Module, then the Fire Module must be completed for Incident Types: 140-143, 160, 170-173
11	The Structure Fire Module is always required for Incident Types: 111-112 (Only the Structure Type element is required on the Structure Module for code 112, the rest of the module is optional) 120-123
12	The Structure fire Module is never allowed for Incident Types: 130-173
13	The Structure fire Module is optional for Incident Types: 113-118
14	If the Fire Module is not used in place of the Wildland Module, then the Wildland Fire Module must be completed for Incident Types: 140-143, 160, 170-173
15	The Wildland Module is optional for Incident Types: 561, 631, 632
16	The Wildland Module is never allowed for Incident Types: 100-138, 150-155, 161-164, 200-555, 571-621, 641-911
17	If used, the Arson Module is only allowed for Incident Types: 100-173 (Fire Cause field code on the Fire Module must also be '1 Intentional or '2 Unintentional' or '5 Cause under investigation' or 'U Undetermined after investigation'. If the Wildland Module is used instead, the Wildland Fire Cause must be '7 Intentional'.)
18	If used, the EMS module is only allowed for Incident Types: 100-243, 311, 320-323, 351-381, 400-431, 451, 900
19	If used, the HazMat module is only allowed for Incident Types: 100-244, 320-324, 371, 400-431, 451, 900

System Field Security Levels

The following table lists the default security level for each field in the NFIRS 5.0 system. The security level is the highest level at which the data in the field may be released from the national system. Please note that these are the default settings and may be configured differently at the option of individual states or fire departments. The purpose of these settings is to prevent data from being released publicly at the federal level when to do so would conflict with state or local jurisdiction privacy laws.

Sensitive data (marked as anything other than "Federal" in the table below) transmitted by vendor software and collected by the USFA NFIRS 5.0 software will be handled in the following manner once it is in the that system:

Data fields that are marked "Fire Department" in the table are collected and stored in the state database but may not be released publicly without permission of the originating fire department.

Data fields that are marked "State" in the table are collected and stored in the Federal Database but may not be released publicly without permission of the originating state.

These data security rules are in effect once the data passes into the USFA software system via transaction file.

TABLE 3-4. System Field Security Levels (Sheet 1 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
1			**Basic Module**			
1	A	D	State	2	C	National
1	A	D	FDID	5	X	National
1	A	D	Incident Date	8	D	National
1	A	D	Station	3	X	National
1	A	D	Incident Number	7	N	National
1	A	D	Exposure	3	N	National
1	B		Location			
1	B	S	Wildland Address Elsewhere Flag	1	Y	National
1	B	D	Location Type	1	C	National
1	B	D	Census Tract	6	X	National
1	B	D	Number/Milepost	8	X	National
1	B	D	Street Prefix Direction	2	C	National
1	B	D	Street or Highway Name	20	X	National
1	B	D	Street Type	4	C	National
1	B	D	Street Suffix	2	X	National
1	B	D	Apt or Suite	15	X	National
1	B	D	City	20		National
1	B	D	State	2	C	National
1	B	D	Zip	9	N	National
1	B	D	Cross Street, Directions or National Grid	20	X	National
1	C	D	Incident Type	4	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 2 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
1	D		Aid Given / Received			
1	D	D	Aid Type	1	C	National
1	D	D	FDID Receiving Aid	5	X	National
1	D	D	State	2	C	National
1	D	D	Incident Number of Receiving Aid	7	N	National
1	E1		Dates & Times			
1	E1	D	Alarm Date	8	N	National
1	E1	D	Alarm Time	6	N	National
1	E1	S	Arrival Date Flag	1	Y	National
1	E1	D	Arrival Date	8	N	National
1	E1	D	Arrival Time	6	N	National
1	E1	S	Controlled Date Flag	1	Y	National
1	E1	D	Controlled Date	8	N	National
1	E1	D	Controlled Time	6	N	National
1	E1	S	Last Unit Cleared Date Flag	1	Y	National
1	E1	D	Last Unit Cleared Date	8	N	National
1	E1	D	Last Unit Cleared Time	6	N	National
1	E2	D	Shifts or Platoon	1	X	National
1	E2	D	Alarms	2	X	National
1	E2	D	District	3	X	National
1	E3	D	Special Study Sequence Number #1	3	N	National
1	E3	D	Special Study ID #1	5	N	National
1	E3	D	Special Study Code #1	5	C	National
1	E3	D	Special Study Sequence Number #2	3	N	National
1	E3	D	Special Study ID #2	5	N	National
1	E3	D	Special Study Code #2	5	C	National
1	F	D	Actions Taken #1	3	C	National
1	F	D	Actions Taken #2	3	C	National
1	F	D	Actions Taken #3	3	C	National
1	G1		Resources			
1	G1	S	Resource Form Use Flag	1	Y	National
1	G1	D	Suppression Apparatus	4	N	National
1	G1	D	Suppression Personnel	4	N	National
1	G1	D	EMS Apparatus	4	N	National
1	G1	D	EMS Personnel	4	N	National
1	G1	D	Other Apparatus	4	N	National
1	G1	D	Other Personnel	4	N	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 3 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
1	G_1	D	Resource Count Includes Aid Received Flag	1	Y	National
1	G_2		Estimated Dollar Losses & Values			
1	G_2	D	Property $ Loss	9	N	National
1	G_2	S	Property Loss-None Flag	1	Y	National
1	G_2	D	Contents $ Loss	9	N	National
1	G_2	S	Contents Loss-None Flag	1	Y	National
1	G_2	D	Pre-Incident Property Value	9	N	National
1	G_2	S	Pre-Incident Property None Flag	1	Y	National
1	G_2	D	Pre-Incident Contents Value	9	N	National
1	G_2	S	Pre-Incident Contents None Flag	1	Y	National
1	H_1		Casualties			
1	H_1	S	Casualties-None Flag	1	Y	National
1	H_1	D	Fire Service Deaths	3	N	National
1	H_1	D	Fire Service Injuries	3	N	National
1	H_1	D	Other Deaths	3	N	National
1	H_1	D	Other Injuries	3	N	National
1	H_2	D	Detector Alerted Occupants	2	C	National
1	H_3	D	HazMat Released	2	C	National
1	I	D	Mixed Use	3	C	National
1	J	D	Property Use	4	C	National
1	K_1		Person/Entity Involved			
1	K_1	D	Business Name	25	X	National
1	K_1	D	Telephone Number	10	N	National
1	K_1	D	Name Prefix	3	C	National
1	K_1	D	First Name	15	X	State
1	K_1	D	MI	1	X	State
1	K_1	D	Last Name	25	X	State
1	K_1	D	Name Suffix	3	C	State
1	K_1	S	Same Address as Incident Flag	1	Y	National
1	K_1	D	Number/Milepost	8	X	National
1	K_1	D	Prefix	2	C	National
1	K_1	D	Street or highway	20	X	National
1	K_1	D	Street Type	4	C	National
1	K_1	D	Street Suffix	2	C	National
1	K_1	D	Apt. or Suite	15	X	National
1	K_1	D	City	20	X	National
1	K_1	D	State	2	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 4 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
1	K_1	D	Zip	9	N	National
1	K_1	D	P. O. Box	10	X	National
1	K_1	S	More People Involved Record Flag	1	Y	National
1	K_2		Owner			
1	K_2	S	Same Person Involved Flag	1	Y	National
1	K_2	D	Business Name	25	X	National
1	K_2	D	Telephone Number	10	N	National
1	K_2	D	Name Prefix	3	C	National
1	K_2	D	First Name	15	X	State
1	K_2	D	MI	1	X	State
1	K_2	D	Last Name	25	X	State
1	K_2	D	Name Suffix	3	C	State
1	K_2	S	Same Address as Incident Flag	1	Y	National
1	K_2	D	Number/Milepost	8	X	National
1	K_2	D	Prefix	2	C	National
1	K_2	D	Street or highway	20	X	National
1	K_2	D	Street Type	4	C	National
1	K_2	D	Street Suffix	2	C	National
1	K_2	D	Apt. or Suite	15	X	National
1	K_2	D	City	20	X	National
1	K_2	D	State	2	C	National
1	K_2	D	Zip	9	N	National
1	K_2	D	P. O. Box	10	X	National
1	L_1	S	Remarks	255	X	State
1	M		Authorization			
1	M	D	Officer in Charge ID	6	X	State
1	M	D	Last Name, Officer in Charge	25	X	State
1	M	D	First Name, Officer in Charge	15	X	State
1	M	D	Middle Initial, Officer in Charge	1	X	State
1	M	D	Position or rank, Officer in Charge	10	X	State
1	M	D	Assignment, Officer in Charge	10	X	State
1	M	D	Date, Officer in Charge	8	N	State
1	M	S	Same as Officer Flag	1	Y	State
1	M	D	Member Making Report ID	6	X	State
1	M	D	Last Name, Member Making Report	25	X	State
1	M	D	First Name, Member Making Report	15	X	State
1	M	D	Middle Initial, Member Making Report	1	X	State
1	M	D	Position or rank, Member Making Report	10	X	State

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 5 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
1	M	D	Assignment, Member Making Report	10	X	National
1	M	D	Date, Member Making Report	8	N	National
1		S	Vender Identification Number	5	N	National
1		D	NFIRS Version Number	2.2	F	National
2			**Fire Module**			
2	A	D	State	2	C	National
2	A	D	FDID	5	X	National
2	L	D	Incident Date	8	D	National
2	A	D	Station	3	X	National
2	A	D	Incident Number	7	N	National
2	A	D	Exposure	3	N	National
2	A	D	Delete/Change	1	X	National
2	B		Property Detail			
2	B_1	D	Not Residential Flag	1	Y	National
2	B_1	D	Number of Residential units	4	N	National
2	B_2	D	# of Bldg. Involved	3	N	National
2	B_2	S	Bldg. not Involved Flag	1	Y	National
2	B_3	D	Acres Burned	6	N	National
2	B_3	D	Acres Burn None/Less than one acre	1	N	National
2	C		On-Site Materials or Products			
2	C	S	On Site Materials or Products None Flag	1	Y	National
2	C	D	Material # 1	4	C	National
2	C	D	Storage Use #1 (BPPR)	1	C	National
2	C	D	Material # 2	4	C	National
2	C	D	Storage Use #2 (BPPR)	1	C	National
2	C	D	Material # 3	4	C	National
2	C	D	Storage Use #3 (BPPR)	1	C	National
2			Ignition			National
2	D_1	D	Area of Fire Origin	3	C	National
2	D_2	D	Heat Source	3	C	National
2	D_3	D	Item First Ignited	3	C	National
2	D_{3a}	S	Check box if fire is confined to object of origin	1	Y	National
2	D_4	D	Type of Material	3	C	National
2	E_1		Cause of Ignition			
2	E_1	S	Exposure Report Flag	1	Y	National
2	E_1	D	Cause of Ignition	2	C	National
			Factor Contributing to Ignition			National
2	E_2	D	Factor Contributing None Flag	1	Y	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 6 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
2	E_2	S	Factor Contributing to Ignition (1)	3	C	National
2	E_2	D	Factor Contributing to Ignition (2)	3	C	National
2	E_3		Human Factors			
2	E_3	S	Human Factors Contributing None (Flag)	1	C	National
2	E_3	D	Human Factor - Asleep	1	C	National
2	E_3	D	Human Factor - Impaired by Alcohol	1	C	National
2	E_3	D	Human Factor - Unattended person	1	C	National
2	E_3	D	Human Factor - Mentally disabled	1	C	National
2	E_3	D	Human Factor - Physically disabled	1	C	National
2	E_3	D	Human Factor - Multiple persons.	1	C	National
2	E_3	D	Human Factor - Estimated Age related	1	C	National
2	E_3	D	Estimated Age of Person Involved	3	N	National
2	E_3	D	Sex of Person Involved	1	C	National
2	F		Equipment Involved			
2	F_1	D	Equipment Involved. in Ignition Flag	1	Y	National
2	F_1	D	Equipment Involved	4	C	National
2	F_1	D	Brand	25	X	National
2	F_1	D	Model	25	X	National
2	F_1	D	Serial #	25	X	National
2	F_1	D	Year	4	X	National
2	F_2	D	Equipment Power Source	3	C	National
2	F_3	D	Equipment Portability	2	C	National
2	G	D	Suppression Factors None Flag	1	Y	National
2	G	D	Suppression Factor #1	4	C	National
2	G	D	Suppression Factor #2	4	C	National
2	G	D	Suppression Factor #3	4	C	National
2	H		Mobile Property			National
2	H_1	D	Mobile Property None Flag	1	Y	National
2	H_1	D	Mobile Property Involve & Type	2	C	National
2	H_2	D	Mobile Property Type	3	C	National
2	H_2	D	Mobile Property Make	3	C	National
2	H_2	D	Year	4	N	National
2	H_2	D	Model	25	X	National
2	H_2	D	License plate #	10	X	National
2	H_2	D	State	2	C	National
2	H_2	D	VIN #	17	X	National
3			**Structure Fire Module**			
3	I_1	D	Structure Type	2	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 7 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
3	I_2	D	Building Status	2	C	National
3	I_3		Building Height			
3	I_3	D	Number of Stories at/above grade	3	N	National
3	I_3	D	Number of Stories below grade	2	N	National
3	I_4		Size of Main Floor Area			
3	I_4	D	Sq. Feet	8	N	National
3	I_4	D	Length	4	N	National
3	I_4	D	Width	4	N	National
3	J_1	D	Floor of Origin	3	N	National
3	J_1	D	Story of Origin, Below grade flag	1	Y	National
3	J_2	D	Fire Spread	2	C	National
3	J_3		# of Stories Damaged Flame			
3	J_3	D	Minor Damage	3	N	National
3	J_3	D	Significant Damage	3	N	National
3	J_3	D	Heavy Damage	3	N	National
3	J_3	D	Extreme Damage	3	N	National
3			Material Contributing to Flame Spread			
3	K	D	Material Contributing None Flag	1	Y	National
3	K_1	D	Item Contributing Most to Spread	3	C	National
3	K_2	D	Type of Material Contributing Most to Spread	3	C	National
3			Detector Performance			
3	L_1	D	Presence of Detectors	2	C	National
3	L_2	D	Type of Detection System	2	C	National
3	L_3	D	Detector Power Supply	2	C	National
3	L_4	D	Detector Operation	2	C	National
3	L_5	D	Detector Effectiveness	2	C	National
3	L_6	D	Detector Failure Reason	2	C	National
3	M		Automatic Extinguishment Systems			
3	M_1	D	Presence of AES	2	C	National
3	M_2	D	Type of AES	2	C	National
3	M_3	D	Operation of Automatic Extinguishing System	2	C	National
3	M_4	D	# of Sprinkler Heads Operating	3	N	National
3	M_5	D	Reason for AES Failure	2	C	National
4			**Civilian Fire Casualty Module**			
4	A	D	State	2	C	National
4	A	D	FDID	5	X	National
4	A	D	Incident Date	8	D	National
4	A	D	Station	3	X	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 8 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
4	A	D	Incident Number	7	N	National
4	A	D	Exposure	3	N	National
4	A	D	Delete/Change	1	A	National
4	B		Injured Person			
4	B	D	Gender	1	C	National
4	B	D	First Name	15	X	State
4	B	D	Middle Initial	1	X	State
4	B	D	Last Name	25	X	State
4	B	D	Name Suffix	3	C	State
4	C	D	Casualty Number	3	N	National
4			Age or Date of Birth			
4	D	D	Age	6	N	National
4	D	S	Months for Infants	1	Y	National
4	D	S	Date of Birth	8	N	State
4	E_1	D	Race	2	C	National
4	E_2	D	Ethnicity, Hispanic	2	C	National
4	F	D	Affiliation	2	C	National
4	G	D	Date of Injury	8	N	National
4	G	D	Time of Injury	6	N	National
4	H	D	Severity	2	C	National
4	I	D	Cause of Injury	2	C	National
4	J		Human Factors Contributing			
4	J	D	Human Factors None	1	C	National
4	J	D	Asleep	1	C	National
4	J	D	Unconscious	1	C	National
4	J	D	Possible Alcohol Involved	1	C	National
4	J	D	Possible Drugs Involved	1	C	National
4	J	D	Mentally Challenged	1	C	National
4	J	D	Physically Challenged	1	C	National
4	J	D	Physically restrained	1	C	National
4	J	D	Unattended person	1	C	National
4	K		Factors Contributing to Injury			
4	K	S	Contributing Factors None Box	1	Y	National
4	K	D	Contributing Factors 1	3	C	National
4	K	D	Contributing Factors 2	3	C	National
4	K	D	Contributing Factors 3	3	C	National
4	L	D	Activity When Injured	2	C	National
4	M_1	D	Location at Time of Incident	2	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 9 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
4	M_2	D	General Location at Time of Injury	2	C	National
4	M_3	D	Story at Start of Injury	3	N	National
4	M_3	D	Story at Start of Injury Below Grade Flag	1	Y	National
4	M_4	D	Story where Injury Occurred	3	N	National
4	M_4	D	Story where Injury Occurred Below Grade Flag	1	Y	National
4	M_5	D	Specific Location at Time of Injury	3	C	National
4	N	D	Primary Apparent Symptom	3	C	National
4	O	D	Primary Part of Body Injured	2	C	National
4	P	D	Disposition	2	C	National
5			**Fire Service Casualty Module**			
5	A	D	State	2	C	National
5	A	D	FDID	5	X	National
5	A	D	Incident Date	8	D	National
5	A	D	Station	3	X	National
5	A	D	Incident Number	7	N	National
5	A	D	Exposure	3	N	National
5	A	D	Delete/Change	1	X	National
			Injured Person			
5	B	D	Identification Number	9	X	Fire Department
5	B	D	Gender	1	C	National
5	B	D	Career/Volunteer	1	C	National
5	B	D	First Name	15	X	State
5	B	D	Middle Initial	1	X	State
5	B	D	Last Name	25	X	State
5	B	D	Name Suffix	3	C	State
5	C	D	Casualty Number	3	N	National
5	E	D	Date of Injury	8	N	National
5	E	D	Time of Injury	6	N	National
5	D	D	Age	3	N	National
5	D	S	Date of Birth	8	N	State
5	F	D	Number of Responses during past 24 hours	2	N	National
5	G_1	D	Usual Assignment	2	C	National
5	G_2	D	Physical Condition Just Prior to Injury	2	C	National
5	G_3	D	Severity	2	C	National
5	G_4	D	Taken to	2	C	National
5	G_5	D	Activity at Time of Injury	3	C	National
5	H_1	D	Primary Apparent Symptom	3	C	National
5	H_2	D	Primary Injured Body Part	3	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 10 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
5	I_1	D	Cause of Firefighter Injury	3	C	National
5	I_2	D	Contributing Factor	3	C	National
5	I_3	S	Object Involved in Injury - None	1	Y	National
5	I_3	D	Object Involved in Injury	3	C	National
5	J_1	D	Where Injury Occurred	2	C	National
5	J_2	D	Below Grade Flag	1	Y	National
5	J_2	D	Stories or Floor where injury occurred	3	N	National
5	J_3	D	Specific Location	3	C	National
5	J_4	D	Vehicle Type	2	C	National
5	K	D	Did Protective Equip fail and/or contribute to injury?	1	C	National
			Equipment Involved in Injury			
5	K_1	D	Equipment Involved in Injury Sequence Number	3	N	National
5	K_2	D	Equipment Item	3	C	National
5	K_3	D	Equipment Problem	3	C	National
5	K_4	D	Equipment Manufacturer	12	X	National
5	K_4	D	Equipment Model	12	X	National
5	K_4	D	Equipment Serial Number	12	X	National
6			**EMS Module**			
6	A	D	State	2	C	National
6	A	D	FDID	5	X	National
6	A	D	Incident Date	8	D	National
6	A	D	Station	3	X	National
6	A	D	Incident Number	7	N	National
6	A	D	Exposure	3	N	National
6	A	D	Delete/Change	1	X	National
6			Casualty Information			
6	B	D	Number of Patients	3	N	National
6	B	D	Patient Number	3	N	National
6			Dates & Times			
6	C	D	Arrived at Patient Date	8	N	National
6	C	D	Arrived at Patient Time	6	N	National
6	C	D	Patient Transfer Date	8	N	National
6	C	D	Patient Transfer Time	6	N	National
6	D	D	Provider Impression/Assessment	3	C	National
6			Age/Date of Birth			
6	E_1	D	Age	6	N	National
6	E_1	S	Months for Infants	1	Y	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 11 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
6	E_1	S	Date of Birth	8	N	State
6	E_2	D	Gender	1	C	National
6	F_1	D	Race	2	C	National
6	F_2	D	Ethnicity	2	C	National
6	G_1	D	Human Factors			
6	G_1	S	Human Factors None	1	Y	National
6	G_1	D	Asleep	1	C	National
6	G_1	D	Unconscious	1	C	National
6	G_1	D	Possibly Impaired by Alcohol	1	C	National
6	G_1	D	Possibly Impaired by Drugs	1	C	National
6	G_1	D	Mentally Disabled	1	C	National
6	G_1	D	Physically Disabled	1	C	National
6	G_1	D	Physically Restrained	1	C	National
6	G_1	D	Unattended person	1	C	National
6	G_2	D	Other Factors			
6	G_2	D	Accidental	1	C	National
6	G_2	D	Self-Inflicted	1	C	National
6	G_2	D	Inflicted, not self	1	C	National
6	H_1		Body Site of Injury			
6	H_1	D	Body Site # 1	2	C	National
6	H_1	D	Body Site # 2	2	C	National
6	H_1	D	Body Site # 3	2	C	National
6	H_1	D	Body Site # 4	2	C	National
6	H_1	D	Body Site # 5	2	C	National
6	H_2		Injury Type			
6	H_2	D	Injury Type # 1	3	C	National
6	H_2	D	Injury Type # 2	3	C	National
6	H_2	D	Injury Type # 3	3	C	National
6	H_2	D	Injury Type # 4	3	C	National
6	H_2	D	Injury Type # 5	3	C	National
6	H_3		Cause of Illness/Injury			
6	H_3	D	Cause of Illness/Injury # 1	3	C	National
6	K		Cardiac Arrest			
6	K	D	Pre-Arrival Arrest	1	C	National
6	K	D	Witnessed	1	C	National
6	K	D	Bystander CPR	1	C	National
6	K	D	Post-Arrival Arrest	1	C	National
6	K	D	Initial Arrest Rhythm	2	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 12 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
6	J	D	Safety Equipment	1	C	National
6	I	D	Procedures Used	2	C	National
6	L_1	D	Initial Level of Care	2	C	National
6	L_2	D	Highest Level of Provider at Scene	2	C	National
6	M	D	Patient Status	2	C	National
6	M	D	Pulse on Transfer	1	Y	National
6	N	D	Disposition	2	C	National
7			**HazMat Module**			
7	A	D	State	2	C	National
7	A	D	FDID	5	X	National
7	A	D	Incident Date	8	D	National
7	A	D	Station	3	X	National
7	A	D	Incident Number	7	N	National
7	A	D	Exposure	3	N	National
7	A	D	HazMat Number	2	N	National
7	A	D	Delete/Change	1	X	National
7	B		HazMat ID			National
7	B	D	UN Number	4	X	National
7	B	D	DOT Hazard Classification	2	C	National
7	B	D	CAS Registration Number	10	C	National
7	B	D	Name of Chemical or Material (Code)	7	C	National
7	C_1	D	Container Type	3	C	National
7	C_2	D	Estimated Container Capacity	9	N	National
7	C_3	D	Capacity Units	3	C	National
7	D_1	D	Estimated Amount Release	9	N	National
7	D_2	D	Released Units	3	C	National
7	E_1	D	Physical State When Released	2	C	National
7	E_2	D	Released Into Air	1	C	National
7	F_1		Released From			National
7	F_1	D	Release (inside/outside)	1	C	National
7	F_1	D	Story of Release	3	N	National
7	F_1	D	Below Grade	1	Y	National
7	F_2	D	Population Density	2	C	National
7	G_1	D	Area Affected	4	N	National
7	G_1	D	Area Affected Unit	2	C	National
7	G_2	D	Area Evacuated	4	N	National
7	G_2	S	Area Evacuated - None	1	Y	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 13 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
7	G2	D	Area Evacuated Unit	2	C	National
7	G3	D	Estimated Number of People Evacuation	6	N	National
7	G3	D	Estimated Number - None	1	Y	National
7	G4	D	Estimated Number of Building Evacuated	4	N	National
7	G4	S	Estimated Number of bldg. - None	1	Y	National
7	H	D	HazMat Actions Taken # 1	3	C	National
7	H	D	HazMat Actions Taken # 2	3	C	National
7	H	D	HazMat. Actions Taken # 3	3	C	National
7	I	D	If fire or explosion is involved with incident, Which Occurred First?	2	C	National
7	J	D	Cause of Release	2	C	National
7	K		Factors Contributing to Release			National
7	K	D	Factors #1	3	C	National
7	K	D	Factors #2	3	C	National
7	K	D	Factors #3	3	C	National
	L		Factors Affecting Mitigation			National
7	L	D	Mitigating Factors #1	3	C	National
7	L	D	Mitigating Factors #2	3	C	National
7	L	D	Mitigating Factors #3	3	C	National
7	M		Equipment Involved in Release			National
7	M	D	No Equipment Involved in Release Flag	1	Y	National
7	M	D	Equipment Involved	4	C	National
7	M	D	Brand	25	X	National
7	M	D	Model	25	X	National
7	M	D	Serial #	25	X	National
7	M	D	Year	4	N	National
7	M		Mobile Property			National
7	N	D	Mobile Property None Flag	1	Y	National
7	N	D	Mobile Property Involved	2	C	National
7	N	D	Make	2	C	National
7	N	D	Year	4	N	National
7	N	D	Model	25	X	National
7	N	D	License plate #	10	X	National
7	N	D	State	2	C	National
7	N	D	DOT Number / ICC Number/VIN #	17	X	National
7	O	D	Disposition	2	C	National
7	P	D	HazMat Deaths	4	N	National
7	P	D	HazMat Injuries	4	N	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 14 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
8			**Wildland Module**			
8	A	D	State	2	C	National
8	A	D	FDID	5	X	National
8	A	D	Incident Date	8	D	National
8	A	D	Station	3	X	National
8	A	D	Incident Number	7	N	National
8	A	D	Exposure	3	N	National
8	A	D	Delete/Change	1	X	National
8	B		Alternate Location Specification			National
8	B	D	Latitude	5	N	National
8	B	D	Longitude	6	N	National
8	B	D	Township	3.1	F	National
8	B	D	Township Direction	1	C	National
8	B	D	Range	3	X	National
8	B	D	Range Direction	1	C	National
8	B	D	Section	2	X	National
8	B	D	Subsection	4	X	National
8	B	D	Meridian	2	X	National
8	C	D	Area Type	1	X	National
8	D_1	D	Wildland Fire Cause	1	X	National
8	D_2		Human Factors			National
8	D_2	D	Human Factors Contributing, None	1	C	National
8	D_2	D	Human Factor - Asleep	1	C	National
8	D_2	D	Human Factor - Impaired by Alcohol	1	C	National
8	D_2	D	Human Factor - Unattended person	1	C	National
8	D_2	D	Human Factor - Mentally disabled	1	C	National
8	D_2	D	Human Factor - Physically disabled	1	C	National
8	D_2	D	Human Factor - Multiple persons.	1	C	National
8	D_2	D	Human Factor - Age was a factor	1	C	National
			Factor Contributing to Ignition			National
8	D_3	D	Factor Contributing to Ignition (1)	3	C	National
8	D_3	D	Factor Contributing to Ignition (2)	3	C	National
8	D_4		Fire Suppression Factors			National
8	D_4	D	Factor # 1	4	C	National
8	D_4	D	Factor # 2	4	C	National
8	D_4	D	Factor # 3	4	C	National
8	E	D	Heat Source	3	C	National
8	F	D	Mobile Property Type	3	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 15 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
8	G	D	Equipment Involved	4	C	National
8	H	D	Weather Station ID	6	X	National
8	H	D	Weather Type	2	C	National
8	H	D	Wind Direction	1	C	National
8	H	D	Wind Speed	3	N	National
8	H	D	Temperature	4	N	National
8	H	S	Negative Temp. Flag	1	X	National
8	H	D	Humidity	3	N	National
8	H	D	Fuel Moisture	2	N	National
8	H	D	Fire Danger Rating	1	C	National
8	I_1	S	Number of Bldg. Involved Flag	1	N	National
8	I_2	D	Number of Bldg. Involved	3	N	National
8	I_3	D	Total Acres Burned	11	N	National
8	I_4	D	Primary Crops Burned - Crop 1	25	X	National
8	I_4	D	Primary Crops Burned - Crop 2	25	X	National
8	I_4	D	Primary Crops Burned - Crop 3	25	X	National
8			Property Management			National
8	J	D	Property Mgmt. - Code	2	C	National
8	J	D	% of Total Acres Burned - Undetermined	3	N	National
8	J	D	% of Total Acres Burned - Tax paying	3	N	National
8	J	D	% of Total Acres Burned - Non tax paying	3	N	National
8	J	D	% of Total Acres Burned - City town, village, local	3	N	National
8	J	D	% Total Acres Burned - County	3	N	National
8	J	D	% of Total Acres Burned - State or province	3	N	National
8	J	D	Federal Agency Code	5	X	National
8	J	D	% of Total Acres Burned - Federal	3	N	National
8	J	D	% of Total Acres Burned - Foreign	3	N	National
8	J	D	% of Total Acres Burned - Military	3	N	National
8	J	D	% of Total Acres Burned - Other	3	N	National
8	K	D	NFDRS Fuel Model At Origin	2	C	National
8	L_1	D	Person Responsible for Fire	1	C	National
8	L_2	D	Person Involved Gender	1	C	National
8	L_3	D	Age	6	N	National
8	L_3	S	Date of Birth	8	N	National
8	L_4	D	Activity of Person	2	C	National
8	M	D	Horizontal Distance from Right of Way	2	N	National
8	M	D	Type of Right of Way	3		National
8			Fire Behavior			National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 16 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
8	N	D	Elevation in Feet	5	N	National
8	N	D	Relation	1	C	National
8	N	D	Aspect	1	C	National
8	N	D	Flame Length	2	N	National
8	N	D	Rate of spread (Chains per hour)	3	N	National
9			**Apparatus Module**			
9	A	D	State	2	C	National
9	A	D	FDID	5	X	National
9	A	D	Incident Date	8	D	National
9	A	D	Station	3	X	National
9	A	D	Incident Number	7	N	National
9	A	D	Exposure	3	N	National
9	B	D	Apparatus or Resource Record Number	4	N	National
9	B	D	Delete/Change	1	X	National
9	B	D	ID of Apparatus or Resource	5	X	National
9	B	D	Type of Apparatus or Resource	2	C	National
9	B	S	Dispatch Flag	1	Y	National
9	B	D	Dispatch Date	8	N	National
9	B	D	Dispatch Time	4	N	National
9	B	S	Clear Flag	1	Y	National
9	B	D	Clear Date	8	N	National
9	B	D	Clear Time	4	N	National
9	B	S	Arrive Flag	1	Y	National
9	B	D	Arrive Date	8	N	National
9	B	D	Arrive Time	4	N	National
9	B	I	Sent			National
9	B	D	Number of People	3	N	National
9	B	D	Use	1	X	National
9	B	D	Action#1	3	C	National
9	B	D	Action#2	3	C	National
9	B	D	Action#3	3	C	National
9	B	D	Action#4	3	C	National
10			**Personnel Module**			
10	A	D	State	2	C	National
10	A	D	FDID	5	X	National
10	A	D	Incident Date	8	D	National
10	A	D	Station	3	X	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 17 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
10	A	D	Incident Number	7	N	National
10	A	D	Exposure	3	N	National
10	B	D	Personnel Record Number	4	N	National
10	B	D	Delete/Change	1	X	National
10	B	D	ID of Apparatus or Resource	5	X	National
10	B	D	Type of Apparatus or Resource	3	C	National
10	B	S	Dispatch Flag	1	Y	National
10	B	D	Dispatch Date	8	N	National
10	B	D	Dispatch Time	4	N	National
10	B	S	Arrival Flag	1	Y	National
10	B	D	Arrival Date	8	N	National
10	B	D	Arrival Time	4	N	National
10	B	S	Clear Flag	1	Y	National
10	B	D	Clear Date	8	N	National
10	B	D	Clear Time	4	N	National
10	B	I	Sent			National
10	B	D	Number of People	3	N	National
10	B	D	Use	1	C	National
10	B		Apparatus or Resource Actions Taken			National
10	B	D	Action #1	3	C	National
10	B	D	Action #2	3	C	National
10	B	D	Action #3	3	C	National
10	B	D	Action #4	3	C	National
10	B	D	Personnel ID	9	X	Fire Department
10	B	D	First Name	15	X	Fire Department
10	B	D	Middle Initial	1	X	
10	B	D	Last Name	25	X	
10	B	D	Name Suffix	3	C	
10	B	D	Rank or Grade	10	X	National
10	B	I	Attend			National
10	B		Personnel Actions Taken			National
10	B	D	Action #1	3	C	National
10	B	D	Action #2	3	C	National
10	B	D	Action #3	3	C	National
10	B	D	Action #4	3	C	National
11			**Arson Module**			
11	A	D	State	2	C	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 18 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
11	A	D	FDID	5	X	National
11	A	D	Incident Date	8	D	National
11	A	D	Station	3	X	National
11	A	D	Incident Number	7	N	National
11	A	D	Exposure	3	N	National
11	A	D	Delete/Change	1	X	National
11	B		Agency Referred to			National
11	B	D	Agency Name	30	X	National
11	B		Agency Street Address			National
11	B	D	Agency Street Number	8	N	National
11	B	D	Agency Street Prefix	2	C	National
11	B	D	Agency Street or Highway Name	30	X	National
11	B	D	Agency Street Type	4	C	National
11	B	D	Agency Street Suffix	2	X	National
11	B	D	Agency Apt or Suite	15	X	National
11	B	D	Agency City	20	A	National
11	B	D	Agency State	2	C	National
11	B	D	Agency Zip Code	9	N	National
11	B	D	Their case #	12	X	National
11	B	D	Their ORI	5	X	National
11	B	D	Their FID	2	X	National
11	B	D	Their FDID	5	X	National
11	C	D	Case Status	1	C	National
11	D	D	Availability of Ignition Source	1	C	National
11	E	D	Suspected Motivation Factors	2	C	National
11	F	D	Apparent Involvement	1	C	National
11	G_1	D	Entry Method	2	C	National
11	G_2	D	Extent of Fire Involvement on Arrival	1	C	National
11	H	D	Methods, Devices			National
11	H	D	Container	2	C	National
11	H	D	Delay Device	2	C	National
11	H	D	Fuel	2	C	National
11	I	D	Other Investigative Information	1	C	National
11	J	D	Property Ownership	1	C	National
11	K	D	Initial Observations	1	C	National
11	L	D	Laboratory Used	1	C	National
11	M_1	S	Subject Number	3	N	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

TABLE 3-4. System Field Security Levels (Sheet 19 of 19)

MODULE NO.	LINE	ELEMENT TYPE	ELEMENT	SIZE	FIELD TYPE	SECURITY LEVEL
11	M_2	D	Age	6	N	National
11	M_2	D	Date of Birth	8	N	National
11	M_3	D	Gender	1	C	National
11	M_4	D	Race	1	C	National
11	M_5	D	Ethnicity	1	C	National
11	M_6	D	Family Type	1	C	National
11	M_7	D	Motivation, Risk Factors	1	C	National
11	M_8	D	Disposition	1	C	National
X			**Supplemental Paper Form**			**National**
			Same as K_1 on Module #2			National
X			**Fire Department ID Record**			
		D	FDID	5	X	National
		D	State Code	2	C	National
		D	FIPS County code	3	X	National
		D	FIP County Name	15	X	National
		D	Department Name	30	X	National
		D	Number of Stations	3	N	National
		D	Address	25	X	National
		D	City	20	X	National
		D	State	2	C	National
		D	Zip	9	N	National
		D	Population Protected	8	N	National
		D	Population Density	1	C	National
		D	Number of Paid	4	N	National
		D	Number of Volunteer, Paid per Call	4	N	National
		D	Number of Volunteer, not paid	4	N	National
		D	Telephone Number	10	N	National
		D	Fax Number	10	N	National
		D	E-Mail Address	45	X	National
		D	Square Miles	6	N	National

1. Element Types: (D)ata, (S)ystem, (I)nstructional, (L)ook-up
2. Field Types: (A)lphabetic, (C)oded Field, (X)Text, (N)umeric, (F)loating Point Numeric, (Y) Yes/No Flag

Incident Flat File Transfer Format

Overview

This section explains some of the conventions used in documenting the NFIRS 5.0 Incident Transaction File Format.

Transaction Record Hierarchy

The incident transaction records have been designed under the assumption that if a particular piece of information has not been collected as part of an incident, an empty record should not be transmitted. To accomplish this, a transaction hierarchy has been created so a parent transaction can be sent with only those applicable child transactions.

Example:

If aid was not given or received during an incident, the Aid Given or Received Transaction (1020) doesn't need to be transmitted.

However, it must be mentioned, that if a transaction record is empty at the time of transmittal, but child transactions to that record are not, an empty parent transaction is required.

Example:

If the Mobile Property section of the Fire Form has been filled out, but the remainder of the Fire Form has not been entered, an empty Fire Form Transaction (1100) would need to be sent along with the Fire Mobile Property Transaction (1120). Note: The Fire Equipment Involved Transaction (1130) and File Attached Transaction (1110) would not need to be included, since they are child transactions and are empty.

All child transactions need to be included in the transaction file, after their corresponding parent transaction (although how many records after the parent transaction is irrelevant, as long as it is prior to the next incident).

Table 3-5, "Transaction Hierarchy Table," on page 132 depicts the Incident Transaction Hierarchy and the associated Parent/Child relationships.

TABLE 3-5. Transaction Hierarchy Table

(1000) Incident Header Transaction

- (1005) Basic Incident Transaction
- (1010) Incident Address Transaction
- (1020) Aid Given and Received Transaction
- (1030) Officer in Charge Authority Transaction
- (1035) Member Making Report Authority Transaction
- (1040) Incident Remarks Transaction
- (1050) Incident Persons Involved Transactions
- (1055) Incident Owner Transaction
- (1060) Incident Special Studies Transactions
- (1100) Fire Form Transaction
  - (1110) File Attached Transaction
  - (1120) Fire Mobile Property Involved Transaction
  - (1130) Fire Equipment Involved Transaction
- (1200) Structure Fire Form Transaction
- (1300) Wildland Form Transaction
- (1400) Civilian Fire Casualty Transactions
- (1500) Fire Service Casualty Transactions
  - (1510) Fire Service Equipment Failure Transactions
- (1600) EMS Patient Transaction
- (1700) HazMat Transaction
  - (1710) HazMat Chemical Transactions
  - (1720) HazMat Mobile Property Involved Transaction
  - (1730) HazMat Equipment Involved Transaction
- (1800) Incident Apparatus Transactions
  - (1810) Incident Personnel Transactions
- (1900) Arson Transaction
  - (1910) Arson Agency Referral Transaction
  - (1920) Arson Juvenile Subject Transactions

Delimiters

Fields within the transaction record can be delimited using a character or series of characters defined by the creator of the transaction file. The first record in the file MUST be the delimiter. NOTE: The delimiter MUST be different from the sub-delimiter used to denote multiple choice answers, which is a semi-colon (;) (explained in detail below).

Transaction Record Termination

All records in the file must be terminated with a delimiter, followed by a carriage return, followed immediately by a line feed.

Vendor Identification and Software Identification

Each vendor and/or custom system will be assigned an alphanumeric Vendor Identifier after they have been registered at www.nfirs.fema.gov as a NFIRS 5.0 software vendor. The Vendor Identifier assigned may be up to 10 characters in length. In addition, each version of the software activated will be assigned a unique alphanumeric Software Identifier. The Software Identifier may be up to 5 characters in length.

When entered in NFIRS 5.0 transaction files, all alpha characters in the Vendor Identifier and the Software identifier fields **must be upper case**.

The second record in the file MUST contain both the vendor and software identification numbers.

Example:	
Delimiter	^
Vendor XYZ Vendor Identification Number	12S22R69K
Software Version 1.1 Software Identification Number	1234C
Vendor and Software Identification Record	12S22R69K^1234C^

Addition, Deletion, Change and No Activity Transaction Flags

Each paper based form for the NFIRS support a Delete/Change flag in section A. This convention has been mimicked in the transaction file format.

Each Transaction Record has a Transaction Type field, which can have the following values.

Value	Transaction Type
Blank	Addition
1	Change
2	Delete
3	No Activity

Add Incident

When a new incident is transmitted, the first record should be the Basic Incident Transaction. If this is not the first record of the new

incident, a fatal error will be generated. All subsequent transactions are included with the incident until the key values change or the end of the file is reached.

Change and Delete Transaction

When an incident needs to be modified, a Change transaction should be transmitted. This includes changing records that already exists as well as transmitting new records for an existing incident (e.g. adding another casualty record to an existing incident). This change transaction must contain all the field values that should replace all the existing values for that transaction. (i.e. – If one field in a transaction changes, the entire transaction must be transmitted).

When a particular transaction has been removed from an incident, a Delete transaction should be transmitted. When a parent transaction is deleted, all child transactions for that parent are also deleted. If the Basic Incident Transaction is deleted, the entire incident is deleted. (Including any exposure record for fire incidents)

All transactions for an incident must appear at the same point in the transaction file. To ensure proper execution of change and delete transactions for an incident, they must be grouped into the following order.

- Deletion of existing records for the incident (in descending sequence)
- Addition of new records for the incident (in ascending sequence)
- Changes to existing records for the incident

Delete transactions MUST be grouped in descending sequence to ensure proper processing. For example, if three (3) casualty records exist for an incident and the last two (2) are to be deleted, the transactions should be transmitted as follows:

- Delete Casualty Number 3
- Delete Casualty Number 2

Addition transactions must be aware of any/all delete transactions that have been previously processed for the incident, and must use the appropriate sequence numbers. If in the above example, a new casualty were to be added after the delete transactions had been processed, the first casualty added must use Casualty number 2.

No Activity

No Activity transactions should only send the 1000 Incident Header Transaction. A code of "3" for No Activity should be entered in the Transaction Type (the 7th element) for these transactions.

Fire Department Transactions

The Fire Department Transactions records (record types 2000 through 2020) are provided for the transmission of specific fire department information. These records, when transmitted, need to be contained in a separate flat file (i.e. These records can not be transmitted as part of the incident flat file). When reporting begins under NFIRS 5.0, each department will need to submit an initial Fire Department Header Record (record type 2000) in a separate flat file so that basic information about each department can be established in the State database.

Sequence Numbering Methodologies

When multiple records can occur for a single type of transaction, the transactions employ one of two possible numbering methodologies. For both types of methodologies, the numbers must be incremented by one (1). In addition, the transaction records must occur in the file in their ascending sequential order (although the transaction records do not necessarily need to appear one after the other).

Zero Based
Numbers starting at 0 and incrementing by 1.

One Based
Numbers starting at 1 and incrementing by 1.

Data Types Legend

A (Alphabetic)
Alphabetic characters. If the user has not provided information, an empty field should be transmitted.

X (Text)
Alphanumeric or special characters. If the user has not provided information, an empty field should be transmitted.

N (Numeric)
Integer numbers (no decimal points). If the user has not provided information, an empty field should be transmitted. All Integer values are assumed to be positive. Any fields which allow a negative Integer value have been denoted with "+ or –" in the comment field. Negative numbers should be transmitted with the minus sign preceding the digits.

F (Floating Point)
Floating point precision numbers (The expected length column depicts the max left and right side precision). If the user has not provided information, an empty field should be transmitted.

C (Coded Field)
The coded field relating to an entry in the code table. Most coded fields allow for Plus+ One codes. For these fields the expected length of the coded entry is depicted as (National length OR

Plus+ One length). Only fields with this notation in the expected length column allow for Plus+ One definitions. If the user has not provided information, an empty field should be transmitted.

Y (Yes/No)
A (Y)es/(N)o flag. NOTE: This is case sensitive and must be capital Y or N. If the user has not provided information, a value of N should be transmitted (if no value is transmitted, N is assumed).

Positive and Negative Numbers

Certain Numerical Fields can contain positive or negative numbers. When a numerical field has a value that is positive, only the number should be given and the field length requirements should be observed.

However, when a field value is negative, the number should be preceded by a minus sign (-), and the field length requirements should be observed, without accounting for the minus sign.

Multiple Choice Fields

Fields that permit multiple values (e.g. a multiple choice coded field) must use a semi-colon (;) to separate the coded values. The field must ALWAYS end with a semi-colon, EXCEPT if the field contains no values.

Example:
Delimiter: ^
User had selected the following coded values (1,22,30).
(Prior fields) ^1;22;30;^ (Subsequent fields)
Note: If the field had been empty, the transaction record would appear as follows:
(Prior fields) ^^ (Subsequent fields)

Multiple Choice fields allow for Plus+ One codes (described above). A 'MC' in the Comments column designates multiple Choice fields. In addition, the maximum number of responses allowed is noted in parenthesis.

If 'None' is the given response for a multiple choice questions, the 'None' code should be listed in the field. This allows for the critical differentiation between a 'None' response and a field which had no response.

Date and Time

Date and Time field responses can have the following notations in the transaction, depending on the type of field (Date Only or Date and Time).

Field Type	Scenario	Field Format
Date Only or Date and Time	No Date or Time Provided	Blank
Date Only		YYYYMMDD
Date and Time	Seconds not recorded	YYYYMMDDHHMM
Date and Time	Seconds recorded	YYYYMMDDHHMMSS

Zip Code

Zip Codes can be provided using either 5 or 9-digit notation. NOTE: No hyphens should be used when transmitting the 9-digit notation.

Zip Code	Type Field Format
5-digit Notation	NNNNN
9-digit notation	NNNNNNNNN

User Defined Transactions

User may define their own NFIRS 5.0 transaction types in order to collect data fields not specified in the national NFIRS 5.0 standard. These fields may be defined by states or by local fire departments for their own use locally. The 7000 transaction series is reserved for local fire department use. The 8000 series is reserved for state use. The 9000 series is currently reserved for future national expansion.

In order to properly set up a user defined transaction, use these guidelines:

1. Each user defined transaction must contain the first seven key fields in the Incident Header (1000) transaction before beginning the user defined fields.
2. The user defined transactions must follow the same format and rules defined in this document for standard NFIRS 5.0 transactions.

TABLE 3-6. Index of Transaction (Sheet 1 of 3)

TRANS ID	TRANSACTION	FORM	SECTION	NUMBER RECORD EXPECTED	COMMENTS
NA	Field Delimiter	NA	NA	1 per Transaction File	The first record in the transaction file must be the delimiter. The delimiter may be a multiple character string, and is used to delimit fields within all transaction records. NOTE: All transaction records must terminate with a delimiter.
N/A	Vendor ID and Software ID	NA	NA	1 per Transaction File	The second record in the transaction file must contain the Vendor ID, assigned as part of the vendor certification process and the software ID, for the particular version of the software used to generate the flat file. These fields need to be separated using the Field Delimiter.
1000	Incident Header	Basic	Section A	1 per Incident (Includes Exposure Transactions for Fire Incidents Only)	This transaction record contains the information collected as part of Section A. This record is the sole transaction required for No Activity incidents.
1005	Basic Incident	Basic	Section C, D, E_1 - E_2, F, G_1, G_2, H_1 - H_3, I, J	1 per Incident (Includes Exposure Transactions for Fire Incidents Only)	This transaction record contains the majority of the coded information contained on the Basic Form.
1010	Incident Address	Basic	Section B	0 or 1 per Basic Incident Transaction	This transaction record contains the incident address information captured as part of the Basic form.

TABLE 3-6. Index of Transaction (Sheet 2 of 3)

TRANS ID	TRANSACTION	FORM	SECTION	NUMBER RECORD EXPECTED	COMMENTS
1020	Aid Given and Received	Basic	Section D	0 or 1 per Basic Incident Transaction	This transaction record contains the information from the Aid Given and Received section of the Basic Form.
1030	Officer in Charge Authority	Basic	Section M	0 or 1 per Basic Incident Transaction	This transaction record contains the Officer in Charge information captured on the Basic Form.
1035	Member Making Report Authority	Basic	Section M	0 or 1 per Basic Incident Transaction	This transaction record contains the Member making report information captured on the Basic Form.
1040	Incident Remarks	Basic	Section L_1	0 or 1 per Basic Incident Transaction	This transaction record contains all Remarks associated with the incident.
1050	Incident Persons Involved	Basic	Section K_1	0 to 200 per Basic Incident Transaction	These transaction records contain the Person(s) Involved Information. Persons Involved captured on the Additional Form are included in this transaction record.
1055	Incident Owner	Basic	Section K_2	0 or 1 per Basic Incident Transaction	This transaction record contains the Owner Information captured as part of the Basic Form.
1060	Incident Special Studies	Basic	E3	0 to 200 per Basic Incident Transaction	These transaction records contain the Special Study Information for a particular incident. One record exists for each special study associated with an incident.
1100	Fire	Fire	Section B_1 - B_3, C, D_1 - D_4, E_1 - E_3	0 or 1 per Basic Incident Transaction	This transaction record contains the majority of coded information captured on the Fire Form.
1110	File Attached	Fire	Local Use	0 or 1 per Fire Transaction	This transaction record contains the files attached information captured on the Fire Form.
1120	Fire Mobile Property Involved	Fire	Section H_2	0 to 1 per Fire Transaction	This transaction record contains the Mobile Property Information that is gathered as part of the Fire Form.
1130	Fire Equipment Involved	Fire	Section F_1	0 to 1 per Fire Transaction	This transaction record contains the Equipment Involved Information which is gathered as part of the Fire Form.
1200	Structure Fire	Structure Fire	All	0 or 1 per Basic Incident Transaction	This transaction record contains all the information captured on the Structure Fire Form.
1300	Wildland Fire	Wildland	All	0 or 1 per Basic Incident Transaction	This transaction record contains all the information captured on the Wildland Form.
1400	Civilian Fire Casualty	Civilian Fire Casualty	All	0 to many per Basic Incident Transaction	This transaction record contains all the information captured on the Civilian Fire Casualty Form.
1500	Fire Service Casualty	Fire Service Casualty	Section B - K_1	0 to many per Basic Incident Transaction	This transaction record contains the majority of the information captured on the Fire Service Casualty Form.
1510	Fire Service Casualty Equipment Failure	Fire Service Casualty	Section K_2 - K_4	0 to 200 per Fire Service Casualty Transaction	These transaction records contain the protective equipment failure information captured as part of the Fire Service Casualty Form.

TABLE 3-6. Index of Transaction (Sheet 3 of 3)

TRANS ID	TRANSACTION	FORM	SECTION	NUMBER RECORD EXPECTED	COMMENTS
1600	EMS Patient	EMS	All	0 to many per Basic Incident Transaction	These transaction records contain the information captured on the EMS Form.
1700	HazMat	HazMat	Section F[1] - L, O	0 or 1 per Basic Incident Transaction	This transaction record contains the information gathered for the first hazardous material in an incident.
1710	HazMat Chemicals	HazMat	Section B - E[2]	1 to 200 per HazMat Transaction	These transaction records contain the specific chemical information gathered on the HazMat Form.
1720	HazMat Mobile Property Involved	HazMat	Section N	0 to 1 per HazMat Transaction	This transaction record contains the Mobile Property Information that is gathered as part of the HazMat form.
1730	HazMat Equipment Involved	HazMat	Section M	0 to 1 per HazMat Transaction	This transaction record contains the Equipment Involved Information which is gathered as part of the HazMat Form.
1800	Incident Apparatus	Apparatus Form or Resources Form	NA	0 to 200 per Basic Incident Transaction	These transaction records contain the Apparatus information captured on the Apparatus Form and Resources Form.
1810	Incident Resources	Resources Form	NA	0 to 200 per Incident Apparatus Transaction	These transaction records contain the Resource information captured on the Resources Form.
1900	Arson	Arson	Section C - L	0 or 1 per Basic Incident Transaction	This transaction record contains the information gathered as part of the Federal Arson Module.
1910	Arson Agency Referral	Arson	Section B	0 to 1 per Arson Transaction	This transaction record contains information regarding any Agency Referrals.
1920	Arson Juvenile Subject	Arson	Section M	0 to many per Arson Transaction	This transaction record contains the information gathered on each Juvenile Subject as part of the Arson Module.

TABLE 3-7. Incident File Header Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1000
7	Transaction Type	C		1	
8	Fire Department Station	X		3	
9	NFIRS Version	F		1.1	*

* NFIRS Version – Refers to the version of NFIRS rules/edits used when generating this flat file. Initially the value for this field will be 5.0, but will change in the future as modifications and/or enhancements are made to the standard (e.g. 5.1).

TABLE 3-8. Basic Incident Transaction (Sheet 1 of 2)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type: 1005
7	Transaction Type	C		1	
8	Incident Type	C		3 or 4	
9	Address on Wildland Flag	Y		1	
10	Aid Given or Received	C		1 or 2	
11	Alarm Date and Time	N		12 or 14	
12	Arrival Date and Time	N		12 or 14	
13	Incident Controlled Date and Time	N		12 or 14	
14	Last Unit Cleared Date and Time	N		12 or 14	
15	Shift	X		1	
16	Alarms	X		2	
17	District	X		3	
18	Actions Taken	C		2 or 3	MC (Max of 3)
19	Resource Form Used Flag	Y		1	
20	Suppression Apparatus	N		4	
21	EMS Apparatus	N		4	
22	Other Apparatus	N		4	
23	Suppression Personnel	N		4	
24	EMS Personnel	N		4	
25	Other Personnel	N		4	
26	Resources Include Mutual Aid	Y		1	
27	Property Loss	N		9	
28	Contents Loss	N		9	
29	Property Value	N		9	
30	Contents Value	N		9	
31	Fire Service Deaths	N		3	
32	Other Deaths	N		3	
33	Fire Service Injuries	N		3	
34	Other Injuries	N		3	
35	Detector Alerted Occupants	C		1 or 2	
36	Hazardous Material Released	C		1 or 2	
37	Mixed Use	C		2 or 3	
38	Property Use	C		3 or 4	

TABLE 3-9. Incident Address Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1010
7	Transaction Type	C		1	
8	Census Tract	X		6	
9	Location Type	C		1	
10	Number or Milepost	X		8	
11	Street Prefix	C		2	
12	Street or Highway Name	X		30	
13	Street Type	C		4	
14	Street Suffix	C		2	
15	Apartment Number	X		15	
16	City	X		20	
17	State	C		2	
18	Zip	N		5 or 9	
19	Cross Street, Directions or National Grid	X		30	

TABLE 3-10. Aid Given or Received Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1020
7	Transaction Type	C		1	
8	FDID Receiving Aid	X		5	
9	FDID State Receiving Aid	C		2	
10	Incident Number of FDID Receiving Aid	N		7	

TABLE 3-11. Officer in Charge Authority Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1030
7	Transaction Type	C		1	
8	Authority Personnel ID	X		9	
9	Authority First Name	X		15	
10	Authority Middle Initial	X		1	
11	Authority Last Name	X		25	
12	Authority Rank	X		10	
13	Authority Assignment	X		10	
14	Authority Date	N		8	

TABLE 3-12. Member Making Report Authority Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1035
7	Transaction Type	C		1	
8	Authority Personnel ID	X		9	
9	Authority First Name	X		15	
10	Authority Middle Initial	X		1	
11	Authority Last Name	X		25	
12	Authority Rank	X		10	
13	Authority Assignment	X		10	
14	Authority Date	N		8	

TABLE 3-13. Incident Remarks Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type: 1040
7	Transaction Type	C		1	
8	Remarks	X		Variable	

TABLE 3-14. Incident Person(s) Involved Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type: 1050
7	Transaction Type	C		1	
8	Person Sequence Number	N		3	One Based
9	Name Prefix	C		3	
10	First Name	X		15	
11	Middle Initial	X		1	
12	Last Name	X		25	
13	Name Suffix	C		3	
14	Business Name	X		25	
15	Phone	N		10	
16	Street Number or Milepost	X		8	
17	Street Prefix	C		2	
18	Street or Highway Name	X		30	
19	Street Type	C		4	
20	Street Suffix	C		2	
21	Post Office Box	X		10	
22	Apartment	X		15	
23	City	X		20	
24	State	C		2	
25	Zip	N		5 or 9	

TABLE 3-15. Incident Owner Transactions

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1055
7	Transaction Type	C		1	
8	Name Prefix	C		3	
9	First Name	X		15	
10	Middle Initial	X		1	
11	Last Name	X		25	
12	Name Suffix	C		3	
13	Business Name	X		25	
14	Phone	N		10	
15	Street Number or Milepost	X		8	
16	Street Prefix	C		2	
17	Street or Highway Name	X		30	
18	Street Type	C		4	
19	Street Suffix	C		2	
20	Post Office Box	X		10	
21	Apartment	X		15	
22	City	X		20	
23	State	C		2	
24	Zip	N		5 or 9	

TABLE 3-16. Incident Special Study Transactions

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1060
7	Transaction Type	C		1	
8	Special Study Sequence Number	N		3	One based
9	Special Study Identification Number	N		5	*
10	Special Study Code	C		5	

* Special Study Identification Number – In order to support National, State and Local Special Studies, each special study will be assigned a unique identification number. This number must be included with the Special Study transaction record to identify which special study the code belongs. This also allows for validation of special study codes.

TABLE 3-17. Fire Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1100
7	Transaction Type	C		1	
8	Number of Residential Units	N		4	
9	Not Residential Flag	Y		1	
10	Number of Buildings Involved	N		3	
11	Acres Burned	N		6	
12	Less than one Acre	Y		1	
13	On Site Materials	C		3 or 4	MC (Max of 3)
14	Material Storage Use	C		1 or 2	MC *
15	Area of Origin	C		2 or 3	
16	Heat Source	C		2 or 3	
17	Item First Ignited	C		2 or 3	
18	Confined To Origin	C		1	
19	Type of Material	C		2 or 3	
20	Cause of Ignition	C		1 or 2	
21	Contributed To Ignition Factors	C		2 or 3	MC (Max of 2)
22	Human Factors	C		1 or 2	MC (Max of 8)
23	Age of Person	F		3.2	
24	Sex of Person	C		1	
25	Equipment Involved	C		3 or 4	
26	Mobile Property Involved	C		1 or 2	**
27	Suppression Factors	C		3 or 4	MC (Max of 3)

* Material Storage Use corresponds directly to the On-Site Materials listed in Field #12. The first code in On-Site Material is associated with the first Material Storage Use, the second code is associated with the second Material Storage Use, etc. Each On-Site Materials listed should have a corresponding Material Storage Use. (i.e. If 2 On-Site Materials are listed, Material Storage Use should have 2 entries).

** Mobile Property Involved Code refers to the coded information captured in Section H1 of the Fire Form. This includes 'None' responses.

TABLE 3-18. File Attached Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1110
7	Transaction Type	C		1	
8	Pre Fire Plan Available Flag	Y		1	
9	Reports Attached	C			MC (Max of 4)

TABLE 3-19. Fire Mobile Property Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1120
7	Transaction Type	C		1	
8	Mobile Property Type	C		2 or 3	
9	Mobile Property Make	C		2 or 3	
10	Mobile Property Model	X		25	
11	Mobile Property Year	N		4	4 digit year only
12	Mobile Property License Plate	X		10	
13	Mobile Property State	C		2	
14	Mobile Property VIN Number	X		17	

TABLE 3-20. Fire Equipment Involved Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		6	Record Type:1130
7	Transaction Type	C		1	
8	Equipment Brand	X		25	
9	Equipment Model	X		25	
10	Equipment Serial Number	X		25	
11	Equipment Year	N		4	4 digit year only
12	Equipment Power	C		2 or 3	
13	Equipment Portability	C		1 or 2	

TABLE 3-21. Structure Fire Transaction (Sheet 1 of 2)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1200
7	Transaction Type	C		1	
8	Structure Type	C		1 or 2	
9	Structure Status	C		1 or 2	
10	Building Height: Stories Above Grade	N		3	
11	Building Height: Stories Below Grade	N		2	
12	Building Length	N		4	
13	Building Width	N		4	
14	Total Square Feet	N		8	
15	Fire Origin	N		3	+ or -
16	Fire Spread	C		1 or 2	
17	Number of Stories with Damage: Minor	N		3	
18	Number of Stories with Damage: Significant	N		3	
19	Number of Stories with Damage: Heavy	N		3	

TABLE 3-21. Structure Fire Transaction (Sheet 2 of 2)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
20	Number of Stories with Damage: Extreme	N		3	
21	No Flame Spread/Same As First/Unknown	Y		1	
22	Item Contributing To Spread	C		2 or 3	
23	Type of Material Contributing To Spread	C		2 or 3	
24	Detector Presence	C		1 or 2	
25	Detector Type	C		1 or 2	
26	Detector Power	C		1 or 2	
27	Detector Operation	C		1 or 2	
28	Detector Effectiveness	C		1 or 2	
29	Detector Failure Reason	C		1 or 2	
30	AES Presence	C		1 or 2	
31	AES Type	C		1 or 2	
32	AES Operation	C		1 or 2	
33	Number of Sprinklers Operating	N		3	
34	AES Failure Reason	C		1 or 2	

TABLE 3-22. Wildland Fire Transaction (Sheet 1 of 3)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1300
7	Transaction Type	C		1	
8	Latitude	F		2.2	
9	Longitude	F		3.2	
10	Township	F		3.1	
11	North/South	C		1	
12	Range	N		3	
13	East/West	C		1	
14	Section	N		2	
15	Subsection	C		4	
16	Meridian	C		2	
17	Area Type	C		1 or 2	

TABLE 3-22. Wildland Fire Transaction (Sheet 2 of 3)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
18	Wildland Fire Cause	C		1 or 2	
19	Human Factors Contributing	C		1 or 2	MC (Max of 8)
20	Factors Contributing to Ignition Factors	C		2 or 3	MC (Max of 2)
21	Fire Suppression Factors	C		3 or 4	MC (Max of 3)
22	Heat Source	C		2 or 3	
23	Mobile Property Type	C		2 or 3	
24	Equipment Involved In Ignition	C		3 or 4	
25	NFDRS Weather Station ID	A		6	
26	Weather Type	C		2 or 3	
27	Wind Direction	C		1 or 2	
28	Wind Speed	N		3	
29	Air Temperature	N		3	+ or -
30	Relative Humidity	N		3	
31	Fuel Moisture	N		2	
32	Fire Danger Rating	C		1 or 2	
33	Number of Buildings Involved	N		3	
34	Number of Buildings Threatened	N		3	
35	Total Acres Burned	F		9.2	
36	Primary Crop Burned 1	X		25	
37	Primary Crop Burned 2	X		25	
38	Primary Crop Burned 3	X		25	
39	Undetermined Acres Burned %	N		3	
40	Tax Paying Acres Burned %	N		3	
41	Non-Tax Paying Acres Burned %	N		3	
42	City, town, village, local Acres Burned %	N		3	
43	County or parish Acres Burned %	N		3	
44	State or province Acres Burned %	N		3	
45	Federal Acres Burned %	N		3	
46	Foreign Acres Burned %	N		3	
47	Military Acres Burned %	N		3	
48	Other Acres Burned %	N		3	
49	Property Management Ownership	C		1 or 2	
50	Federal Agency Code	X		5	
51	NFDRS Fuel Model at Origin	C		2 or 3	
52	Person Responsible for Fire	C		1 or 2	
53	Gender	C		1	
54	Age	F		3.2	
55	Activity of Person	C		2 or 3	

TABLE 3-22. Wildland Fire Transaction (Sheet 3 of 3)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
56	Horizontal Distance from ROW	N		2	
57	Type of ROW	C		3 or 4	
58	Elevation	N		5	
59	Relative Position on Slope	C		1 or 2	
60	Aspect	C		1 or 2	
61	Flame Length	N		2	
62	Rate of Spread	N		3	

TABLE 3-23. Civilian Fire Casualty Transaction (Sheet 1 of 2)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1400
7	Transaction Type	C		1	
8	Civilian Fire Casualty Sequence Number	N		3	One Based
9	First Name	X		15	
10	Middle Initial	X		1	
11	Last Name	X		25	
12	Name Suffix	C		3	
13	Gender	C		1	
14	Age	F		3.2	
15	Race	C		1 or 2	
16	Ethnicity	C		1 or 2	
17	Affiliation	C		1 or 2	
18	Injury Date and Time	N		8 or 14	
19	Severity	C		1 or 2	
20	Cause of Injury	C		1 or 2	
21	Human Factors	C		1 or 2	MC (Max of 8)
22	Contributing Factors	C		2 or 3	MC (Max of 3)
23	Activity When Injured	C		1 or 2	
24	Location At Time of Incident	C		1 or 2	
25	General Location At Time of Injury	C		1 or 2	
26	Story At Start of Incident	N		3	+ or -
27	Story When Injury Occurred	N		3	+ or -

TABLE 3-23. Civilian Fire Casualty Transaction (Sheet 2 of 2)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
28	Specific Location at Time of Injury	C		2 or 3	
29	Primary Apparent Symptom	C		2 or 3	
30	Primary Part of Body Injured	C		1 or 2	
31	Disposition	C		1 or 2	

TABLE 3-24. Fire Service Casualty Transaction (Sheet 1 of 2)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type: 1500
7	Transaction Type	C		1	
8	Fire Service Casualty Sequence Number	N		3	One Based
9	Firefighter Identification Number	X		9	
10	First Name	X		15	
11	Middle Initial	X		1	
12	Last Name	X		25	
13	Name Suffix	C		3	
14	Gender	C		1	
15	Career	C		1 or 2	
16	Age	N		3	
17	Injury Date and Time	N		12 or 14	
18	Responses	N		2	
19	Usual Assignment	C		1 or 2	
20	Physical Condition	C		1 or 2	
21	Severity	C		1 or 2	
22	Taken To	C		1 or 2	
23	Activity At Time of Injury	C		2 or 3	
24	Primary Apparent Symptom	C		2 or 3	
25	Primary Area of Body Injured	C		2 or 3	
26	Cause of Firefighter Injury	C		1 or 2	
27	Factor Contributing to Injury	C		2 or 3	
28	Object Involved In Injury	C		2 or 3	
29	Where Injury Occurred	C		1 or 2	
30	Injury Relation to Structure	C		1 or 2	

TABLE 3-24. Fire Service Casualty Transaction (Sheet 2 of 2)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
31	Story of Injury	N		3	+ or -
32	Specific Location	C		2 or 3	
33	Vehicle Type	C		1 or 2	
34	Protective Equipment Contributed to Injury	C		1 or 2	

TABLE 3-25. Fire Service Equipment Failure Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1510
7	Transaction Type	C		1	
8	Fire Service Casualty Sequence Number	N		3	One Based
9	Equipment Failure Sequence Number	N		3	One Based
10	Equipment Item	C		2 or 3	
11	Equipment Problem	C		2 or 3	
12	Equipment Manufacturer	X		12	
13	Equipment Model	X		12	
14	Equipment Serial Number	X		12	

TABLE 3-26. EMS Patient Transaction (Sheet 1 of 2)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	

The number of Injury Types codes supplied must correspond directly to the number of Body Sites Injured in Field #18.
Example: If 3 Body Site of Injury were supplied, a maximum of 3 Injury Types are allowed.

The Injury Type responses must be listed in the exact same order as the Body Sites to which they correspond.

Example: Given the Body Sites and Injury Types listed below, the transaction should look as follows. (Please note the codes are not real codes, but for illustrative purposes only)

Sequence	Body Site	Injury Type
#1	1	A
#2	2	B
#3	3	C

Transaction Record: (Prior Fields)^1;2;3;^A;B;C;^(Subsequent Fields)

TABLE 3-26. EMS Patient Transaction (Sheet 2 of 2)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1600
7	Transaction Type	C		1	
8	EMS Patient Sequence Number	N		3	One Based
9	Arrived At Patient Date and Time	N		12 or 14	
10	Patient Transfer Date and Time	N		12 or 14	
11	Provider Impression / Assessment	C		2 or 3	
12	Age	F		3.2	
13	Gender	C		1	
14	Race	C		1 or 2	
15	Ethnicity	C		1 or 2	
16	Human Factors	C		1 or 2	MC (Max of 8)
17	Other Factors	C		1 or 2	
18	Body Sites of Injury	C		1 or 2	MC (Max of 5)
19	Injury Types	C		2 or 3	MC (See Below)
20	Cause of Illness/Injury	C		2 or 3	
21	Procedures Used	C		2 or 3	MC (Max of 25)
22	Safety Equipment Used	C		1 or 2	MC (Max of 8)
23	Pre or Post Arrival Arrest	C		1 or 2	
24	Pre-Arrival Arrest Descriptors	C		1 or 2	MC (Max of 2)
25	Initial Arrest Rhythm	C		1 or 2	
26	Initial Level of Care	C		1 or 2	
27	Highest Level of Care	C		1 or 2	
28	Patient Status	C		1 or 2	
29	Pulse on Transfer	C		1 or 2	
30	Disposition	C		1 or 2	

The number of Injury Types codes supplied must correspond directly to the number of Body Sites Injured in Field #18.
Example: If 3 Body Site of Injury were supplied, a maximum of 3 Injury Types are allowed.

The Injury Type responses must be listed in the exact same order as the Body Sites to which they correspond.

Example: Given the Body Sites and Injury Types listed below, the transaction should look as follows. (Please note the codes are not real codes, but for illustrative purposes only)

Sequence	Body Site	Injury Type
#1	1	A
#2	2	B
#3	3	C

Transaction Record: (Prior Fields)^1;2;3;^A;B;C;^(Subsequent Fields)

TABLE 3-27. Hazardous Material Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1700
7	Transaction Type	C		1	
8	Released From	C		1 or 2	
9	Story of Release	N		3	+ or -
10	Population Density	C		1 or 2	
11	Area Affected Measurement	N		4	
12	Area Affected Units	C		1 or 2	
13	Area Evacuated Measurement	N		4	
14	Area Evacuated Units	C		1 or 2	
15	Estimated Number of People Evacuated	N		6	
16	Estimated Number of Buildings Evacuated	N		4	
17	HazMat Actions Taken	C		2 or 3	MC (Max of 3)
18	Occurred First	C		1 or 2	
19	Cause of Release	C		1 or 2	
20	Factors Contributing To Release	C		2 or 3	MC (Max of 3)
21	Mitigating Factors	C		2 or 3	MC (Max of 3)
22	Equipment Involved in Release	C		3 or 4	
23	Disposition	C		1 or 2	
24	HazMat Civilian Deaths	N		4	
25	HazMat Civilian Injuries	N		4	

TABLE 3-28. Hazardous Material Chemical Transaction (Sheet 1 of 2)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1710
7	Transaction Type	C		1	
8	HazMat Chemical Sequence Number	N		2	One Based
9	UN Number	X		4	

TABLE 3-28. Hazardous Material Chemical Transaction (Sheet 2 of 2)

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
10	DOT Hazard Classification	C		2 or 3	
11	CAS Registration	X		10	
12	Chemical Name	X		50	
13	Container Type	C		2 or 3	
14	Estimated Container Capacity	N		9	
15	Capacity Units	C		2 or 3	
16	Estimated Amount Released	N		9	
17	Released Units	C		2 or 3	
18	Physical State When Released	C		1 or 2	
19	Released Into	C		1 or 2	

TABLE 3-29. Hazardous Material Mobile Property Type

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type: 1720
7	Transaction Type	C		1	
8	Mobile Property Type	C		2 or 3	
9	Mobile Property Make	C		2 or 3	
10	Mobile Property Model	X		25	
11	Mobile Property Year	N		4	4 digit year only
12	Mobile Property License Plate	X		10	
13	Mobile Property State	C		2	
14	Mobile Property DOT/ICC Number	X		17	

TABLE 3-30. Hazardous Material Equipment Involved Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1730
7	Transaction Type	C		1	
8	Equipment Brand	X		25	
9	Equipment Model	X		25	
10	Equipment Serial Number	X		25	
11	Equipment Year	N		4	4 digit year only

TABLE 3-31. Incident Apparatus Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1800
7	Transaction Type	C		1	
8	Apparatus Sequence Number	N		3	One Based
9	Apparatus ID	X		5	
10	Apparatus Type	C		2 or 3	
11	Apparatus Dispatch Date and Time	N		12 or 14	
12	Apparatus Arrival Date and Time	N		12 or 14	
13	Apparatus Clear Date and Time	N		12 or 14	
14	Number of People	N		3	Must match number of 1810 transactions (if present)
15	Apparatus Use	C		1 or 2	
16	Apparatus Actions Taken	C		2 or 3	MC (Max of 4)

TABLE 3-32. Incident Personnel Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type: 1810
7	Transaction Type	C		1	
8	Apparatus Sequence Number	N		3	One Based
9	Personnel Sequence Number	N		3	One Based
10	Personnel ID	X		9	
11	First Name	X		15	
12	Middle Initial	X		1	
13	Last Name	X		25	
14	Rank	X		10	
15	Personnel Actions Taken	C		2 or 3	MC (Max of 4)

TABLE 3-33. Arson Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type: 1900
7	Transaction Type	C		1	
8	Case Status	C		1 or 2	
9	Availability of Material First Ignited	C		1 or 2	
10	Suspected Motivation Factors	C		2 or 3	MC (Max of 3)
11	Apparent Group Involvement	C		1 or 2	MC (Max of 3)
12	Entry Method	C		2 or 3	
13	Extent of Fire Involvement on Arrival	C		1 or 2	
14	Incendiary Devices: Container	C		2 or 3	
15	Incendiary Devices: Ignition/ Delay Device	C		2 or 3	
16	Incendiary Devices: Fuel	C		2 or 3	
17	Other Investigative Information	C		1 or 2	MC (Max of 8)
18	Property Ownership	C		1 or 2	
19	Initial Observations	C		1 or 2	MC (Max of 8)
20	Laboratory Used	C		1 or 2	MC (Max of 6)

TABLE 3-34. Arson Agency Referral Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1910
7	Transaction Type	C		1	
8	Agency Name	X		30	
9	Agency Street Number	X		8	
10	Agency Street Prefix	C		2	
11	Agency Street or Highway	X		30	
12	Agency Street Type	C		4	
13	Agency Street Suffix	C		2	
14	Agency Apartment Number	X		15	
15	Agency City	X		20	
16	Agency State	C		2	
17	Agency ZIP Code	N		5 or 9	
18	Agency Phone Number	N		10	
19	Agency Case Number	X		12	
20	Agency ORI	X		5	
21	Agency FID	X		2	
22	Agency FDID	X		5	

TABLE 3-35. Arson Juvenile Subject Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Alarm Date	N		8	
4	Incident Number	N		7	
5	Exposure Number	N		3	Zero Based
6	Record Type	N		5	Record Type:1920
7	Transaction Type	C		1	
8	Subject Sequence Number	N		3	One Based
9	Age	N		3	
10	Gender	C		1 or 2	
11	Race	C		1 or 2	
12	Ethnicity	C		1 or 2	
13	Family Type	C		1 or 2	
14	Motivation/Risk Factors	C		1 or 2	MC (Max of 8)
15	Disposition	C		1 or 2	

TABLE 3-36. Index of Transactions

TRANS ID	TRANSACTION	FORM	SECTION	NUMBER RECORD EXPECTED	COMMENTS
2000	Fire Department Header	NA	NA	1 per Fire Department	This transaction record contains all the National information pertaining to a single Fire Department.
2010	Fire Department Personnel	NA	NA	0 to many per Fire Department	These transaction records contain Personnel information about firefighters for a particular fire department.
2020	Fire Department Apparatus	NA	NA	0 to many per Fire Department	These transaction records contain Apparatus information for apparatus located at a particular fire department.

The Fire Department Transactions records are provided for the transmission of specific fire department information. These records, when transmitted, need to be contained in a separate flat file (i.e. – They can not be transmitted as part of the incident flat file).

TABLE 3-37. Fire Department Header Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Record Type	N		5	Record Type: 2000
4	Transaction Type	C		1	
5	Fire Department Name	X		30	
6	Fire Department Street Number of Milepost	X		8	
7	Fire Department Street Prefix	C		2	
8	Fire Department Street or Highway Name	X		30	
9	Fire Department Street Type	C		4	
10	Fire Department Street Suffix	C		2	
11	Fire Department City	X		20	
12	Fire Department Zip	N		9	
13	Fire Department Phone	N		10	
14	Fire Department Fax	N		10	
15	Fire Department E-mail	X		45	
16	Fire Department FIPS County Code	X		3	
17	Number of Stations	N		3	
18	Number of Paid Firefighters	N		4	
19	Number of Volunteer Firefighters	N		4	
20	Number of Volunteer Paid Per Call	N		4	

TABLE 3-38. Fire Department Personnel Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Record Type	N		5	Record Type:2010
4	Transaction Type	C		1	
5	Firefighter Sequence Number	N		3	One Based
6	Firefighter Personnel ID	X		9	
7	Firefighter First Name	X		15	
8	Firefighter Middle Initial	X		1	
9	Firefighter Last Name	X		25	
10	Firefighter Name Suffix	C		3	
11	Firefighter Rank	X		10	
12	Firefighter Personal Phone 1	N		10	
13	Firefighter Personal Phone 2	N		10	
14	Firefighter Personal E-Mail	X		45	

TABLE 3-39. Fire Department Apparatus Transaction

ELEMENT NUMBER	ELEMENT NAME	DATA TYPE	SPECIAL FORMATTING	MAX OR EXPECTED LENGTH	COMMENTS
1	Fire Dept. ID	X		5	
2	Fire Dept. State	C		2	
3	Record Type	N		5	Record Type:2020
4	Transaction Type	C		1	
5	Apparatus Sequence Number	N		3	One Based
6	Apparatus ID	X		5	
7	Apparatus Type	X		2 or 3	
8	Apparatus Name	X		25	
9	Apparatus First In Service Date	N		8	

Data Dictionary

The NFIRS 5.0 data dictionary codes that follow contain a shorter version of the code descriptors for the NFIRS 5.0 specification. These descriptors are a maximum of fifty (50) characters in length and are intended for use in automated NFIRS 5.0 data collection systems. The full length code descriptors are available in the NFIRS 5.0 Reference Guide available from the United States Fire Administration.

Important Notes For Developers:

Certain codes in the data dictionary are designated as conversion only codes in the following manner:

Code #	Code Descriptor (conversion only)

Codes that are identified in this manner are used solely to store data converted from the NFIRS 4.1 format and are never used for the collection of data in NFIRS 5.0. Under no circumstances should these codes ever be included in automated data entry systems' code look-ups, pick-lists or code tables. Including the "conversion only" codes in such a manner will result in a failure to successfully complete NFIRS 5.0 software certification. Also note that in some cases the (conversion only) designation at the end of codes may make the total descriptor length exceed 50 characters. Since these codes are not to be used to collect data, this should not have an impact on the descriptor field size.

Please note that for the numeric code values listed in the following pages, hierarchical code placeholders are used. These placeholders are not themselves valid codes used for data entry. Instead they are used as section titles for code groups and are intended for use in automated pick-lists and database groupings used by data analysts. They should never be allowed as valid choices for data entry and will be rejected as invalid by the NFIRS 5.0 edits. Some examples of code placeholders are "1 Fire" and "10 Fire, other" in the Incident Type field listing below.

Tables for all of the data dictionaries can be obtained on the USFA website at: http://www.nfirs.fema.gov/documentation/design/

Basic Module Data Dictionary

Location Type - Section B

1	Street Address
2	Intersection
3	In front of
4	Rear of
5	Adjacent to
6	Directions
7	U.S. National Grid

Street Prefix or Street Suffix - Section B

E	East
N	North
S	South
W	West
NE	Northeast
NW	Northwest
SE	Southeast
SW	Southwest

Street Type - Section B

ALY	Alley
ANX	Annex
ARC	Arcade
AVE	Avenue
BCH	Beach
BND	Bend
BLF	Bluff
BLFS	Bluffs
BTM	Bottom
BLVD	Boulevard
BR	Branch
BRG	Bridge
BRK	Brook
BRKS	Brooks
BG	Burg
BGS	Burgs
BYP	Bypass
CP	Camp
CYN	Canyon
CPE	Cape
CSWY	Causeway
CTR	Center
CTRS	Centers
CIR	Circle
CIRS	Circles
CLF	Cliff
CLFS	Cliffs
CLB	Club
CMN	Common
CMNS	Commons
COR	Corner
CORS	Corners
CT	Court
CTS	Courts
CV	Cove
CVS	Coves
CRK	Creek
CRES	Cresent
CRST	Crest
XING	Crossing
XRD	Crossroad
XRDS	Crossroads
CURV	Curve
DL	Dale
DM	Dam
DV	Divide
DR	Drive
DRS	Drives
EST	Estate
ESTS	Estates
EXPY	Expressway
EXT	Extension
EXTS	Extensions
FALL	Fall
FLS	Falls
FRY	Ferry
FLD	Field
FLDS	Fields
FLT	Flat
FLTS	Flats
FRD	Ford
FRDS	Fords
FRST	Forest
FRG	Forge
FRGS	Forges
FRK	Fork
FRKS	Forks
FT	Fort
FWY	Freeway
GDN	Garden
GDNS	Gardens

Street Type - Section B (continued)

GTWY Gateway
GLN Glen
GLNS Glens
GRN Green
GRNS Greens
GRV Grove
GRVS Groves
HBR Harbor
HBRS Harbors
HVN Haven
HTS Heights
HWY Highway
HL Hill
HLS Hills
HOLW Hollow
INLT Inlet
IS Island
ISS Islands
ISLE Isle
JCT Junction
JCTS Junctions
KY Key
KYS Keys
KNL Knoll
KNLS Knolls
LK Lake
LKS Lakes
LNDG Landing
LN Lane
LGT Light
LGTS Lights
LF Loaf
LCK Lock
LCKS Locks
LDG Lodge
LOOP Loop
MALL Mall
MNR Manor
MNRS Manors
MDW Meadow
MDWS Meadows
MEWS Mews
ML Mill
MLS Mills
MSN Mission
MTWY Motorway
MT Mount
MTN Mountain
MTNS Mountains
NCK Neck
ORCH Orchard
OVAL Oval
PARK Park
PARKS Parks
PKY Parkway
PKYS Parkways
PASS Pass
PSGE Passage
PATH Path
PIKE Pike
PNE Pine
PNES Pines
PL Place
PLZ Plaza
PT Point
PTS Points
PRT Port
PRTS Ports
PR Prairie
RADL Radial
RAMP Ramp
RNCH Ranch
RPD Rapid
RPDS Rapids
RST Rest
RDG Ridge
RDGS Ridges
RIV River
RD Road
RDS Roads
RT Route
ROW Row
RUE Rue
RUN Run
SHL Shoal
SHLS Shoals
SHR Shore
SHRS Shores
SKWY Skyway
SPG Spring
SPGS Springs

Street Type - Section B (continued)

SPUR	Spur
SPURS	Spurs
SQ	Square
SQS	Squares
STA	Station
STRA	Stravenue
STRM	Stream
ST	Street
STS	Streets
SMT	Summit
TER	Terrace
TRWY	Throughway
TRCE	Trace
TRAK	Track
TRFY	Trafficway
TRL	Trail
TRLR	Trailer
TUNL	Tunnel
TPKE	Turnpike
UPAS	Underpass
UN	Union
UNS	Unions
VLY	Valley
VLYS	Valleys
VIA	Viaduct
VW	View
VWS	Views
VLG	Village
VLGS	Villages
VL	Ville
VIS	Vista
WALK	Walk
WALK	Walks
WALL	Wall
WAY	Way
WAYS	Ways
WL	Well
WLS	Wells

State, U. S. Territory Abbreviations - Section B

AL	Alabama
AK	Alaska
AZ	Arizona
AR	Arkansas
CA	California
CO	Colorado
CT	Connecticut
DE	Delaware
DC	District of Columbia
FL	Florida
GA	Georgia
HI	Hawaii
ID	Idaho
IL	Illinois
IN	Indiana
IA	Iowa
KS	Kansas
KY	Kentucky
LA	Louisiana
ME	Maine
MD	Maryland
MA	Massachusetts
MI	Michigan
MN	Minnesota
MS	Mississippi
MO	Missouri
MT	Montana
NE	Nebraska
NV	Nevada
NH	New Hampshire
NJ	New Jersey
NM	New Mexico
NY	New York
NC	North Carolina
ND	North Dakota
OH	Ohio
OK	Oklahoma
OR	Oregon
PA	Pennsylvania
RI	Rhode Island
SC	South Carolina
SD	South Dakota
TN	Tennessee
TX	Texas
UT	Utah
VT	Vermont
VA	Virginia
WA	Washington
WV	West Virginia
WI	Wisconsin
WY	Wyoming
AS	American Samoa

State, U. S. Territory Abbreviations - Section B (continued)

CZ Canal Zone
DD Department of Defense
GU Guam
FM Federated States of Micronesia
MH Marshall Islands
MP Northern Mariana Islands
PW Palau
PR Puerto Rico
UM US Minor Outlying Islands
VI Virgin Islands
NA Native American Tribal Authority
OO Other

Incident Type - Section C

1 *Fire*
10 *Fire, other*
100 Fire, other.
11 *Structure Fire*
110 Structure fire, other (Conversion only).
111 Building fire.
112 Fires in structure other than in a building.
113 Cooking fire, confined to container.
114 Chimney or flue fire, confined to chimney or flue.
115 Incinerator overload or malfunction, fire confined.
116 Fuel burner/boiler malfunction, fire confined.
117 Commercial Compactor fire, confined to rubbish.
118 Trash or rubbish fire, contained.
12 *Fire in mobile property used as a fixed structure*
120 Fire in mobile property used as a fixed structure, other.
121 Fire in mobile home used as fixed residence.
122 Fire in motor home, camper, recreational vehicle.
123 Fire in portable building, fixed location.
13 *Mobile property (vehicle) fire*
130 Mobile property (vehicle) fire, other.
131 Passenger vehicle fire.
132 Road freight or transport vehicle fire.
133 Rail vehicle fire.
134 Water vehicle fire.
135 Aircraft fire.
136 Self-propelled motor home or recreational vehicle.
137 Camper or recreational vehicle (RV) fire.
138 Off-road vehicle or heavy equipment fire.
14 *Natural vegetation fire*
140 Natural vegetation fire, other.
141 Forest, woods or wildland fire.
142 Brush or brush-and-grass mixture fire.
143 Grass fire.
15 *Outside rubbish fire*
150 Outside rubbish fire, other.
151 Outside rubbish, trash or waste fire.
152 Garbage dump or sanitary landfill fire.
153 Construction or demolition landfill fire.
154 Dumpster or other outside trash receptacle fire.
155 Outside stationary compactor/compacted trash fire.
16 *Special outside fire*
160 Special outside fire, other.
161 Outside storage fire.
162 Outside equipment fire.
163 Outside gas or vapor combustion explosion.
164 Outside mailbox fire.
17 *Cultivated vegetation, crop fire*
170 Cultivated vegetation, crop fire, other.
171 Cultivated grain or crop fire.
172 Cultivated orchard or vineyard fire.
173 Cultivated trees or nursery stock fire.
2 *Overpressure Rupture, Explosion, Overheat (no fire)*
20 *Overpressure rupture, explosion, overheat, other*
200 Overpressure rupture, explosion, overheat other.
21 *Overpressure rupture from steam (no ensuing fire)*
210 Overpressure rupture from steam, other.
211 Overpressure rupture of steam pipe or pipeline.
212 Overpressure rupture of steam boiler.
213 Steam rupture of pressure or process vessel.
22 *Overpressure rupture from air or gas (no fire)*
220 Overpressure rupture from air or gas, other.
221 Overpressure rupture of air or gas pipe/pipeline.
222 Overpressure rupture of boiler from air or gas.

Incident Type - Section C (continued)

223 Air or gas rupture of pressure or process vessel.

23 *Overpressure rupture, chemical reaction (no fire)*

231 Chemical reaction rupture of process vessel.

24 *Explosion (no fire)*

240 Explosion (no fire), other.
241 Munitions or bomb explosion (no fire).
242 Blasting agent explosion (no fire).
243 Fireworks explosion (no fire).
244 Dust explosion (no fire).

25 *Excessive heat, scorch burns with no ignition*

251 Excessive heat, scorch burns with no ignition.

3 *Rescue & Emergency Medical Service Incident*

30 *Rescue, emergency medical call (EMS), other*

300 Rescue, EMS incident, other.

31 *Medical assist*

311 Medical assist, assist EMS crew.

32 *Emergency medical service (EMS) Incident*

320 Emergency medical service incident, other.
321 EMS call, excluding vehicle accident with injury.
322 Motor vehicle accident with injuries.
323 Motor vehicle/pedestrian accident (MV Ped).
324 Motor vehicle accident with no injuries.

33 *Lock-In*

331 Lock-in (if lock out, use 511).

34 *Search for lost person*

340 Search for lost person, other.
341 Search for person on land.
342 Search for person in water.
343 Search for person underground.

35 *Extrication, rescue.*

350 Extrication, rescue, other.
351 Extrication of victim(s) from building/ structure.
352 Extrication of victim(s) from vehicle.
353 Removal of victim(s) from stalled elevator.
354 Trench/below-grade rescue.
355 Confined space rescue.
356 High-angle rescue.
357 Extrication of victim(s) from machinery.

36 *Water or ice-related rescue*

360 Water & ice-related rescue, other.
361 Swimming/recreational water areas rescue.
362 Ice rescue.
363 Swift water rescue.
364 Surf rescue.
365 Watercraft rescue.

37 *Electrical rescue*

370 Electrical rescue, other.
371 Electrocution or potential electrocution.
372 Trapped by power lines.

38 *Rescue or EMS standby*

381 Rescue or EMS standby.

4 *Hazardous Condition (No Fire)*

40 *Hazardous condition, other*

400 Hazardous condition, other.

41 *Combustible/flammable spills & leaks*

410 Combustible/flammable gas/liquid condition, other.
411 Gasoline or other flammable liquid spill.
412 Gas leak (natural gas or LPG).
413 Oil or other combustible liquid spill.

42 *Chemical release, reaction, or toxic condition.*

420 Toxic condition, other.
421 Chemical hazard (no spill or leak).
422 Chemical spill or leak.
423 Refrigeration leak.
424 Carbon monoxide incident.

43 *Radioactive condition.*

430 Radioactive condition, other.
431 Radiation leak, radioactive material.

44 *Electrical wiring/equipment problem.*

440 Electrical wiring/equipment problem, other.
441 Heat from short circuit (wiring), defective/worn.
442 Overheated motor.
443 Breakdown of light ballast.
444 Power line down.
445 Arcing, shorted electrical equipment.

45 *Biological hazard*

451 Biological hazard, confirmed or suspected.

46 *Accident, potential accident*

460 Accident, potential accident, other.
461 Building or structure weakened or collapsed.
462 Aircraft standby.
463 Vehicle accident, general cleanup.

47 *Explosive, bomb removal*

471 Explosive, bomb removal (for bomb scare, use 721).

Incident Type - Section C (continued)

48 ***Attempted burning, illegal action***
480 Attempted burning, illegal action, other.
481 Attempt to burn.
482 Threat to burn.
5 ***Service Call***
50 ***Service call, other***
500 Service Call, other.
51 ***Person in distress***
510 Person in distress, other.
511 Lock-out.
512 Ring or jewelry removal.
52 ***Water problem***
520 Water problem, other.
521 Water evacuation.
522 Water or steam leak.
53 ***Smoke, odor problem***
531 Smoke or odor removal.
54 ***Animal problem or rescue***
540 Animal problem, other.
541 Animal problem.
542 Animal rescue.
55 ***Public service assistance***
550 Public service assistance, other.
551 Assist police or other governmental agency.
552 Police matter.
553 Public service.
554 Assist invalid.
555 Defective elevator, no occupants.
56 ***Unauthorized burning***
561 Unauthorized burning.
57 ***Cover assignment, standby at fire station, move-up***
571 Cover assignment, standby, moveup.
6 ***Good Intent Call***
60 ***Good intent call, other***
600 Good intent call, other.
61 ***Dispatched and canceled en route***
611 Dispatched & canceled en route.
62 ***Wrong location, no emergency found***
621 Wrong location.
622 No incident found on arrival at dispatch address.
63 ***Controlled burning***
631 Authorized controlled burning.
632 Prescribed fire.
64 ***Vicinity alarm***
641 Vicinity alarm (incident in other location).
65 ***Steam, other gas mistaken for smoke***
650 Steam, other gas mistaken for smoke, other.
651 Smoke scare, odor of smoke.
652 Steam, vapor, fog or dust thought to be smoke.
653 Smoke from barbecue, tar kettle.
66 ***EMS call where party has been transported***
661 EMS call, party transported by non-fire agency.
67 ***HazMat release investigation w/no HazMat***
671 HazMat release investigation w/no HazMat.
672 Biological hazard investigation, none found.
7 ***False Alarm & False Call***
70 ***False alarm and false call, other***
700 False alarm or false call, other.
71 ***Malicious, mischievous false alarm***
710 Malicious, mischievous false call, other.
711 Municipal alarm system, malicious false alarm.
712 Direct tie to FD, malicious false alarm.
713 Telephone, malicious false alarm.
714 Central station, malicious false alarm.
715 Local alarm system, malicious false alarm.
72 ***Bomb scare***
721 Bomb scare - no bomb.
73 ***System or detector malfunction***
730 System malfunction, other.
731 Sprinkler activation due to malfunction.
732 Extinguishing system activation due to malfunction.
733 Smoke detector activation due to malfunction.
734 Heat detector activation due to malfunction.
735 Alarm system sounded due to malfunction.
736 CO detector activation due to malfunction.
74 ***Unintentional system/detector operation (no fire)***
740 Unintentional transmission of alarm, other.
741 Sprinkler activation, no fire - unintentional.
742 Extinguishing system activation.
743 Smoke detector activation, no fire - unintentional.
744 Detector activation, no fire - unintentional.
745 Alarm system activation, no fire - unintentional.
746 Carbon monoxide detector activation, no CO.

Incident Type - Section C (continued)

75 ***Biohazard scare***
751 Biological hazard, malicious false report.
8 ***Severe Weather & Natural Disaster***
800 Severe weather or natural disaster, other.
811 Earthquake assessment.
812 Flood assessment.
813 Wind storm, tornado/hurricane assessment.
814 Lightning strike (no fire).
815 Severe weather or natural disaster standby.
9 ***Special Incident Type***
90 ***Special type of incident, other***
900 Special type of incident, other.
91 ***Citizen complaint***
911 Citizen complaint.
UUU Undetermined incident type (Conversion only).

Aid Given or Received - Section D

1 Mutual aid received.
2 Automatic aid received.
3 Mutual aid given.
4 Automatic aid given.
5 Other aid given.
N None.

Actions Taken - Section F

1 ***Fire Control or Extinguishment***
10 Fire control or extinguishment, other.
11 Extinguishment by fire service personnel.
12 Salvage & overhaul.
13 Establish fire lines (wildfire).
14 Contain fire (wildland).
15 Confine fire (wildland).
16 Control fire (wildland).
17 Manage prescribed fire (wildland).
2 ***Search & Rescue***
20 Search & rescue, other.
21 Search.
22 Rescue, remove from harm.
23 Extricate, disentangle.
24 Recover body.
3 ***EMS & Transport***
30 Emergency medical services, other.
31 Provide first aid & check for injuries.
32 Provide basic life support (BLS).
33 Provide advanced life support (ALS).
34 Transport person.
4 ***Hazardous Condition***
40 Hazardous condition, other.
41 Identify, analyze hazardous materials.
42 HazMat detection, monitoring, sampling, & analysis.
43 Hazardous materials spill control and confinement.
44 Hazardous materials leak control & containment.
45 Remove hazard.
46 Decontaminate persons or equipment.
47 Decontaminate occupancy or area.
48 Remove hazardous materials.
5 ***Fires, Rescues & Hazardous Conditions***
50 Fires, rescues & hazardous conditions, other.
51 Ventilate.
52 Forcible entry.
53 Evacuate area.
54 Determine if materials are non-hazardous.
55 Establish safe area.
56 Provide air supply.
57 Provide light or electrical power.
58 Operate apparatus or vehicle.
6 ***Systems & Services***
60 Systems and services, other.
61 Restore municipal services.
62 Restore sprinkler or fire protection system.
63 Restore fire alarm system.
64 Shut down system.
65 Secure property.
66 Remove water.
7 ***Assistance***
70 Assistance, other.
71 Assist physically disabled.
72 Assist animal.
73 Provide manpower.
74 Provide apparatus.
75 Provide equipment.
76 Provide water.
77 Control crowd.
78 Control traffic.
79 Assess severe weather or natural disaster damage.
8 ***Information, Investigation & Enforcement***

Actions Taken - Section F (continued)

80 Information, investigation & enforcement, other.
81 Incident command.
82 Notify other agencies.
83 Provide information to public or media.
84 Refer to proper authority.
85 Enforce codes.
86 Investigate.
87 Investigate, fire out on arrival.
9 Fill-in, Standby
90 Fill-in, standby, other.
91 Fill-in or moveup.
92 Standby.
93 Cancelled en route.
00 Action taken, other.
UU Undetermined (Conversion only).

Detector

1 Detector alerted occupants.
2 Detector did not alert occupants.
U Unknown.

Hazardous Materials Release - Section H3

1 Natural gas: slow leak, no evac. or HazMat actions.
2 Propane gas - Less than a 21 lb. tank.
3 Gasoline - vehicle fuel tank or portable container.
4 Kerosene - fuel-burning equipment/portable storage.
5 Diesel fuel/fuel oil - vehicle fuel tank/portable.
6 Household/office solvent or chemical spill.
7 Motor oil - from engine or portable container.
8 Paint - spills less than 55 gallons.
0 Special HazMat actions required or spill >= 55 gal.
N None.

Mixed Use Property - Section I

10 Assembly use.
20 Educational use.
33 Medical use.
40 Residential use.
51 Row of stores.
53 Enclosed mall.
58 Business and residential use.
59 Office use.
60 Industrial use.
63 Military use.
65 Farm use.
00 Mixed use, other.
NN Not mixed use.

Property Use - Section J

0 Property Use, Other
1 Assembly
100 Assembly, other.
110 Fixed-use recreation places, other.
111 Bowling establishment.
112 Billiard center, pool hall.
113 Electronic amusement center.
114 Ice rink: indoor, outdoor.
115 Roller rink: indoor or outdoor.
116 Swimming facility: indoor or outdoor.
120 Variable-use amusement, recreation places, other.
121 Ballroom, gymnasium.
122 Convention center, exhibition hall.
123 Stadium, arena.
124 Playground.
129 Amusement center: indoor/outdoor.
130 Places of worship, funeral parlors, other.
131 Church, mosque, synagogue, temple, chapel.
134 Funeral parlor.
140 Clubs, other.
141 Athletic/health club.
142 Clubhouse.
143 Yacht Club.
144 Casino, gambling clubs.
150 Public or government, other.
151 Library.
152 Museum.
154 Memorial structure, including monuments & statues.
155 Courthouse.
160 Eating, drinking places, other.
161 Restaurant or cafeteria.
162 Bar or nightclub.
170 Passenger terminal, other.
171 Airport passenger terminal.
173 Bus station.
174 Rapid transit station.
180 Studio/theater, other.

Property Use - Section J (continued)

181 Live performance theater.
182 Auditorium, concert hall.
183 Movie theater.
185 Radio, television studio.
186 Film/movie production studio.

2 *Educational*

200 Educational, other.
210 Schools, non-adult, other.
211 Preschool.
213 Elementary school, including kindergarten.
215 High school/junior high school/middle school.
241 Adult education center, college classroom.
250 Day care, other (Conversion only).
254 Day care, in commercial property.
255 Day care, in residence, licensed.
256 Day care in residence, unlicensed.

3 *Health Care, Detention & Correction*

300 Health care, detention, & correction, other.
311 24-hour care Nursing homes, 4 or more persons.
321 Mental retardation/development disability facility.
322 Alcohol or substance abuse recovery center.
323 Asylum, mental institution.
331 Hospital - medical or psychiatric.
332 Hospices.
340 Clinics, doctors offices, hemodialysis cntr, other.
341 Clinic, clinic-type infirmary.
342 Doctor, dentist or oral surgeon office.
343 Hemodialysis unit.
361 Jail, prison (not juvenile).
363 Reformatory, juvenile detention center.
365 Police station.

4 *Residential*

400 Residential, other.
419 1 or 2 family dwelling.
429 Multifamily dwelling.
439 Boarding/rooming house, residential hotels.
449 Hotel/motel, commercial.
459 Residential board and care.
460 Dormitory-type residence, other.
462 Sorority house, fraternity house.
464 Barracks, dormitory.

5 *Mercantile, Business*

500 Mercantile, business, other.
511 Convenience store.
519 Food and beverage sales, grocery store.
529 Textile, wearing apparel sales.
539 Household goods, sales, repairs.
549 Specialty shop.
557 Personal service, including barber & beauty shops.
559 Recreational, hobby, home repair sales, pet store.
564 Laundry, dry cleaning.
569 Professional supplies, services.
571 Service station, gas station.
579 Motor vehicle or boat sales, services, repair.
580 General retail, other.
581 Department or discount store.
592 Bank.
593 Office: veterinary or research.
596 Post office or mailing firms.
599 Business office.

6 *Industrial, Utility, Defense, Agriculture, Mining*

600 Ind., utility, defense, agriculture, mining, other.
610 Energy production plant, other.
614 Steam or heat-generating plant.
615 Electric-generating plant.
629 Laboratory or science laboratory.
631 Defense, military installation.
632 Flight control tower.
635 Computer center.
639 Communications center.
640 Utility or Distribution system, other.
642 Electrical distribution.
644 Gas distribution, gas pipeline.
645 Flammable liquid distribution, F.L. pipeline.
647 Water utility.
648 Sanitation utility.
655 Crops or orchard.
659 Livestock production.
669 Forest, timberland, woodland.
679 Mine, quarry.

7 *Manufacturing, Processing*

700 Manufacturing, processing.

8 *Storage*

Property Use - Section J (continued)

800 Storage, other.
807 Outside material storage area.
808 Outbuilding or shed.
816 Grain elevator, silo.
819 Livestock, poultry storage.
839 Refrigerated storage.
849 Outside storage tank.
880 Vehicle storage, other.
881 Parking garage, (detached residential garage).
882 Parking garage, general vehicle.
888 Fire station.
891 Warehouse.
899 Residential or self-storage units.
898 Dock, marina, pier, wharf.

9 *Outside or Special Property*

900 Outside or special property, other.
919 Dump, sanitary landfill.
921 Bridge, trestle.
922 Tunnel.
926 Outbuilding, protective shelter.
931 Open land or field.
935 Campsite with utilities.
936 Vacant lot.
937 Beach.
938 Graded and cared-for plots of land.
940 Water area, other.
941 Open ocean, sea or tidal waters.
946 Lake, river, stream.
951 Railroad right-of-way.
952 Railroad yard.
960 Street, other.
961 Highway or divided highway.
962 Residential street, road or residential driveway.
963 Street or road in commercial area.
965 Vehicle parking area.
972 Aircraft runway.
973 Aircraft taxiway.
974 Aircraft loading area.
981 Construction site.
982 Oil or gas field.
983 Pipeline, power line or other utility right-of-way.
984 Industrial plant yard - area.
NNN None.
UUU Undetermined.

Name Prefix

MR Mr.
MRS Mrs.
MS Ms.
DR Doctor.
REV Reverend.

Name Suffix

JR Junior.
SR Senior.
I The First.
II The Second.
III The Third.
IV The Fourth.
V The Fifth.
MD Medical Doctor.
DDS Doctor of Dental Science.

Fire Module Data Dictionary

On-Site Materials or Products - Section C

1 ***Foods, Beverages, Agriculture***
100 Foods, beverages, agriculture, other.
11 ***Food***
110 Food, other.
111 Baked goods.
112 Meat products, including poultry & fish.
113 Dairy products.
114 Produce, fruit or vegetables.
115 Sugar, spices.
116 Deli products.
117 Cereals, grains; packaged.
118 Fat/cooking grease, including lard & animal fat.
12 ***Beverages***
120 Beverages, other.
121 Alcoholic beverage.
122 Nonalcoholic beverage.
13 ***Agriculture***
130 Agriculture, other.
131 Trees, plants, flowers.
132 Feed, grain, seed.
133 Hay, straw.
134 Crop, not grain.
135 Livestock.
136 Pets.
137 Pesticides.
138 Fertilizer.
2 ***Personal & Home Products***
200 Personal & home products, other.
21 ***Fabrics***
210 Fabrics, other.
211 Curtains, drapes.
212 Linens.
213 Bedding.
214 Cloth, yarn, dry goods.
22 ***Wearable products***
220 Wearable products, other.
221 Clothes.
222 Footwear.
223 Eyeglasses.
225 Perfumes, colognes, cosmetics.
226 Toiletries.
23 ***Accessories***
230 Accessories, other.
231 Jewelry, watches.
232 Luggage, suitcases.
233 Purses, satchels, briefcases, wallets, belts.
24 ***Furnishings***
240 Furnishings, other.
241 Furniture.
242 Beds, mattresses.
243 Clocks.
244 Houseware.
245 Glass, ceramics, china, pottery, stoneware.
246 Silverware.
3 ***Raw Materials***
300 Raw materials, other.
31 ***Wood***
310 Wood, other.
311 Lumber, sawn wood.
312 Timber.
313 Cork.
314 Pulp.
315 Sawdust, wood chips.
32 ***Fibers***
320 Fibers, other.
321 Cotton.
322 Wool.
323 Silk.
33 ***Animal skins***
330 Animal skins, other.
331 Leather.
332 Fur.
34 ***Other Raw Materials***
341 Ore.
342 Rubber.
343 Plastics.
344 Fiberglass.
345 Salt.
4 ***Paper Products, Rope***
400 Paper products, rope, other.
41 ***Paper products***
410 Paper products, other.
411 Newspaper, magazines.
412 Books.
413 Greeting cards.
414 Paper, rolled.
415 Cardboard.
416 Packaged paper products, including stationery.

On-Site Materials - Section C (continued)

417 Paper records or reports.

42 *Rope, twine, cordage*

421 Rope, twine, cordage.

5 *Flammables, Chemicals, Plastics*

500 Flammables, chemicals, plastics, other.

51 *Flammables, combustible liquids*

510 Flammables, combustible liquids, other.
511 Gasoline, diesel fuel.
512 Flammable liquid, not gasoline.
513 Combustible liquid, including heating oil.
514 Motor oil.
515 Heavy oils, grease, noncooking related.
516 Asphalt.
517 Adhesive, resin, tar.

52 *Flammable gases*

520 Flammable gases, other.
521 Natural gas.
522 LP gas, butane, propane.
523 Hydrogen gas.

53 *Solid fuel, coal type*

530 Solid fuel, coal type, other.
531 Charcoal.
532 Coal.
533 Peat.
534 Coke.

54 *Chemicals, drugs*

540 Chemicals, drugs, other.
541 Hazardous chemicals.
542 Nonhazardous chemicals.
543 Cleaning supplies.
544 Pharmaceuticals, drugs.
545 Illegal drugs.

55 *Radioactive materials*

551 Radioactive materials.

6 *Construction, Machinery, Metals*

600 Construction, machinery, metals, other.

61 *Machinery, tools*

610 Machinery, tools, other.
611 Industrial machinery.
612 Machine parts.
613 Tools (power & hand tools).

62 *Construction supplies*

620 Construction supplies, other.
621 Hardware products.
622 Construction & home improvement products.
623 Pipes, fittings.
624 Stone-working materials.
625 Lighting fixtures and lamps.
626 Electrical parts, supplies, equipment.
627 Insulation.
628 Abrasives.
629 Fencing, fence supplies.

63 *Floor & wall coverings*

630 Floor & wall coverings, other.
631 Carpets, rugs.
632 Linoleum, tile.
633 Ceramic tile.
634 Wallpaper.
635 Paint.

64 *Metal products*

640 Metal products, other.
641 Steel, iron products.
642 Nonferrous metal products.
643 Combustible metals products.

7 *Appliances, Electronics, Medical, Laboratory*

700 Appliances, electronics, medical, lab, other.

71 *Appliances, electronics*

710 Appliances, electronics, other.
711 Appliances.
712 Electronic parts, supplies, equipment.
713 Electronic media.
714 Photographic equipment, supplies, materials.

72 *Medical, laboratory products*

720 Medical, laboratory products, other.
721 Dental supplies.
722 Medical supplies.
723 Optical products.
724 Veterinary supplies.
725 Laboratory supplies.

8 *Vehicles,Vehicle Parts*

800 Vehicles, other (Conversion only).

81 *Motor vehicles*

810 Motor vehicles & parts, other.
811 Autos, trucks, buses, recreational vehicles.
812 Construction vehicles.
813 Motor vehicle parts, not including tires.
814 Tires.

82 *Watercraft*

820 Watercraft, other.
821 Boats, ships.

83 *Aircraft*

On-Site Materials - Section C (continued)

830 Aircraft, other.
831 Planes, airplanes.
832 Helicopters.
84 ***Rail***
840 Rail, other.
841 Trains, light rail, rapid transit cars.
842 Rail equipment.
85 ***Non-motorized vehicles***
850 Non-motorized vehicles, other.
851 Bicycles, tricycles, unicycles.
9 ***Other Products***
91 ***Containers, packing materials***
910 Containers, packing materials, other.
911 Bottles, barrels, boxes.
912 Packing material.
913 Pallets.
92 ***Previously owned products***
920 Previously owned products, other.
921 Antiques.
922 Collectibles.
923 Used merchandise.
93 ***Ordnance, explosives, fireworks***
930 Ordnance, explosives, fireworks, other.
931 Guns.
932 Ammunition.
933 Explosives.
934 Fireworks, commercially made.
935 Rockets, missiles.
94 ***Recreation, arts (products)***
940 Recreation, arts products, other.
941 Musical instruments.
942 Hobby, crafts.
943 Art supply/artwork.
944 Sporting goods.
945 Camping, hiking, outdoor products.
946 Games, toys.
95 ***Mixed sales products***
950 Mixed sales products, other .
951 Office supplies.
952 Restaurant supplies, not including food.
96 ***Discarded material***
960 Discarded material, other.
961 Junkyard materials.
962 Recyclable materials.
963 Trash, not recyclable.
000 On-site materials, other.
NNN None.
UUU Undetermined.

On-site Materials Storage Use - Section C

1 Bulk storage or warehousing.
2 Processing or manufacturing.
3 Packaged goods for sale.
4 Repair or service.
N None.
U Undetermined.

Area of Fire Origin - Section D1

0 ***Means of Egress***
01 Hallway corridor, mall.
02 Exterior stairway, ramp, or fire escape.
03 Interior stairway or ramp.
04 Escalator - exterior, interior.
05 Entrance way, lobby.
09 Egress/exit, other.
1 ***Assembly, Sales Areas (Groups of People)***
11 Arena, assembly area w/ fixed seats - 100+ persons.
12 Assembly area without fixed seats - 100+ persons.
13 Assembly area - less than 100 persons.
14 Common room, den, family room, living room, lounge.
15 Sales area, showroom (exclude display window).
16 Art gallery, exhibit hall, library.
17 Swimming pool.
10 Assembly or sales area, other.
2 ***Function Areas***
21 Bedroom - < 5 persons; included are jail or prison.
22 Bedroom - 5+ persons; including barrack/dormitory.
23 Dining room, cafeteria, bar area, beverage service.
24 Cooking area, kitchen.
25 Bathroom, checkroom, lavatory, locker room.
26 Laundry area, wash house (laundry).
27 Office.
28 Personal service area, barber/beauty salon area.

Area of Fire Origin - Section D1 (continued)

20 Function areas, other.

3 ***Technical Processing Areas***

31 Laboratory.

32 Dark room, photography area, or printing area.

33 Treatment - first aid area, surgery area.

34 Surgery area - major operations, operating room.

35 Computer room, control room or center.

36 Stage area - performance, basketball court, boxing.

37 Projection room, spotlight area.

38 Processing/manufacturing area, workroom.

30 Technical processing areas, other.

4 ***Storage Areas***

41 Storage room, area, tank, or bin.

42 Closet.

43 Storage: supplies or tools; dead storage.

44 Records storage room, storage vault.

45 Shipping/receiving area; loading area, dock or bay.

46 Chute/container - trash, rubbish, waste.

47 Vehicle storage area; garage, carport.

40 Storage area, other.

5 ***Service Areas***

51 Dumbwaiter or elevator shaft.

52 Conduit, pipe, utility, or ventilation shaft.

53 Light shaft.

54 Chute; laundry or mail, excluding trash chutes.

55 Duct: HVAC, cable, exhaust, heating, or AC.

56 Display window.

57 Chimney (conversion only).

58 Conveyor.

50 Service facilities, other.

6 ***Service, Equipment Areas***

61 Machinery room or area; elevator machinery room.

62 Heating room or area, water heater area.

63 Switchgear area, transformer vault.

64 Incinerator area.

65 Maintenance shop or area, paint shop or area.

66 Cell, test.

67 Enclosure, pressurized air.

68 Enclosure with enriched oxygen atmosphere.

60 Equipment or service area, other.

7 ***Structural Areas***

71 Substructure area or space, crawl space.

72 Exterior balcony, unenclosed porch.

73 Ceiling & floor assembly, crawl space between stories.

74 Attic: vacant, crawl space above top story, cupola.

75 Wall assembly, concealed wall space.

76 Wall surface: exterior.

77 Roof surface: exterior.

78 Awning.

70 Structural area, other.

8 ***Transportation,Vehicle Areas***

81 Operator/passenger area of transportation equip.

82 Cargo/trunk area - all vehicles.

83 Engine area, running gear, wheel area.

84 Fuel tank, fuel line.

85 Separate operator/control area of transportation.

86 Exterior, exposed surface.

80 Vehicle area, other.

9 ***Other Area of Origin***

91 Railroad right of way: on or near.

92 Highway, parking lot, street: on or near.

93 Courtyard, patio, porch, terrace.

94 Open area - outside; included are farmland, field.

95 Wildland, woods.

96 Construction/renovation area.

97 Multiple areas.

98 Vacant structural area.

90 Outside area, other.

00 Other.

UU Undetermined.

Heat Source - Section D2

1 ***Operating Equipment***

11 Spark, ember or flame from operating equipment.

12 Radiated, conducted heat from operating equipment.

13 Electrical arcing.

10 Heat from powered equipment, other.

4 ***Hot or Smoldering Object***

41 Heat, spark from friction.

Heat Source - Section D2 (continued)

42 Molten, hot material.
43 Hot ember or ash.
40 Hot or smoldering object, other.

5 ***Explosives, Fireworks***

51 Munitions.
53 Blasting agent, primer cord, black powder fuse.
54 Fireworks.
55 Model and amateur rockets.
56 Incendiary device.
50 Explosive, fireworks, other.

6 ***Other Open Flame or Smoking Materials***

61 Cigarette.
62 Pipe or cigar.
63 Heat from undetermined smoking material.
64 Match.
65 Lighter: cigarette, cigar.
66 Candle.
67 Warning or road flare; fusee.
68 Backfire from internal combustion engine.
69 Flame/torch used for lighting.
60 Heat from other open flame or smoking materials.

7 ***Chemical, Natural Heat Sources***

71 Sunlight.
72 Spontaneous combustion, chemical reaction.
73 Lightning discharge.
74 Other static discharge.
70 Chemical, natural heat source, other.

8 ***Heat Spread from Another Fire***

81 Heat from direct flame, convection currents.
82 Radiated heat from another fire.
83 Flying brand, ember, spark.
84 Conducted heat from another fire.
80 Heat spread from another fire, other.

9 ***Other Heat Sources***

97 Multiple heat sources including multiple ignitions.
00 Heat source: other.
UU Undetermined.

Item First Ignited - Section D3

1 ***Structural Component, Finish***

10 Structural component or finish, other.
11 Exterior roof covering, surface, finish.
12 Exterior wall covering or finish.
13 Exterior trim, including doors.
14 Floor covering or rug/carpet/mat, surface.
15 Interior wall covering excluding drapes, etc.
16 Interior ceiling covering or finish.
17 Structural member or framing.
18 Thermal, acoustical insulation within wall, partition or floor/ceiling space.

2 ***Furniture, Utensils, Including Built-in Furniture***

20 Furniture, utensils, other.
21 Upholstered sofa, chair, vehicle seats.
22 Non-upholstered chair, bench.
23 Cabinetry (including built-in).
24 Ironing board.
25 Appliance housing or casing.
26 Household utensils.

3 ***Soft Goods,Wearing Apparel***

30 Soft goods, wearing apparel, other.
31 Mattress, pillow.
32 Bedding; blanket, sheet, comforter.
33 Linen; other than bedding.
34 Wearing apparel not on a person.
35 Wearing apparel on a person.
36 Curtain, blind, drapery, tapestry.
37 Goods not made up, including fabrics & yard goods.
38 Luggage.

4 ***Adornment, Recreational Material, Signs***

40 Adornment, recreational material, signs, other.
41 Christmas tree.
42 Decoration.
43 Sign, including outdoor signs such as billboards.
44 Chips, including wood chips.
45 Toy, game.
46 Awning, canopy.
47 Tarpaulin, tent.

5 ***Storage Supplies***

50 Storage supplies, other.
51 Box, carton, bag, basket, barrel.
52 Material being used to make a product.
53 Pallet, skid (empty).
54 Cord, rope, twine, yarn.
55 Packing, wrapping material.
56 Baled goods or material.
57 Bulk storage.

Item First Ignited - Section D3 (continued)

58 Palletized material, material stored on pallets.
59 Rolled, wound material (paper, fabric).
6 ***Liquids, Piping, Filters***
60 Liquids, piping, filters, other.
61 Atomized liquid, vaporized liquid, aerosol.
62 Flammable liquid/gas - in/from engine or burner.
63 Flammable liquid/gas - in/from final container.
64 Flammable liquid/gas in container or pipe.
65 Flammable liquid/gas - uncontained.
66 Pipe, duct, conduit, hose.
67 Pipe, duct, conduit, hose covering.
68 Filter, including evaporative cooler pads.
7 ***Organic Materials***
70 Organic materials, other.
71 Agricultural crop, including fruits and vegetables.
72 Light vegetation - not crop, including grass.
73 Heavy vegetation - not crop, including trees.
74 Animal living or dead.
75 Human living or dead.
76 Cooking materials, including edible materials.
77 Feathers or fur, not on bird or animal.
8 ***General Materials***
80 General materials, other (conversion only).
81 Electrical wire, cable insulation.
82 Transformer, including transformer fluids.
83 Conveyor belt, drive belt, V-belt.
84 Tire.
85 Railroad ties.
86 Fence, pole.
87 Fertilizer.
88 Pyrotechnics, explosives.
9 ***General Materials Continued***
90 General materials continued (conversion only).
91 Book.
92 Magazine, newspaper, writing paper.
93 Adhesive.
94 Dust, fiber, lint, including sawdust and excelsior.
95 Film, residue, including paint & resin.
96 Rubbish, trash, waste.
97 Oily rags.
99 Multiple items first ignited.
00 Item First Ignited, Other.
UU Undetermined.

Type of Material First Ignited - Section D4

1 ***Flammable Gas***
11 Natural gas.
12 LP gas.
13 Anesthetic gas.
14 Acetylene gas.
15 Hydrogen.
10 Flammable gas, other.
2 ***Flammable, Combustible Liquid***
21 Ether, pentane type flammable liquid.
22 JP-4 jet fuel & methyl ethyl ketone type flammable.
23 Gasoline.
24 Turpentine, butyl alcohol type flammable liquid.
25 Kerosene, No.1 and 2 fuel oil, diesel fuel.
26 Cottonseed oil, creosote oil type combustible
27 Cooking oil, transformer or lubricating oil.
28 Ethanol.
20 Flammable or combustible liquid, other.
3 ***Volatile Solid or Chemical***
31 Fat, grease, butter, margarine, lard.
32 Petroleum jelly and non-food grease.
33 Polish, paraffin, wax.
34 Adhesive, resin, tar, glue, asphalt, pitch.
35 Paint, varnish - applied.
36 Combustible metal, included are magnesium.
37 Solid chemical, included are explosives.
38 Radioactive material.
30 Volatile solid or chemical, other.
4 ***Plastics***
41 Plastic.
5 ***Natural Product***
51 Rubber, excluding synthetic rubbers.
52 Cork.
53 Leather.
54 Hay, straw.
55 Grain, natural fiber (preprocess).
56 Coal, coke, briquettes, peat.
57 Food, starch, excluding fat and grease (Code 31).

Type of Material First Ignited - Section D4 (continued)

58 Tobacco.
50 Natural product, other.
6 ***Wood or Paper – Processed***
61 Wood chips, sawdust, shavings.
62 Round timber, including round posts, poles.
63 Sawn wood, including all finished lumber.
64 Plywood.
65 Fiberboard, particleboard, and hardboard.
66 Wood pulp, wood fiber.
67 Paper, including cellulose, waxed paper.
68 Cardboard.
60 Wood or paper, processed, other.
7 ***Fabric, Textiles, Fur***
71 Fabric, fiber, cotton, blends, rayon, wool.
74 Fur, silk, other fabric.
75 Wig.
76 Human hair.
77 Plastic-coated fabric.
70 Fabric, textile, fur, other.
8 ***Material Compounded with Oil***
81 Linoleum.
82 Oilcloth.
86 Asphalt-treated material.
80 Material compounded with oil, other.
9 ***Other Material***
99 Multiple types of material.
00 Type of material first ignited, other.
UU Undetermined.

Cause of Ignition - Section E1

1 Intentional.
2 Unintentional.
3 Failure of equipment or heat source.
4 Act of nature.
5 Cause under investigation.
0 Cause, other **(System generated code only, not used for data entry).**
U Cause undetermined after investigation.

Factors Contributing To Ignition - Section E2

1 ***Misuse of Material or Product***
10 Misuse of material or product, other.
11 Abandoned or discarded materials or products.
12 Heat source too close to combustibles.
13 Cutting, welding too close to combustible.
14 Flammable liquid or gas spilled.
15 Improper fueling technique.
16 Flammable liquid used to kindle fire.
17 Washing part, painting with flammable liquid.
18 Improper container or storage procedure.
19 Playing with heat source.
2 ***Mechanical Failure, Malfunction***
20 Mechanical failure, malfunction, other.
21 Automatic control failure.
22 Manual control failure.
23 Leak or break.
25 Worn out.
26 Backfire.
27 Improper fuel used.
3 ***Electrical Failure, Malfunction***
30 Electrical failure, malfunction, other.
31 Water-caused short-circuit arc.
32 Short-circuit arc from mechanical damage.
33 Short-circuit arc from defective, worn insulation.
34 Unspecified short-circuit arc.
35 Arc from faulty contact, broken conductor.
36 Arc, spark from operating equipment.
37 Fluorescent light ballast.
4 ***Design, Manufacturing, Installation Deficiency***
40 Design, manufacture, installation deficiency, other.
41 Design deficiency.
42 Construction deficiency.
43 Installation deficiency.
44 Manufacturing deficiency.
5 ***Operational Deficiency***
50 Operational deficiency, other.
51 Collision, knock down, run over, turn over.
52 Accidentally turned on, not turned off.
53 Equipment unattended.
54 Equipment overloaded.
55 Failure to clean.
56 Improper startup/shutdown procedure.
57 Equipment not used for purpose intended.
58 Equipment not operated properly.
6 ***Natural Condition***
60 Natural condition, other.

Factors Contributing to Ignition - Section E2 (continued)

61 High wind.
62 Storm.
63 High water including floods.
64 Earthquake.
65 Volcanic action.
66 Animal.
7 ***Fire Spread or Control***
70 Fire spread or control, other.
71 Exposure fire.
72 Rekindle.
73 Outside/open fire for debris or waste disposal.
74 Outside/open fire for warming or cooking.
75 Agriculture or land management burns.
00 Factors contributing to ignition, other.
NN None.
UU Undetermined.

Human Factors Contributing to Ignition - Section E3

1 Asleep.
2 Possibly impaired by alcohol or drugs.
3 Unattended or unsupervised person.
4 Possibly mentally disabled.
5 Physically disabled.
6 Multiple persons involved.
7 Age was a factor.
N None.

Age Factor Gender - Section E3

1 Male.
2 Female.

Equipment Involved In Ignition - Section F1

1 ***Heating,Ventilation, Air Conditioning***
100 Heating, ventilation and air conditioning, other.
111 Air conditioner.
112 Heat pump.
113 Fan.
114 Humidifier.
115 Ionizer.
116 Dehumidifier.
117 Evaporative cooler, cooling tower.
120 Fireplace, chimney, other.
121 Fireplace, masonry.
122 Fireplace, factory-built.
123 Fireplace, insert/stove.
124 Stove, heating.
125 Chimney connector, vent connector.
126 Chimney: brick, stone, masonry.
127 Chimney: metal, including stovepipe, flue.
131 Furnace, local heating unit, built-in.
132 Furnace, central heating unit.
133 Boiler (power, process, heating).
141 Heater, excluding catalytic and oil-filled heaters.
142 Heater, catalytic.
143 Heater, oil filled.
144 Heat lamp.
145 Heat tape.
151 Water heater.
152 Steamline, heat pipe, hot air duct.
2 ***Electrical Distribution, Lighting & Power Transfer***
200 Electrical distribution, power transfer, other.
210 Electrical wiring, other.
211 Electrical power (utility) line.
212 Electrical service supply wires from utility.
213 Electric meter, meter box.
214 Wiring from meter box to circuit breaker
215 Panelboard, switchboard, circuit breaker board.
216 Electrical branch circuit.
217 Outlet, receptacle.
218 Wall switch.
219 Ground fault interrupter, GFI.
221 Transformer, distribution type.
222 Overcurrent, disconnect equipment.
223 Transformer, low voltage.
224 Generator.
225 Inverter.
226 Uninterrupted power supply (UPS).
227 Surge protector.
228 Battery charger, rectifier.
229 Battery.
230 Lamp, lighting, other.
231 Lamp: tabletop, floor, desk.
232 Lantern, flashlight.
233 Incandescent lighting fixture.
234 Fluorescent lighting fixture, ballast.
235 Halogen lighting fixture or lamp.
236 Sodium, mercury vapor lighting fixtures or lamps.

Equipment Involved In Ignition - Section F1 (continued)

237 Work light, trouble light.
238 Light bulb.
241 Nightlight.
242 Decorative lights, line voltage.
243 Decorative or landscape lighting, low voltage.
244 Sign.
251 Fence, electric.
252 Traffic control device.
253 Lightning rod, arrester/grounding device.
260 Cord, plug, other.
261 Power cord, plug - detachable from appliance.
262 Power cord, plug - permanently attached.
263 Extension cord.

3 *Shop Tools & Industrial Equipment*

300 Shop or industrial equipment, other.
310 Power tools, other.
311 Power saw.
312 Power lathe.
313 Power shaper, router, jointer, planer.
314 Power cutting tool.
315 Power drill, screwdriver.
316 Power sander, grinder, buffer, polisher.
317 Power hammer, including jackhammers.
318 Power nail gun, stud driver, stapler.
320 Painting tools, other.
321 Paint dipper.
322 Paint flow coating machine.
323 Paint mixing machine.
324 Paint sprayer.
325 Coating machine, including asphalt-saturating.
331 Welding torch.
332 Cutting torch.
333 Burners.
334 Soldering equipment.
340 Hydraulic equipment, other.
341 Air compressor.
342 Gas compressor.
343 Atomizing equipment.
344 Pump.
345 Wet/dry vacuum (shop vacuum).
346 Hoist, lift.
347 Powered jacking equipment.
348 Drilling machinery or equipment.
351 Heat-treating equipment.
352 Incinerator.
353 Industrial furnace, kiln.
354 Tarpot, tar kettle.
355 Casting, molding, forging equipment.
356 Distilling equipment.
357 Digester, reactor.
358 Extractor, waste recovery machine.
361 Conveyor.
362 Power transfer equipment: ropes, cables, blocks.
363 Power takeoff.
364 Powered valves.
365 Bearing or brake.
371 Picking, carding, weaving machine.
372 Testing equipment.
373 Gas regulator.
374 Motor - separate.
375 Internal combustion engine (non-vehicular).
376 Printing press.
377 Car washing equipment.

4 *Commercial & Medical Equipment*

400 Commercial or medical equipment, other.
410 Medical equipment, other.
411 Dental, medical, or other powered bed or chair.
412 Dental equipment, other.
413 Dialysis equipment.
414 Medical imaging equipment.
415 Medical monitoring equipment.
416 Oxygen administration equipment.
417 Radiological equipment, x-ray, radiation therapy.
418 Sterilizer: medical.
419 Therapeutic equipment.
421 Transmitter.
422 Telephone switching gear, including PBX.
423 TV monitor array.
424 Studio-type TV camera.
425 Studio-type sound recording/modulating equipment.
426 Radar equipment.
431 Amusement ride equipment.
432 Ski lift.
433 Elevator or lift.
434 Escalator.

Equipment Involved In Ignition - Section F1 (continued)

441 Microfilm, microfiche viewing equipment.
442 Photo processing equipment.
443 Vending machine.
444 Nonvideo arcade game.
445 Water fountain, water cooler.
446 Telescope.
450 Laboratory equipment, other.
451 Electron microscope.

5 *Garden Tools & Agricultural Equipment*

500 Gardening tools or agricultural equipment, other.
511 Combine, threshing machine.
512 Hay processing equipment.
513 Elevator or conveyor: farm.
514 Silo loader, unloader, screw/sweep auger.
515 Feed grinder, mixer, blender.
516 Milking machine.
517 Pasteurizer.
518 Cream separator.
521 Sprayer: farm or garden.
522 Chain saw.
523 Weed burner.
524 Lawn mower.
525 Lawn, landscape trimmer, edger.
531 Lawn vacuum.
532 Leaf blower.
533 Mulcher, grinder, chipper.
534 Snow blower, thrower.
535 Log splitter.
536 Post-hole auger.
537 Post driver, pile driver.
538 Tiller, cultivator.

6 *Kitchen & Cooking Equipment*

600 Kitchen & cooking equipment, other.
611 Blender, juicer, food processor, mixer.
612 Coffee grinder.
621 Can opener.
622 Knife.
623 Knife sharpener.
631 Coffee maker or teapot.
632 Food warmer, hot plate.
633 Kettle.
634 Popcorn popper.
635 Pressure cooker or canner.
636 Slow cooker.
637 Toaster, toaster oven, counter-top broiler.
638 Waffle iron, griddle.
639 Wok, frying pan, skillet.
641 Breadmaking machine.
642 Deep fryer.
643 Grill, hibachi, barbecue.
644 Microwave oven.
645 Oven, rotisserie.
646 Range, stove with/without oven or cooking surface.
647 Steam table, warming drawer/table.
651 Dishwasher.
652 Freezer when separate from refrigerator.
653 Garbage disposer.
654 Grease hood/duct exhaust fan.
655 Ice maker (separate from refrigerator).
656 Refrigerator, refrigerator/freezer.

7 *Electronic and Other Electrical Equipment*

700 Electronic equipment, other.
710 Computer device, other.
711 Computer.
712 Computer storage device: external.
713 Computer modem: external.
714 Computer monitor.
715 Computer printer.
716 Computer projection device, LCD panel.
720 Office equipment, other.
721 Adding machine, calculator.
722 Telephone or answering machine.
723 Cash register.
724 Copier.
725 Fax machine.
726 Paper shredder.
727 Postage, shipping meter equipment.
728 Typewriter.
730 Musical instrument, other.
731 Guitar.
732 Piano, organ.
733 Musical synthesizer or keyboard.
740 Sound recording or receiving equipment, other.
741 CD player (audio).
742 Laser disk player.
743 Radio.
744 Radio, two way.

Equipment Involved In Ignition - Section F1 (continued)

745 Record player, phonograph, turntable.
747 Speakers, audio - separate components.
748 Stereo equipment.
749 Tape recorder or player.
750 Video equipment, other.
751 Cable converter box.
752 Projector: film, slide, overhead.
753 Television.
754 VCR or VCR-TV combination.
755 Video game - electronic.
756 Camcorder, video camera.
757 Photographic camera and equipment.

8 *Personal & Household Equipment*

800 Personal or household equipment, other.
811 Clothes dryer.
812 Trash compactor.
813 Washer/dryer combination (within one frame).
814 Washing machine - clothes.
821 Hot tub, whirlpool, spa.
822 Swimming pool equipment.
830 Floor care equipment, other.
831 Broom - electric.
832 Carpet cleaning equipment, including rug shampooer.
833 Floor buffer, waxer, cleaner.
834 Vacuum cleaner.
841 Comb, hair brush.
842 Curling iron.
843 Electrolysis equipment.
844 Hair curler warmer.
845 Hair dryer.
846 Makeup mirror, lighted.
847 Razor, shaver.
848 Suntan equipment, sunlamp.
849 Toothbrush.
850 Portable appliance designed to produce heat, other.
851 Baby bottle warmer.
852 Blanket - electric.
853 Heating pad.
854 Clothes steamer.
855 Clothes iron.
861 Automatic door opener - not garage.
862 Burglar alarm.
863 Garage door opener.
864 Gas detector.
865 Intercom.
866 Smoke or heat detector, fire alarm.
868 Thermostat.
871 Ashtray.
872 Charcoal lighter.
873 Cigarette lighter, pipe lighter.
874 Fire-extinguishing equipment.
875 Insect trap.
876 Timer.
877 Novelty lighter.
881 Model vehicles.
882 Toy, powered.
883 Woodburning kit.
891 Clock.
892 Gun.
893 Jewelry cleaning machine.
894 Scissors.
895 Sewing machine.
896 Shoe polisher.
897 Sterilizer.
000 Other equipment involved in ignition.
NNN None.
UUU Undetermined.

Equipment Power Source - Section F2

1 *Electrical*

11 Electrical line voltage (>=50 volts).
12 Batteries and low voltage (< 50 volts).
10 Electrical, other.

2 *Gas Fuels*

21 Natural gas or other lighter-than-air gas.
22 LP gas or other heavier-than-air gas.
20 Gas fuels, other.

3 *Liquid Fuels*

31 Gasoline.
32 Alcohol.
33 Kerosene, diesel fuel, No.1 and 2 fuel oil.
34 No.4, 5 & 6 fuel oils.
30 Liquid fuel, other.

4 *Solid Fuels*

41 Wood, paper.
42 Coal, charcoal.
43 Chemicals.
40 Solid fuel, other.

Equipment Power Source - Section F2 (continued)

5 *Other Power Sources*
51 Compressed air.
52 Steam.
53 Water.
54 Wind.
55 Solar.
56 Geothermal.
57 Nuclear.
58 Fluid/hydraulic power source.
00 Other power source.
UU Undetermined.

Equipment Portability - Section F3

1 Portable.
2 Stationary.

Fire Suppression Factors - Section G

1 *Building Construction or Design Factors*
100 Building construction or design factors, other.
112 Roof collapse.
113 Roof assembly combustible.
115 Solar panels.
121 Ceiling collapse.
125 Holes or openings in walls or ceilings.
131 Wall collapse.
132 Difficult to ventilate.
134 Combustible interior finish.
137 Balloon construction.
138 Internal arrangement of partitions.
139 Internal arrangement of stock or contents.
141 Floor collapse.
151 Lack of fire barrier walls or doors.
153 Transoms.
161 Attic undivided.
166 Insulation combustible.
173 Stairwell not enclosed.
174 Elevator shaft.
175 Dumbwaiter.
176 Ducts: vertical.
177 Chute: rubbish, garbage, laundry.
181 Supports unprotected.
182 Composite plywood I beam construction.
183 Composite roof/floor sheathing construction.
185 Wood truss construction.
186 Metal truss construction.
187 Fixed burglar protection assemblies (bars, grills).
188 Quick release failure of bars on windows or doors.
192 Previously damaged by fire.

2 *Act or Omission*
200 Act or omission, other.
213 Doors left open or outside door unsecured.
214 Fire doors blocked or did not close properly.
218 Violation of fire, building or life safety code.
222 Illegal and clandestine drug operation.
232 Intoxication, drugs or alcohol.
253 Riot or civil disturbance, including hostile acts.
254 Persons interfered with operations.
283 Accelerant used.

3 *On-site materials*
300 On-site materials, other.
311 Aisles blocked or improper width.
312 Significant/unusual fuel load structure components.
313 Significant/unusual fuel load from contents.
314 Significant/unusual fuel load outside from natural.
315 Significant fuel load from man-made condition.
316 Storage, improper.
321 Radiological hazard onsite.
322 Biological hazard onsite.
323 Cryogenic hazard onsite.
324 Hazardous chemical, corrosive material, or oxidize.
325 Flammable/combustible liquid hazard.
327 Explosives hazard present.
331 Decorations, included are crepe paper, garland.
341 Natural or other lighter-than-air gas present.
342 Liquefied Petroleum (LPG) gas present.
361 Combustible storage > 12 feet.
362 High rack storage.

4 *Delays*
400 Delays, other.
411 Delayed detection of fire.
412 Delayed reporting of fire.

Fire Suppression Factors - Section G (continued)

413 Alarm system malfunction.
414 Alarm system shut off for valid reason.
415 Alarm System inappropriately shut off.
421 Unable to contact Fire Department.
424 Information incomplete or incorrect.
425 Communications problem.
431 Blocked or obstructed roadway.
434 Poor or no access for fire department apparatus.
435 Traffic delay.
436 Trouble finding location.
437 Size, height, or other building characteristic.
438 Power lines down/arcing.
443 Poor access for firefighters.
444 Secured area.
445 Guard dogs.
446 Aggressive animals, excluding guard dogs.
447 Suppression delayed due to evaluation of HazMat.
448 Locked or jammed doors.
451 Apparatus failure before arrival at incident.
452 Hydrants inoperative.
461 Airspace restriction.
462 Military activity.
481 Closest apparatus unavailable.

5 ***Protective Equipment***

500 Protective equipment factor, other.
510 Automatic fire suppression system problem.
520 Automatic sprinkler, standpipe connection problem.
531 Water supply inadequate: private.
532 Water supply inadequate: public.
543 Electrical power outage.
561 Failure of rated fire protection assembly.
562 Protective equipment negated.

6 ***Egress/Exit***

600 Egress/exit problem, other.
611 Occupancy load above legal limit.
612 Evacuation activity impeded FD access.
613 Window type impeded egress.
614 Windowless wall.
621 Young occupants.
622 Elderly occupants.
623 Physically disabled occupants.
624 Mentally disabled occupants.
625 Physically restrained/confined occupants.
626 Medically disabled occupants.
641 Special Event.
642 Public Gathering.

7 ***Natural Conditions***

700 Natural conditions, other.
711 Drought or low fuel moisture.
712 Humidity, low.
713 Humidity, high.
714 Temperature, low.
715 Temperature, high.
721 Fog.
722 Flooding.
723 Ice.
724 Rain.
725 Snow.
732 Wind, including hurricanes or tornadoes.
741 Earthquake.
760 Unusual vegetation fuel loading.
771 Threatened or endangered species.
772 Timber sale activity.
773 Fire restriction.
774 Historic disturbance.
775 Urban-Wildland Interface Area.
000 Fire suppression factor, other.
NNN None.
UUU Undetermined (conversion only).

Mobile Property Involved - Section H1

1 Not involved in ignition, but burned.
2 Involved in ignition, but did not itself burn.
3 Involved in ignition and burned.
N None.

Mobile Property Type - Section H2

1 ***Passenger Road Vehicles***

11 Automobile, passenger car, ambulance, race car.
12 Bus, school bus, trackless trolley.
13 Off-road recreational vehicle.
14 Motor home, camper, bookmobile.
15 Trailer - travel, designed to be towed.
16 Trailer - camping, collapsible.
17 Mobile home.
18 Motorcycle, trail bike.
10 Passenger road vehicle, other.

Mobile Property Type - Section H2 (continued)

2 *Freight Road Vehicles*
21 General use truck, dump truck, fire apparatus.
22 Pickup truck, hauling rig (non-motorized).
23 Trailer - semi, designed for freight.
24 Tank truck - nonflammable cargo.
25 Tank truck - flammable or combustible liquid.
26 Tank truck - compressed gas or LP-gas.
27 Garbage, waste, refuse truck.
20 Freight road transport vehicle, other.
3 *Rail Transport Vehicles*
31 Diner car, passenger car - rail.
32 Box, freight, or hopper car - rail.
33 Tank car - rail.
34 Container or piggyback car - rail.
35 Engine/locomotive - rail.
36 Rapid transit car, trolley - self-powered.
37 Maintenance equipment car.
30 Rail transport vehicle, other.
4 *Water Vessels*
41 Boat: shorter than 65 ft. with power.
42 Boat, ship, or >= 65 ft but < 1,000 tons.
43 Cruise liner or passenger ship >= 1,000 tons.
44 Tank ship.
45 Personal water craft.
46 Cargo or military ship > 1,000 tons.
47 Non-self-propelled vessel.
48 Commercial fishing or processing vessel.
49 Sailboat.
40 Water transport vessel, other.
5 *Air transport vehicles*
51 Personal aircraft less than 12,500 lb. gross wt.
52 Personal aircraft >= 12,500 lb. gross wt.
53 Commercial aircraft: propeller, fixed wing.
54 Commercial aircraft: turbine powered, fixed-wing.
55 Helicopters, nonmilitary.
56 Military fixed-wing aircraft.
57 Military non-fixed-wing aircraft.
58 Balloon vehicles.
50 Air transport vehicle, other.
6 *Industrial, Agricultural, Construction Vehicles*
61 Construction vehicle.
63 Loader - industrial, fork lift, tow motor, stacker.
64 Crane.
65 Agricultural vehicle, baler, chopper (farm use).
67 Timber harvest vehicle.
60 Industrial, constr., agricultural vehicle, other.
7 *Mobile Property, Miscellaneous*
71 Home, garden vehicle.
73 Shipping container, mechanically moved.
74 Armored vehicle.
75 Missile, rocket, space vehicle.
76 Aerial tramway vehicle.
00 Mobile property, other.
NN None.
UU Undetermined (conversion only).

Mobile Property Make - Section H2

AC Acura
AG Agco
AR Alfa Romeo
AL Allis Chalmers
AV Antique Vehicle
AN Ariens
AM Aston Martin
AT ATK
AU Audi
AY Avery
BS Belarus
BE Beta
BM BMW
BO Bobcat
BR Briggs
BL Buell
BU Buick
CD Cadillac
CA Case
CB Case - David Brown
CI Case IH
CP Caterpillar
CE Century
CH Chevrolet
CR Chrysler
CV Classic Vehicle
CO Continental
CC Crane Carrier (CCC)
CU Cub Cadet
DA Daihatsu

Mobile Property Make - Section H2 (continued)

DE	Demco
DR	Diamond Reo
DI	Dixon
DO	Dodge
DU	Ducati
DT	Duetz
DS	Duetz-Allis
DF	Duetz-Fahr
ER	Eager
EA	Eagle
EU	Euclid
FK	Farm King
FA	Farmall
FM	Farmtrac
FE	Ferrari
FT	Fetrel
FO	Ford
FR	Freightliner
FG	Frigstad
FW	FWD
GH	Gehl
GE	Geo
GI	Giehl
GL	Gleaner
GM	GMC (General Motors)
GV	GVM
HD	Harley Davidson
HV	Harvester
HB	Haybuster
HE	Hesston
HI	Hino
HO	Honda
HG	Hough
HS	Husky
HU	Husqvarna
HX	Hydrax
HY	Hyundai
IF	Infiniti
IN	International
IL	International Farmall
IH	International Harvester
IS	Isuzu
IT	Italjet
IV	Iveco
JA	Jaguar
JE	Jeep
JD	John Deere
KA	Kawasaki
KE	Kenworth
KI	Kia
KZ	Kinze
KO	Kioti
KN	Knight
KM	Komatsu
KR	Krause
KT	KTM
KU	Kubota
LC	Land Chief
LR	Land Rover
LT	Landtrac
LE	Lexus
LI	Lincoln
LN	Long
LO	Lotus
MN	MacDon
MK	Mack
ML	Maely
MI	Mahindra
MA	Maico
MH	Marmon
MS	Maserati
MY	Massey Ferguson
MV	Massey Harris-Ferguson
MZ	Mazda
MJ	McKee
ME	Melroe
MB	Mercedes Benz
MC	Mercury
MR	Merkur
MF	MHF
MT	Mitsubishi
MO	Montesa
MW	Montgomery Ward
MG	Moto Guzzi
MM	Moto Morini
MD	MTD
MU	Murray
NA	Navistar
NH	New Holland
NE	New Idea

Mobile Property Make - Section H2 (continued)

NI	Nissan
OL	Oldsmobile
OV	Oliver
OS	Oshkosh
OW	Owatona
PT	Peterbilt
PU	Peugeot
PI	Pierce
PL	Plymouth
PN	Pontiac
PR	Porsche
RN	Range Rover
RD	Red Devil
RG	Rogue (Ottowa)
RR	Rolls Royce
SB	Saab
SA	Saturn
SG	Scagg
SC	Scania
SE	Sears Craftsman
SD	Simon Duplex
SI	Simplicity
SN	Snapper
SR	Steiger
ST	Sterling
SU	Subaru
SZ	Suzuki
TT	Toro
TO	Toyota
TL	Trelan
TR	Triumph
TJ	Trojan
TB	Troy-Bilt
UD	UD
UR	Ursus
UT	Utilmaster
VR	Vermeer
VS	Versatile
VE	Vespa
VO	Volkswagen
VL	Volvo
VG	Volvo GMC
WK	Walker
WL	Walter
WS	Western Star
WW	Westward
WH	White
WG	White GMC
WD	Woods
YA	Yamaha
YM	Yardman
YU	Yugo
ZT	Zetor
OO	Other Make

Reports Attached

1	Arson Report Attached.
2	Police Report Attached.
3	Coroner Report Attached.
4	Other Reports Attached.

Structure Fire Module Data Dictionary

Structure Type - Section I1

1 Enclosed building.
2 Fixed portable or mobile structure.
3 Open structure.
4 Air supported structure.
5 Tent.
6 Open platform.
7 Underground structure work areas.
8 Connective structure.
0 Structure type, other.

Building Status - Section I2

1 Under construction.
2 In normal use.
3 Idle, not routinely used.
4 Under major renovation.
5 Vacant and secured.
6 Vacant and unsecured.
7 Being demolished.
0 Other.
U Undetermined.

Fire Spread - Section J2

1 Confined to object of origin.
2 Confined to room of origin.
3 Confined to floor of origin.
4 Confined to building of origin.
5 Beyond building of origin.

Item Contributing Most to Flame Spread - Section K1

Please Note:
The code set table used for this data element is the same set that is used for **Item First Ignited**, section D3 in the Fire Module, with the exception of "99, Multiple Items First Ignited" which is excluded from this code-set. Please refer to page 177 for the codes listed for that data element.

Type Material Contributing to Flame Spread - Section K1

Please Note:
The code set table used for this data element is the same set that is used for **Type of Material First Ignited**, section D4 in the Fire Module, with the exception of "99 Multiple Type of Material", which is excluded from this code-set. Please refer to page 178 for the codes listed for that data element.

Presence of Detectors - Section L

L1 Presence of Detectors
1 Present.
N Not present.
U Undetermined.

L2 Detector Type
1 Smoke.
2 Heat.
3 Combination smoke & heat in a single unit.
4 Sprinkler, water flow detection.
5 More than one type present.
0 Detector type, other.
U Undetermined.

L3 Detector Power Supply
1 Battery only.
2 Hardwire only.
3 Plug in.
4 Hardwire with battery.
5 Plug-in with battery.
6 Mechanical.
7 Multiple detectors & power supplies.
0 Detector power supply, other.
U Undetermined.

L4 Detector Operation
1 Fire too small to activate detector.
2 Detector operated.
3 Detector failed to operate.
U Undetermined.

L5 Detector Effectiveness
1 Detector alerted occupants, occupants responded.
2 Alerted occupants, occupants failed to respond.
3 There were no occupants.
4 Failed to alert occupants.
U Undetermined.

Detectors - Section L (continued)

L6 Detector Failure Reason

1 Power failure, hardwired det. shut off, disconnect.
2 Improper installation or placement.
3 Defective.
4 Lack of maintenance, includes not cleaning.
5 Battery missing or disconnected.
6 Battery discharged or dead.
0 Detector failure reason, other.
U Undetermined.

Presence of Automatic Extinguishing System - Section M

M1 Automatic Extinguishing System Presence

1 Present.
2 Partial system present.
N None Present.
U Undetermined.

M2 Type of Automatic Extinguishing System

1 Wet-pipe sprinkler.
2 Dry-pipe sprinkler.
3 Other sprinkler system.
4 Dry chemical system.
5 Foam system.
6 Halogen type system.
7 Carbon dioxide system.
0 Special hazard system, other.
U Undetermined.

M3 Operation of Automatic Extinguishing System

1 System operated and was effective.
2 System operated and was not effective.
3 Fire too small to activate system.
4 System did not operate.
0 Operation of AES, other.
U Undetermined.

M5 Reason for Automatic Extinguishing System Failure

1 System shut off.
2 Not enough agent discharged to control the fire.
3 Agent discharged, but did not reach the fire.
4 Inappropriate system for the type of fire.
5 Fire not in area protected by the system.
6 System components damaged.
7 Lack of maintenance, including corrosion or heads painted.
8 Manual intervention defeated the system.
0 Reason system not effective, other.
U Undetermined.

Civilian Fire Casualty Module Dictionary

Gender - Section B

1 Male.
2 Female.

Race - Section E1

1 White.
2 Black or African American.
3 American Indian or Alaska native.
4 Asian.
5 Native Hawaiian or other Pacific Islander.
0 Other, includes multi-racial.
U Undetermined.

Ethnicity - Section E2

1 Hispanic or Latino.
0 Non Hispanic or Latino.

Affiliation - Section F

1 Civilian.
2 EMS, not fire department.
3 Police.
0 Other.
U Undetermined (conversion only).

Severity - Section H

1 Minor.
2 Moderate.
3 Severe.
4 Life threatening.
5 Death.
U Undetermined.

Cause of Injury - Section I

1 Exposed to fire products.
2 Exposed to hazardous materials or toxic fumes.
3 Jumped in escape attempt.
4 Fell, slipped or tripped.
5 Caught or trapped.
6 Structural collapse.
7 Struck by or contact with object.
8 Overexertion or strain.
9 Multiple causes.
0 Other.
U Undetermined.
N None (conversion only).

Human Factors Contributing to Injury - Section J

1 Asleep.
2 Unconscious.
3 Possibly impaired by alcohol.
4 Possibly impaired by other drug or chemical.
5 Possibly mentally disabled.
6 Physically disabled.
7 Physically restrained.
8 Unattended or unsupervised person.
N None.

Factors Contributing to Injury - Section K

1 *Egress Problem*
11 Crowd situation, limited exits.
12 Mechanical obstacles to exit.
13 Locked exit or other problem with exit.
14 Problem with quick release burglar or security bar.
15 Burglar or security bar, intrusion barrier.
16 Window type or size impeded egress.
10 Egress problem, other.

2 *Fire Pattern*
21 Exits blocked by flame.
22 Exits blocked by smoke.
23 Vision blocked or impaired by smoke.
24 Trapped above fire.
25 Trapped below fire.
20 Fire pattern, other.

3 *Escape*
31 Unfamiliar with exits.
32 Excessive travel distance to nearest clear exit.
33 Chose inappropriate exit route.
34 Re-entered building.
35 Clothing caught fire while escaping.
30 Escape, other.

4 *Collapse*
41 Roof collapse.
42 Wall collapse.
43 Floor collapse.
40 Collapse, other.

5 *Vehicle-Related Factors*
51 Trapped in/by vehicle.
52 Vehicle collision, rollover.
50 Vehicle-related, other.

Factors Contributing to Injury - Section K (continued)

6 *Equipment-Related Factors*
61 Unvented heating equipment.
62 Improper use of heating equipment.
63 Improper use of cooking equipment.
60 Equipment-related factors, other.
9 *Other Special Factors*
91 Clothing burned, not while escaping.
92 Overexertion.
00 Factor contributing to injury, other.
NN None.
UU Undetermined (conversion only).

Activity When Injured - Section L

1 Escaping.
2 Rescue attempt.
3 Fire control.
4 Returning to vicinity of fire before control.
5 Returning to vicinity of fire after control.
6 Sleeping.
7 Unable to act.
8 Irrational act.
0 Other activity.
U Undetermined.

Location at Time of Incident - Section M

1 In area of origin and not involved.
2 Not in area of origin & not involved.
3 Not in area of origin, but involved.
4 In area of origin and involved.
0 Other location.
U Undetermined.

General Location at Time of Injury - Section M

1 In area of origin.
2 In building, but not in area of origin.
3 Outside, not in area of origin.
U Undetermined.

Specific Location at Time of Injury - Section M

Please Note:
The code set table used for this data element is the same set that is used for ***Area of Fire Origin***, section D1 in the Fire Module. Please refer to page 175 for the codes listed for that data element.

Primary Apparent Symptom - Section N

01 Smoke inhalation.
02 Hazardous fumes inhalation.
03 Breathing difficulty or shortness of breath.
11 Burns and smoke inhalation.
12 Burns only, thermal.
13 Burn, scald.
14 Burn, chemical.
15 Burn, electric.
21 Cut or laceration.
22 Stab wound/puncture wound: penetrating.
23 Gunshot wound; projectile wound.
24 Contusion/bruise, minor trauma.
25 Abrasion.
31 Dislocation.
32 Fracture.
33 Strain or sprain.
34 Swelling.
35 Crushing.
36 Amputation.
41 Cardiac symptoms.
42 Cardiac arrest.
43 Stroke.
44 Respiratory arrest.
51 Chills.
52 Fever.
53 Nausea.
54 Vomiting.
55 Numbness or tingling, paresthesia.
56 Paralysis.
57 Frostbite.
50 Sickness, other.
61 Miscarriage.
63 Eye trauma, avulsion.
64 Drowning.
65 Foreign body obstruction.
66 Electric shock.
67 Poison.
71 Convulsion or seizure.
72 Internal trauma.
73 Hemorrhaging, bleeding internally.
81 Disorientation.
82 Dizziness/fainting/weakness.
83 Exhaustion/fatigue, including heat exhaustion.
84 Heat stroke.

Primary Apparent Symptom - Section N (continued)

85 Dehydration.
91 Allergic reaction, including anaphylactic shock.
92 Drug overdose.
93 Alcohol impairment.
94 Emotional/psychological stress.
95 Mental disorder.
96 Shock.
97 Unconscious.
98 Pain only.
00 Primary apparent symptom, other.
NN None.
UU Undetermined.

Primary Area of Body Injured - Section O

1 Head.
2 Neck or shoulder.
3 Thorax, includes chest and back, excludes spine.
4 Abdomen.
5 Spine
6 Upper extremities.
7 Lower extremities.
8 Internal.
9 Multiple body parts.
0 Other area (conversion only).
U Undetermined (conversion only).

Disposition - Section P

1 Transported to emergency care facility.

Fire Service Casualty Module Data Dictionary

Gender - Section B

1 Male.
2 Female.

Affiliation - Section B

1 Career.
2 Volunteer.

Usual Assignment - Section G1

1 Fire suppression, included are HazMat, rescue, IC.
2 EMS.
3 Prevention or inspection.
4 Training.
5 Maintenance.
6 Communications.
7 Administration.
8 Fire investigation.
0 Other assignment.
U Undetermined (Conversion only).

Physical Condition Just Prior To Injury - Section G2

1 Rested.
2 Fatigued.
4 Ill or injured.
0 Physical condition, other.
U Undetermined.

Severity - Section G3

1 Report only, including exposure.
2 First aid only.
3 Treated by physician, not a lost-time injury.
4 Moderate severity, lost-time injury.
5 Severe, lost-time injury.
6 Life threatening, lost-time injury.
7 Death.
U Undetermined (Conversion only).

Taken To - Section G4

1 Hospital.
4 Doctor's office.
5 Morgue or funeral home.
6 Residence.
7 Station or quarters.
0 Taken to, other.
N Not transported.
U Undetermined (Conversion only).

Activity At Time of Injury - Section G5

1 *Driving or Riding Vehicle*
11 Boarding fire department vehicle.
12 Driving fire department vehicle.
13 Tillering fire department vehicle.
14 Riding fire department vehicle.
15 Getting off fire department vehicle.
16 Driving/riding non-fire department vehicle.
17 Boarding/exiting non-fire department vehicle.
10 Driving or riding vehicle, other.
2 *Operating Fire Department Apparatus*
21 Operating engine or pumper.
22 Operating aerial ladder or elevating platform.
23 Operating EMS vehicle.
24 Operating HazMat vehicle.
25 Operating rescue vehicle.
20 Operating fire department apparatus, other.
3 *Extinguishing Fire or Neutralizing Incident*
31 Handling charged hose lines.
32 Using hand extinguishers.
33 Operating master steam device.
34 Using hand tools in extinguishment activity.
35 Removing power lines.
36 Removing flammable liquids/chemicals.
37 Shutting off utilities, gas lines, etc.
30 Extinguishing fire/neutralizing incident, other.
4 *Suppression Support*
41 Forcible entry.
42 Ventilation with power tools.
43 Ventilation with hand tools.
44 Salvage.
45 Overhaul.
40 Suppression support, other.
5 *Access or Egress*
51 Carrying ground ladder.
52 Raising ground ladder.
53 Lowering ground ladder.
54 Climbing ladder.
55 Scaling.
56 Escaping fire/hazard.
57 Moving/lifting patient with carrying device.
58 Lifting/carrying patient without carrying device.
50 Access/egress, other.

Activity At Time of Injury - Section G5 (continued)

6 *EMS / Rescue*
61 Searching for victim.
62 Rescuing fire victim.
63 Rescuing non-fire victim.
64 Water rescue.
65 Providing EMS care.
66 Diving operations.
67 Extraction with power tools.
68 Extraction with hand tools.
60 EMS/rescue, other.
7 *Other Incident Scene Activity*
71 Directing traffic.
72 Catching hydrant.
73 Laying hose.
74 Moving tools or equipment around scene.
75 Picking up tools, equipment, or hose on scene.
76 Setting up lighting.
77 Operating portable pump.
70 Other incident scene activity, other.
8 *Station Activity*
81 Moving about station, alarm sounding.
82 Moving about station, normal activity.
83 Station maintenance.
84 Vehicle maintenance.
85 Equipment maintenance.
86 Physical fitness activity, supervised.
87 Physical fitness activity, unsupervised.
88 Training activity or drill.
80 Station activity, other.
9 *Other Activity*
91 Incident investigation, during incident.
92 Incident investigation, after incident.
93 Inspection activity.
94 Administrative work.
95 Communications work.
00 Activity, other.
UU Undetermined.

Primary Apparent Symptom - Section H1

01 Smoke inhalation.
02 Hazardous fumes inhalation.
03 Breathing difficulty or shortness of breath.
11 Burns and smoke inhalation.
12 Burns only: thermal.
13 Burn: scald.
14 Burn: chemical.
15 Burn: electric.
21 Cut or laceration.
22 Stab wound/puncture wound: penetrating.
23 Gunshot wound; projectile wound.
24 Contusion/bruise: minor trauma.
25 Abrasion.
31 Dislocation.
32 Fracture.
33 Strain or sprain.
34 Swelling.
35 Crushing.
36 Amputation.
41 Cardiac symptoms.
42 Cardiac arrest.
43 Stroke.
44 Respiratory arrest.
51 Chills.
52 Fever.
53 Nausea.
54 Vomiting.
55 Numbness or tingling, paresthesia.
56 Paralysis.
57 Frostbite.
50 Sickness, other.
61 Miscarriage.
63 Eye trauma, avulsion.
64 Drowning.
65 Foreign body obstruction.
66 Electric shock.
67 Poison.
71 Convulsion or seizure.
72 Internal trauma.
73 Hemorrhaging, bleeding internally.
81 Disorientation.
82 Dizziness/fainting/weakness.
83 Exhaustion/fatigue, including heat exhaustion.
84 Heat stroke.
85 Dehydration.
91 Allergic reaction, including anaphylactic shock.
92 Drug overdose.
93 Alcohol impairment.
94 Emotional/psychological stress.
95 Mental disorder.

Primary Apparent Symptom - Section H1 (continued)

96 Shock.
97 Unconscious.
98 Pain only.
00 Other.
NN None.
UU Undetermined.

Primary Part of Body Injured - Section H2

1 *Head*
11 Ear.
12 Eye.
13 Nose.
14 Mouth included are lips, teeth and interior.
10 Head, other.
2 *Neck & Shoulders*
21 Neck.
22 Throat.
23 Shoulder.
3 *Thorax*
31 Back, except spine.
32 Chest.
30 Thorax, other (conversion only).
4 *Abdominal Area*
41 Abdomen.
42 Pelvis or groin.
43 Hip, lower back or buttocks.
5 *Spine*
51 Spine.
6 *Upper Extremities*
61 Arm, upper, not including elbow or shoulder.
62 Arm, lower, not including elbow or wrist.
63 Elbow.
64 Wrist.
65 Hand and fingers.
60 Upper extremities, other (conversion only).
7 *Lower Extremities*
71 Leg, upper.
72 Leg, lower.
73 Knee.
74 Ankle.
75 Foot and toes.
70 Lower extremities, other (conversion only).
8 *Internal*
81 Trachea and lungs.
82 Heart.
83 Stomach.
84 Intestinal tract.
85 Genito-urinary.
80 Internal, other.
9 *Multiple Parts*
91 Multiple body parts - upper part of body.
92 Multiple body parts - lower part of body.
93 Multiple body parts - whole body.
00 Body part, other.
UU Part of body undetermined.
NN None.

Cause of Firefighter Injury - Section I1

1 Fall.
2 Jump.
3 Slip/trip.
4 Exposure to hazard.
5 Struck or assaulted by person/animal/object.
6 Contact with object (firefighter moved into/onto).
7 Overexertion/strain.
0 Cause of injury, other.
U Undetermined.

Factor Contributing to Injury - Section I2

1 *Collapse or Falling Object*
11 Roof collapse.
12 Wall collapse.
13 Floor collapse.
14 Ceiling collapse.
15 Stair collapse.
16 Falling objects.
17 Cave-in (earth).
10 Collapse or falling object, other.
2 *Fire Development*
21 Fire progress, including smoky conditions.
22 Backdraft.
23 Flashover.
24 Explosion.
20 Fire development, other.
3 *Lost, Caught, Trapped, Confined*
31 Person physically caught or trapped.
32 Lost in building.
33 Operating in confined structural areas.
34 Operating under water or ice.
30 Lost, caught, trapped, or confined, other.

Factor Contributing to Injury - Section I2 (continued)

4 ***Holes***
41 Unguarded hole in structure.
42 Hole burned through roof.
43 Hole burned through floor.
40 Holes, other.
5 ***Slippery or Uneven Surfaces***
51 Icy surface.
52 Wet surface, included are water/soap/foam, etc.
53 Loose material on surface.
54 Uneven surface, included are holes in the ground.
50 Slippery or uneven surfaces, other.
6 ***Vehicle or Apparatus***
61 Vehicle left road or overturned.
62 Vehicle collided with another vehicle.
63 Vehicle collided with nonvehicular object.
64 Vehicle stopped too fast.
65 Seat belt not fastened.
66 Firefighter standing on apparatus.
60 Vehicle or apparatus, other.
9 ***Other Contributing Factors***
91 Civil unrest, including riots/civil disturbances.
92 Hostile acts.
00 Contributing factor, other.
NN None.
UU Undetermined.

Object Involved in Injury - Section I3

11 Coupling.
12 Hose, not charged.
13 Hose, charged.
14 Water from master stream.
15 Water from hose line.
16 Water, not from a hose.
17 Steam.
18 Extinguishing agent.
21 Ladder: aerial.
22 Ladder: ground.
23 Tools/equipment.
24 Knife, scissors.
25 Syringe.
26 FD vehicle/apparatus.
27 FD vehicle door, including apparatus compartments.
28 Station sliding pole.
31 Curb.
32 Door in building.
33 Fire escape.
34 Ledge.
35 Stairs.
36 Wall, including other vertical surfaces.
37 Window.
38 Roof.
39 Floor or ceiling.
30 Structural component, other.
41 Asbestos.
42 Dirt, stones, or debris.
43 Glass.
45 Nails.
46 Splinters.
47 Embers.
48 Hot tar.
49 Hot metal.
51 Biological agents.
52 Chemicals.
53 Fumes, gases, or smoke.
54 Poisonous plants.
55 Insects.
56 Radioactive materials.
61 Electricity.
62 Extreme weather.
63 Utility flames, flares, torches.
64 Heat or flame.
91 Person: victim.
92 Property and structure contents.
93 Animal.
94 Non-fire department vehicle.
95 Gun, including all other projectile weapons.
90 Person, other.
00 Object involved, other.
NN None.
UU Undetermined.

Where Injury Occurred - Section J1

1 Enroute to fire department location.
2 At fire department location.
3 Enroute to incident or assignment.
4 Enroute to medical facility.
5 At scene, in structure.
6 At scene, outside structure.
7 At medical facility.

Where Injury Occurred - Section J1 (continued)

8 Returning from incident or assignment.
9 Returning from medical facility.
0 Location, other.
U Undetermined.

Injury Relationship to Structure - Section J2

1 Inside or on structure.
2 Outside of structure.

Specific Location Where Injury Occurred - Section J3

22 Outside at grade.
23 On roof.
24 On aerial ladder or in basket.
25 On ground ladder.
26 On vertical surface or ledge.
27 On fire escape or outside stairway.
28 On steep grade.
31 In open pit.
32 In ditch or trench.
33 In quarry or mine.
34 In ravine.
35 In well.
36 In water.
45 In attic or other confined structural space.
49 In structure, excluding attic, roof, or wall.
53 In tunnel.
54 In sewer.
61 In motor vehicle.
63 In rail vehicle.
64 In boat, ship or barge.
65 In aircraft.
00 Specific location, other.
UU Undetermined.

Vehicle Type - Section J4

1 Suppression vehicle.
2 EMS vehicle.
3 Other fire department vehicle.
4 Non-fire department vehicle (includes POV).
U Vehicle type undetermined (Conversion only).
N None.

Equipment Failed - Section K1

Y Yes.
N No.

Protective Equipment Item - Section K2

1 *Head or Face Protection*
11 Helmet.
12 Full face protector.
13 Partial face protector.
14 Goggles/eye protection.
15 Hood.
16 Ear protector.
17 Neck protector.
10 Head or face protection, other.
2 *Coat, Shirt or Trousers*
21 Protective coat.
22 Protective trousers.
23 Uniform shirt.
24 Uniform T-shirt.
25 Uniform trousers.
26 Uniform coat or jacket.
27 Coveralls.
28 Apron or gown.
20 Coat, shirt or trousers, other.
3 *Boots or Shoes*
31 Knee-length boots w/steel baseplate & steel toes.
32 Knee-length boots with steel toes only.
33 3/4-length boots w/steel baseplate & steel toes.
34 3/4-length boots with steel toes only.
35 Boots without steel baseplate or steel toes.
36 Safety shoes with steel baseplate and steel toes.
37 Safety shoes with steel toes only.
38 Non-safety shoes.
30 Boots or shoes, other.
4 *Respiratory Protection*
41 Self-contained breathing apparatus (SCBA) demand.
42 Self-contained breathing apparatus (SCBA) positive.
43 Self-contained breathing apparatus (SCBA) closed.
44 Non-self-contained breathing apparatus.
45 Cartridge respirator.
46 Dust or particle mask.
40 Respiratory protection, other.
5 *Hand Protection*
51 Firefighter gloves with wristlets.
52 Firefighter gloves without wristlets.

Protective Equipment Item - Section K2 (continued)

53 Work gloves.
54 HazMat gloves.
55 Medical gloves.
50 Hand protection, other.
6 ***Special Equipment***
61 Proximity suit for entry.
62 Proximity suit for non-entry.
63 Totally encapsulated, reusable chemical suit.
64 Totally encapsulated, disposable chemical suit.
65 Partially encapsulated, reusable chemical suit.
66 Partially encapsulated, disposable chemical suit.
67 Flash protection suit.
68 Flight or jump suit.
69 Brush suit.
7 ***Special Equipment Continued***
71 Exposure suit.
72 Self-contained underwater breathing apparatus (SCUBA).
73 Life preserver.
74 Life belt or ladder belt.
75 Personal alert safety system (PASS).
76 Radio distress device.
77 Personal lighting.
78 Fire shelter or tent.
79 Vehicle safety belt.
70 Special equipment, other.
00 Other protective equipment item.
UU Undetermined (conversion only).
NN None (conversion only).

Protective Equipment Problem - Section K3

11 Burned.
12 Melted.
21 Fractured, cracked or broke.
22 Punctured.
23 Scratched.
24 Knocked off.
25 Cut or ripped.
31 Trapped steam or hazardous gas.
32 Insufficient insulation.
33 Object fell in or onto equipment item.
41 Failed under impact.
42 Face piece or hose detached.
43 Exhalation valve inoperative or damaged.
44 Harness detached or separated.
45 Regulator failed to operate.
46 Regulator damaged by contact.
47 Problem with admissions valve.
48 Alarm failed to operate.
49 Alarm damaged by contact.
51 Supply cylinder or valve failed to operate.
52 Supply cylinder or valve damaged by contact.
53 Supply cylinder contained insufficient air.
94 Did not fit properly.
95 Not properly serviced or stored prior to use.
96 Not used for designed purpose.
97 Not used as recommended by manufacturer.
00 Protective equipment problem, other.
UU Undetermined.

EMS Module Data Dictionary

Provider Impression/Assessment - Section D

10 Abdominal pain.
11 Airway obstruction.
12 Allergic reaction, excludes stings & venomous bite.
13 Altered level of consciousness.
14 Behavioral - mental status, psychiatric disorder.
15 Burns.
16 Cardiac arrest.
17 Cardiac dysrhythmia.
18 Chest pain.
19 Diabetic symptom.
20 Do not resuscitate.
21 Electrocution.
22 General illness.
23 Hemorrhaging/bleeding.
24 Hyperthermia.
25 Hypothermia.
26 Hypovolemia.
27 Inhalation injury, toxic gases.
28 Obvious death.
29 Overdose/poisoning.
30 Pregnancy/OB.
31 Respiratory arrest.
32 Respiratory distress.
33 Seizure.
34 Apparent sexual assault.
35 Sting/bite.
36 Stroke/CVA.
37 Syncope, fainting.
38 Trauma.
00 Impression/assessment, other.
NN None/no patient or refused treatment.

Gender - Section E2

1 Male.
2 Female.

Race - Section F1

1 White.
2 Black or African American.
3 American Indian or Alaska native.
4 Asian.
5 Native Hawaiian or other Pacific Islander.
0 Other, includes multi-racial.
U Undetermined.

Ethnicity - Section F2

1 Hispanic.
0 Other.

Human Factors Contributing to Injury - Section G1

Please Note:
The code set table used for this data element is the same set that is used for ***Human Factors Contributing to Injury***, section J in the Civilian Fire Casualty Module. Please refer to page 191 for the codes listed for that data element.

Other Factors - Section G2

1 Accidental.
2 Self-inflicted.
3 Inflicted, not self-inflicted.
N None.

Body Site of Injury - Section H1

1 Head.
2 Neck or shoulder.
3 Thorax, includes chest and back, excludes spine.
4 Abdomen.
5 Spine.
6 Upper extremities.
7 Lower extremities.
8 Internal.
9 Multiple body parts.
0 Other area (conversion only).
U Undetermined (conversion only).

Injury Type - Section H2

10 Amputation.
11 Blunt Injury.
12 Burn.
13 Crush.
14 Dislocate/fracture.
15 Gunshot.
16 Laceration.
17 Pain without swelling.
18 Puncture/stab.
19 Soft tissue swelling.
00 Injury type, other.

Cause of Illness/Injury - Section H3

10 Chemical exposure.
11 Drug poisoning.
12 Fall.
13 Aircraft related.
14 Bite, includes animal bites.
15 Bicycle accident.
16 Building collapse/construction accident.
17 Drowning.
18 Electrical shock.
19 Cold.
20 Heat.
21 Explosives.
22 Fire and flames.
23 Firearm.
25 Fireworks.
26 Lightning.
27 Machinery.
28 Mechanical suffocation.
29 Motor vehicle accident.
30 Motor vehicle accident, pedestrian.
31 Non-traffic vehicle (off-road) accident.
32 Physical assault/abuse.
33 Scalds/other thermal.
34 Smoke inhalation.
35 Stabbing assault.
36 Venomous sting.
37 Water transport.
00 Cause, other.
UU Unknown.

Procedures Used - Section I

01 Airway insertion.
02 Anti-shock trousers.
03 Assisted ventilation.
04 Bleeding control.
05 Burn care.
06 Cardiac pacing.
07 Cardioversion (defib), manual.
08 Chest/abdominal thrust.
09 CPR.
10 Cricothyroidotomy.
11 Defibrillation by AED.
12 EKG monitoring.
13 Extrication.
14 Intubation (EGTA).
15 Intubation (ET).
16 IO/IV therapy.
17 Medications therapy.
18 Oxygen therapy.
19 Obstetrical care/delivery.
20 Prearrival instructions.
21 Restrained patient.
22 Spinal immobilization.
23 Splinted extremities.
24 Suction/aspirate.
00 Procedures used, other.
NN No treatment.

Safety Equipment - Section J

1 Safety, seat belts.
2 Child safety seat.
3 Airbag.
4 Helmet.
5 Protective clothing.
6 Flotation device.
N None.
0 Safety equipment, other.
U Undetermined.

Cardiac Arrest - Section K

1 Pre-arrival arrest.
2 Post arrival arrest.

Pre-Arrival Details - Section K

1 Witnessed.
2 Bystander CPR.

Initial Arrest Rhythm - Section K

1 V-Fib/V-Tach.
0 Initial arrest rhythm, other.
U Undetermined.

Initial Level of Provider - Section L1

1 First Responder.
2 EMT-B (Basic).
3 EMT-I (Intermediate).
4 EMT-P (Paramedic).
0 Other health care provider.
N No training.

Highest Level of Care Provided on Scene - Section L2

1 First Responder.
2 EMT-B (Basic).
3 EMT-I (Intermediate).
4 EMT-P (Paramedic).

0 Other health care provider.
N No care provided.

Patient Status - Section M

1 Improved.
2 Remained Same.
3 Worsened.

Pulse on Transfer - Section M

1 Pulse on Transfer.
2 No Pulse on Transfer.

EMS Disposition - Section N

1 FD transport to emergency care facility (ECF).
2 Non-FD transport.
3 Non-FD transport with FD attendant.
4 Non-emergency transfer.
0 Other.
N Not transported under EMS.

HazMat Chemical Database

The HazMat Chemical Database is provided to developers as a means of maintaining consistency with the NFIRS 5.0 standard software and also in order to improve consistency and usability of chemical name information collected in the NFIRS 5.0 HazMat module.

The HazMat Chemical Database consists of many, but not all, of the most commonly released chemicals currently responded to by the nation's fire service. The HazMat Chemical Database was created as a product of the development of the Hazardous Materials Guide for First Responders which, in turn, was developed under the Firefighters' Safety Study Act (*Pub. L. 101-446 - Oct. 22, 1990*). The database is intended to be a living document and will be updated on a regular basis as warranted.

Intended Use By Developers

The Chemical Database contains a Chemical ID Number, which should be used as an internal key uniquely identifying chemicals and their associated trade names. The Chemical ID Number key is designed for internal use by software only and is organized in the following manner:

3. Digits 1 through 4 are the unique identifier for a chemical (ex. Acetal is 0001).
4. Digits 5 through 7 are a unique identifier for synonyms or trade names for that chemical.
5. Zeros (000), in the Trade Name Identifier (positions 5 though 7) indicate a base chemical name (not a trade name).
6. If the Trade Name Identifier is greater than zeros (001-999), the record is a trade name alias for the base chemical.
7. Base chemicals and their associated trade names share a common unique identifier (positions 1-4).

Example:

Acetal has a Chemical ID Number of 0001000. The numbers 0001 in positions 1-4 uniquely identify the chemical as Acetal. The last three digits are zeros so Acetal is the base chemical name. Acetal also has several synonyms. Is it also known as Acetaldehyde ethylacetal, which has a Chemical ID number of 0001001. The first four positions (0001) are the same (indicating it is still Acetal) but the 001 in the last 3 positions indicates that it is the first trade name for Acetal. Acetal has three trade names (001-003) associated with it in the HazMat Chemical Database. They are all the same chemical as the base chemical name Acetal (0001).

Data Entry Guidelines

Chemicals selected from the database by the user must be taken from the HazMat Chemical database table and stored in the Chemical Name field. If a chemical trade name is selected (positions 5-7 greater than zeros)

the ***base*** chemical name (000 record) should be stored in the field. The associated UN Number and CAS number may also be automatically filled from the database when there is a match and those values are present in the record. If the chemical involved is not present in the Chemical Database, the user must be allowed to directly enter the name of the chemical, the UN Number and the CAS Number into the appropriate fields.

This method outlined above allows for uniform spelling and formatting of data when values are present in the database but does not preclude entry of chemical names if they are not present in the database. Using the example above, if there was yet another trade name for Acetal that was not included in the HazMat Chemical Database, the user should be allowed to enter that trade name into the Chemical Name field even though it was not present in the database.

The most current version of the Chemical Database may be obtained from the USFA at: http://www.nfirs.fema.gov/documentation/design/

CHEMICAL NAME	ID #	UN #	CAS #
(Chloromethyl) benzene	0045002	1738	100-44-7
(Diethylamino) ethane	0392001	1296	121-44-8
1-(Chloromethyl)-4-nitrobenzene	0702000		
1-(2-Tolyl) thiourea	0292001		614-78-8
1,1,1-Trichloroethane	0389000	2831	71-55-6
1,1,2,2-Tetrachloroethane	0374005	1702	79-34-5
1,1,2-Trichloro-1,2,2-trifluoroethane	1715000		
1,1-DCE	1834000		
1,1-Di(tert-butylperoxy)cyclohexane	0859000	2179	
1,1-Dichloroethane	0130000	2362	75-34-3
1,1-Dichloroethylene	0408002	1303	75-35-4
1,1-Diethoxyethane	0001003	1088	105-57-7
1,1-Difluoroethane	0147001	1030	75-37-6
1,1-Difluoroethylene	0908000	1959	
1,1-Dimethylethane	0238001	1969	75-28-5
1,1-Dimethylethyl hydroperoxide	0068002		75-91-2
1,1-Dimethylethylamine	0065003	2734	75-64-9
1,1-Dimethylhydrazine	0159000	1163	57-14-7
1,1-Oxy-bis-(2-chloroethane)	0129006	1916	111-44-4
1,2,3,4-Diepoxybutane	0138004		1464-53-5
1,2,3,5-Tetramethyl benzene	1662000		
1,2,3,7,8-Pentachlorodibenzofurans	1453000		
1,2,3-Trichloropropane	1712000		
1,2,4-Trichlorobenzene	1701000	2321	
1,2-Butylene oxide	0067000	3022	106-88-7
1,2-DCE	0131002	1150	540-59-0
1,2-Diaminoethane	0191002	1604	107-15-3
1,2-Dibromo-3-chloropropane	0853000	2872	
1,2-Dibromoethane	0192002	1605	106-93-4
1,2-Dichloroethane	0193001	1184	107-06-2
1,2-Dichloroethylene	0131000	1150	540-59-0
1,2-Dichloropropane	0351001	1279	78-87-5
1,2'-Dichlorotriethylamine	0180001	2734	538-07-8
1,2-Diethoxyethane	0195001	1153	629-14-1
1,2-Diethylhydrazine	0145000		1615-80-1
1,2-Dimethoxyethane	0150000	2252	110-71-4
1,2-Dimethylbenzene	0412001	1307	
1,2-Dinitrobenzene	0166001	1597	
1,2-Epoxybutane	0067003	3022	106-88-7
1,2-Epoxyethane	0199004	1040	75-21-8
1,2-Epoxypropane	0353002	1280	75-56-9
1,2-Ethylene dichloride	0193005	1184	107-06-2
1,2-Propanediol-1-methacrylate	0236001		27813-02-1
1,2-Propylenediamine	1537000	2258	
1,3-Butadiene	0059004	1010	106-99-0
1,3-CPD	0137002	2048	77-73-6
1,3-Cyclopentadiene dimer	0137003	2048	77-73-6
1,3-D	0135001	2047	542-75-6
1,3-Dichloro-2-propanone	0127002	2649	534-07-6

CHEMICAL NAME	ID #	UN #	CAS #
1,3-Dichloroacetone	0127000	2649	534-07-6
1,3-Dichloropropene	0135002	2047	542-75-6
1,3-Dimethylbenzene	0412002	1307	
1,3-Dinitrobenzene	0166002	1597	
1,3-Pentadiene	0319000		504-60-9
1,4- Butenediol	0607000		
1,4-Benzoquinone	0041001	2587	106-51-4
1,4-Butynediol	0072000	2716	110-65-6
1,4-Cyclohexadiene dioxide	0041003	2587	106-51-4
1,4-Dichloro-2-butene	1839003		
1,4-Dichlorobenzene	0128001	1592	106-46-7
1,4-Dichlorobutene	1839002		
1,4-Dicyanobutane	0015002	2205	111-69-3
1,4-Diethylenedioxide	0169001	1165	123-91-1
1,4-Dihydroxy-2-butyne	0072004	2716	110-65-6
1,4-Dimethylbenzene	0412003	1307	
1,4-Dinitrobenzene	0166003	1597	
1,4-Dioxane	0169000	1165	123-91-1
1,4-Epoxybutane	0379001	2056	109-99-9
1-Acetoxyethylene	0403003	1301	108-05-4
1-Acetoxypropane	0347002	1276	109-60-4
1-Amino-2,4-dinitrobenzene	0165001	1596	97-02-9
1-Amino-2-propanol	0243001		78-96-6
1-Aminobutane	0064001	1125	109-73-9
1-Bromo-3-methylbutane	0595000	2341	
1-Bromobutane	0056000	1126	109-65-9
1-Bromopropane	0598000		
1-Butanethiol	0070001	2347	109-79-5
1-Butene oxide	0067001	3022	106-88-7
1-Butyl acetate	0061002	1123	123-86-4
1-Butylene oxide	0067002	3022	106-88-7
1-Chloro-1-propene	0710000		
1-Chloro-2,3-epoxypropane	0172001	2023	106-89-8
1-Chloro-2-cyanoethane	0102001	3276	542-76-7
1-Chloro-2-nitrobenzene	0097001	1578	
1-Chloro-4-methylbenzene	0104001	2238	106-43-4
1-Chlorobutane	0094003	1127	109-69-3
1-Chloropropane	0708000	1278	
1-Chloropropylene	0713000		
1-Decene	0816000		
1-Fluoroethene	0407002	1860	75-02-5
1-Heptene	0220001	2278	592-76-7
1-Hexanol	1152000	2282	
1-Hexene	0222002	2370	592-41-6
1-Isocyanobutane	0069003	2485	111-36-4
1-Methoxyethylene	0409002	1087	107-25-5
1-Methyl ethyl alcohol	0242004	1219	67-63-0
1-Methyl naphthalene	1310000		
1-Methyl pyrrolidone	1327000		

CHEMICAL NAME	ID #	UN #	CAS #
1-Methyl-1-phenylethene	0244003	2303	98-83-9
1-Methyl-2-aminoethanol	0243003		78-96-6
1-Methylbutadiene	0319001		504-60-9
1-Methylethylamine	0245002	1221	75-31-0
1-Methylhydrazine	0282002	1244	60-34-4
1-Nitropropane	0308001	2608	108-03-2
1-Octene	0313002		111-66-0
1-Pentanol	0032005	1105	71-41-0
1-Pentene	1461000	1108	
1-Pentyl alcohol	0032006	1105	71-41-0
1-Phenyl-2-thiourea	0328003	2767	103-85-5
1-Phenylpropane	0348002	2364	103-65-1
1-Propanethiol	0342001	2402	107-03-9
1-Propene	0350004	1077	115-07-1
1-Propyl acetate	0347003	1276	109-60-4
1-Propylene	0350005	1077	115-07-1
1-Tetradecene	1653000		
1-Tridecene	1720000		
1-Undecene	1761000		
2- Chloronaphthalene	0703000		
2-(2,4,5-Trichlorophenoxy) propanoic acid	1709000	2765	
2-(2-Aminoethoxy)ethanol	0441000	3055	
2,2',2"-Trichlorotriethylamine	0399001		555-77-1
2,2'-Diaminodiethylamine	0143004	2079	111-40-0
2,2'-Dichlorodiethyl ether	0129000	1916	111-44-4
2,2-Dichloroisopropyl ether	0872000	2490	
2,2'-Dichlorotriethylamine	0880000		
2,2-Dimethyl octanoic acid	0938000		
2,2-Dimethylbutane	0300001	1208	75-83-2
2,2-Dimethylpropane	0942000	2044	
2,2-Dimethylpropane-1,3-diol	0943000		
2,3,7,8-Tetrachlorodibenzofurans	1649000		
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	1650000	2378	
2,3-Butylene oxide	0618000		
2,3-Dichloropropene	0877000	2047	
2,3-Dihydropyran	0912000	2376	
2,4,5-TP (or Silvex)	1691000	2765	
2,4,5-Trichlorophenoxyacetic acid	1707000	2765	
2,4,5-Trichlorophenoxyacetic acid, sodium salt	1708000		
2,4,6-Trichlorophenol	1706000	2020	
2,4,6-Trichloro-s-triazine	0113001	2670	108-77-0
2,4,6-Trimethyl aniline	1737000		
2,4-D	0122000	2765	94-75-7
2,4-Diaminotoluene	0385002	1709	95-80-7
2,4-Dichlorophenol	0875000		
2,4-Dichlorophenoxyacetic acid	0122002	2765	94-75-7
2,4-Dimethyl phenol	0939000	2261	

CHEMICAL NAME	ID #	UN #	CAS #
2,4-Dinitro-1-aminobenzamine	0165002	1596	97-02-9
2,4-Dinitroaniline	0165000	1596	97-02-9
2,4-Dinitrobenzamine	0165003	1596	97-02-9
2,4-Dinitro-o-cresol	0167002	1598	534-52-1
2,4-Dinitrophenol	0168004		51-28-5
2,4-Dinitrotoluene	0951000	2038	
2,4-DNP	0168005		51-28-5
2,4-Pentadione	0320005	2310	123-54-6
2,4-TDI	0386002	2078	584-84-9
2,4-Toluenediamine	0385000	1709	95-80-7
2,5-Dioxahexane	0150003	2252	110-71-4
2,6-Diethyl aniline	0889000		
2,6-Xylidine	1784000	1711	
2-Acetylaminofluorene	0417000		
2-Amino-2-methyl-1-propanol	0444000		
2-Aminoethanol	0174001	2491	141-43-5
2-Aminoisobutane	0065001	2734	75-64-9
2-Aminopentane	0140001	1154	109-89-7
2-Aminopropane	0245001	1221	75-31-0
2-Aminopyridine	0023001	2671	
2-Bromobutane	0591000	2339	
2-Bromoethyl ethyl ether	0593000	2340	
2-Bromopentane	0596000		
2-Bromopropane	0057000	2344	75-26-3
2-Butanone	0280001	1193	78-93-3
2-Butenal	0106001	1143	4170-30-3
2-Butyne-1,4-diol	0072001	2716	110-65-6
2-Butynediol	0072002	2716	110-65-6
2-Chloro-1,3-butadiene	0100003	1991	126-99-8
2-Chloro-1-ethanol	0189002	1135	107-07-3
2-Chloroacetaldehyde	0090001	2232	107-20-0
2-Chloroacrylic acid, methyl ester	0275001		80-63-7
2-Chlorobuta -1,3-diene	0100004	1991	126-99-8
2-Chlorobutane	0693000	1127	
2-Chloroethane sulfonyl chloride	0697000		
2-Chloroethanol	0189001	1135	107-07-3
2-Chloroethyl chlorocarbonate	0095001	2742	627-11-2
2-Chloroethyl vinyl ether	0698000		
2-Chlorophenylthiourea	0098000		5344-82-1
2-Chloropropane	0709000	2356	
2-Chloropropene	0711000	2456	
2-Chloropropionic acid	0101001	2511	598-78-7
2-Cyano-2-propanol	0005001	1541	75-86-5
2-Cyanoethyl alcohol	0190001		109-78-4
2-Cyanohydrin	0190002		109-78-4
2-Cyanopropane	0240001	2284	78-82-0
2-Cyanpropene	0264001	3079	126-98-7
2-Diethylaminoethanol	0141002	2686	100-37-8
2-Dimethylaminoethanol	0930000	2051	

CHEMICAL NAME	ID #	UN #	CAS #
2-Ethoxyethanol	0196001	1171	110-80-5
2-Ethoxyethyl ethyl ether	0195004	1153	629-14-1
2-Ethyl hexanoic acid	1052000		
2-Ethyl hexanol	1053000		
2-Ethyl hexylamine	1054000	2276	
2-Ethyl toluene	1071000		
2-Ethyl-3-propyl acrolein	1065000		
2-Fluoroacetic acid	0208002	2642	144-49-0
2-Fluoroaniline	1096000	2941	
2-Fluoroethanol	0194001		371-62-0
2-Formylfuran	0216001	1199	98-01-1
2-Furaldehyde	0216003	1199	98-01-1
2-Furfural	0216004	1199	98-01-1
2-H-1,4-oxazine	0298003	2054	110-91-8
2-Heptanone	0267003	1110	110-43-0
2-Hexanone	0271001	1224	591-78-6
2-Hexene	1153000		
2-Hydroperoxy-2-methylpropene	0068003		75-91-2
2-Hydroxyethyl acrylate	1160000		
2-Hydroxyisobutyronitrile	0005002	1541	75-86-5
2-Hydroxypropinonitrile	0250003	3275	78-97-7
2-Hydroxypropylamine	0243002		78-96-6
2-Hydroxytriethylamine	0141004	2686	100-37-8
2-Isopropylcyanohydrin	0005004	1541	75-86-5
2-Methoxy-2-methylpropane	0270002	2398	1634-04-4
2-Methoxyethanol	0197005	1188	109-86-4
2-Methyl lactonitrile	0005005	1541	75-86-5
2-Methyl-1,3-butadiene	0241002	1218	78-79-5
2-Methyl-1-butene	1281000	2459	
2-Methyl-1-butenone	0287003	1246	814-78-8
2-Methyl-1-nitroanthraquinone	1312000		
2-Methyl-1-pentene	1317000		
2-Methyl-2-butene	1282000	2460	
2-Methyl-2-hydroxy-3-butyne	1305000		
2-Methyl-2-pentene	1318000		
2-Methyl-2-propenoic acid	0255003	2531	79-41-4
2-Methyl-4-pentanone	0285003	1245	108-10-1
2-Methyl-5-vinyl pyridine (MVP)	1331000	3073	
2-Methyl-6-ethyl aniline	1298000		
2-Methylacrylic acid, methyl ester	0290002	1247	80-62-6
2-Methylbutadiene	0241003	1218	78-79-5
2-Methylpropane	0238002	1969	75-28-5
2-Methylpropene	0239001	1055	115-11-7
2-Methylpropenenitrile	0264003	3079	126-98-7
2-Nitrophenol	1399000	1663	
2-Nitropropane	0308002	2608	79-46-9
2-Nitrotoluene	0310002	1664	
2-Oxetanone	0344002	1993	57-57-8
2-Pentene	1462000		

CHEMICAL NAME	ID #	UN #	CAS #
2-Phenyloxirane	0363002		96-09-3
2-Phenylpropane	0246003	1918	98-82-8
2-Phenylpropylene	0244004	2303	98-83-9
2-Propanol	0242005	1219	67-63-0
2-Propanone	0004003	1090	67-64-1
2-Propen-1-amine	0018005	2334	107-11-9
2-Propenal	0010004	1092	79-06-1
2-Propenamine	0018004	2334	107-11-9
2-Propenenitrile	0013004	1093	107-13-1
2-Propenoic acid	0012007	2218	79-10-7
2-Propenol	0017006	1098	107-18-6
2-Propenyl bromide	0019004	1099	106-95-6
2-Propenyl chloroformate	0021002	1722	2937-50-0
2-Propyl chloroformate	0247003	2407	108-23-6
2-Propylamine	0245003	1221	75-31-0
2-Propynol	0343003	1986	107-19-7
2-Pyrrolidone	1551000		
2-Thiopropane	0163004	1164	75-18-3
2-Thiourea	0382003		62-56-6
3-(1-Methyl ethyl) phenyl methyl carbamate	1299000		
3,3'-Dichlorobenzidine	0869000		
3,3'-Diethylthiadicarbocyanine iodide	0171002		514-73-8
3-Aminopropene	0018001	2334	107-11-9
3-Aminopropylene	0018002	2334	107-11-9
3-Aminopyridine	0023002	2671	
3-Bromo-1-propene	0019002	1099	106-95-6
3-Bromopropylene	0019003	1099	106-95-6
3-Bromopropyne	0058000	2345	106-96-7
3-Buten-2-one	0297001	1251	78-94-4
3-Buteno-beta-lactone	0149002	2521	674-82-8
3-Chloropropanenitrile	0102002	3276	542-76-7
3-Chloropropene	0020003	1100	107-05-1
3-Chloropropionitrile	0102000	3276	542-76-7
3-Chloropropyl octyl sulfoxide	0714000		
3-Chlorotoluene	0716000	2238	
3-Hexene	1154000		
3-Hydroxy-1-propyne	0343002	1986	107-19-7
3-Hydroxypropionitrile	0190005		109-78-4
3-Methoxybutyl acetate	1267000		
3-Methyl nitrosoaminopropionitrile	1313000		
3-Methyl-1-butene	1283000	2561	
3-Methyl-2-butanone	0269000	2397	563-80-4
3-Methyl-3-butene-2-one	0287002	1246	814-78-8
3-Methylbut-2-one	0269002	2397	563-80-4
3-MIC	0284006	2053	108-11-2
3-Nitrophenol	1400000	1663	
3-Nitrotoluene	0310003	1664	
3-Nitrotoluol	0310007	1664	

CHEMICAL NAME	ID #	UN #	CAS #
3-Pentanone	0146005	1156	96-22-0
3-Propanolide	0344003	1993	57-57-8
3-Trifluoromethylaniline	1731000	2948	
4,4'-DDT	0811000	2761	
4,4'-Diaminodiphenyl ether	0832000		
4,4'-Isopropylidenediphenol	1186000		
4,4'-Methylene bis-(2-chloroaniline)	1292000		
4,4'-Methylene bis-(2-methyaniline)	1293000		
4,4'-Methylene dianiline	1295000		
4,4'-Thiodianiline	1679000		
4,6-Dinitro-o-cyclohexyl phenol	0950000	9026	
4-Aminoazobenzene	0439000		
4-Aminobutyl diethoxymethyl silane	0440000		
4-Amino-N,N-dimethylaniline	0160001		99-98-9
4-Aminopropiophenone	0445000		
4-Aminopyridine	0023003	2671	
4-Bromophenyl phenyl ether	0597000		
4-Chloro-1-methylbenzene	0104002	2238	106-43-4
4-Chlorophenyl phenyl ether	0705000		
4-Chlorotoluene	0104003	2238	106-43-4
4-Dimethyl aminoazobenzene	0929000		
4-Fluoroaniline	1097000	2941	
4-Fluorotoluene	1098000	2388	
4-Methyl-1-pentene	0291000	2288	691-37-2
4-Methyl-2-pentanol	0284004	2053	108-11-2
4-Methyl-2-pentene	1319000		
4-Methyl-3-penten-2-one	1841004	1229	141-79-7
4-Methylene	0149004	2521	674-82-8
4-Nitroaniline	1380000	1661	
4-Nitrobiphenyl	1382000		
4-Nitrophenol	1401000	1663	
4-Nitropyridine-1-oxide	1402000		
4-Nitrotoluene	0310004	1664	
4-Pyridinamine	0023009	2671	
4-Pyridylamine	0023010	2671	
4-Thiapentanal	1674000	2785	
5-Nitroacenaphthene	1379000		
5-Nitro-o-anisidine	1381000		
7H- Dibenzo (C,G) carbazole	0850000		
A-150	0411001	1305	75-94-5
AA	0017002	1098	107-18-6
Acetal	0001000	1088	105-57-7
Acetaldehyde	0002000	1089	75-07-0
Acetaldehyde cyanohydrin	0250001	3275	78-97-7
Acetaldehyde ethylacetal	0001001	1088	105-57-7
Acetamide	0414000		
Acetene	0188001	1038	74-85-1
Acetic acid (More than 80%)	1840000	2789	64-19-7
Acetic acid (Solution in Water 1-80%)	1840000	2790	64-19-7

CHEMICAL NAME	ID #	UN #	CAS #
Acetic acid anhydride	0003001	1715	108-24-7
Acetic acid bromide	0007001	1716	506-96-7
Acetic acid chloride	0008001	1717	75-36-5
Acetic acid, dimethylamide	0151001		127-19-5
Acetic acid, ethinyl ester	0403001	1301	108-05-4
Acetic acid, methyl ester	0261001	1231	79-20-9
Acetic acid, n-butyl ester	0061001	1123	123-86-4
Acetic acid, n-propyl ester	0347001	1276	109-60-4
Acetic acid, vinyl ester	0403002	1301	108-05-4
Acetic aldehyde	0002001	1089	75-07-0
Acetic anhydride	0003000	1715	108-24-7
Acetic chloride	0008002	1717	75-36-5
Acetic ester	0175001	1173	141-78-6
Acetic ether	0175002	1173	141-78-6
Acetoacetone	0320001	2310	123-54-6
Acetocyanohydrin	1819000		
Acetol	0001002	1088	105-57-7
Acetone	0004000	1090	67-64-1
Acetone cyanohydrin	0005000	1541	67-64-1
Acetone thiosemicarbazide	0415000		
Acetonitrile	0006000	1648	75-05-8
Acetophenone	0416000		
Acetyl acetone	0320002	2310	123-54-6
Acetyl anhydride	0003002	1715	108-24-7
Acetyl bromide	0007000	1716	506-96-7
Acetyl chloride	0008000	1717	75-36-5
Acetyl ether	0003003	1715	108-24-7
Acetyl ketene	0149001	2521	674-82-8
Acetyl oxide	0003004	1715	108-24-7
Acetyl peroxide solution	0418000	2084	
Acetylene	0009000	1001	74-86-2
Acetylene dichloride	0131001	1150	540-59-0
Acetylene tetrachloride	0374001	1702	79-34-5
Acetylene trichloride	0390001	1710	79-01-6
Acetylenogen	0076001	1402	75-20-7
Acetylsilicon trichloride	0022001	1724	107-37-9
Acridine	0419000	2713	
Acroleic acid	0012001	2218	79-10-7
Acrolein	0010000	1092	79-06-1
Acryladehyde	0010001	1092	79-06-1
Acrylamide	0011000	2074	79-06-1
Acrylic acid	0012000	2218	79-10-7
Acrylic acid, butyl ester	0062001	2348	141-32-2
Acrylic acid, chloride	0014001	9188	814-68-6
Acrylic acid, ethyl ester	0176001	1917	140-88-5
Acrylic acid, methyl ester	0263001	1919	96-33-3
Acrylic amide	0011001	2074	79-06-1
Acrylonitrile	0013000	1093	107-13-1
Acryloyl chloride	0014000	9188	814-68-6

CHEMICAL NAME	ID #	UN #	CAS #
Acrylyl chloride	0014002	9188	814-68-6
Actidione	0117001		66-81-9
Actidone	0117002		66-81-9
Adipic acid	0420000		
Adipic acid dinitrile	0015001	2205	111-69-3
Adiponitrile	0015000	2205	111-69-3
Alachlor	0421000		
Alcide	0088001	9191	10049-04-4
Aldicarb	0016000	2757	116-06-3
Aldifen	0168003		51-28-5
Aldrin	0422000	2761	
Algrain	0177001	1170	64-17-5
Alkyl benzene sulfonic acids	0423000		
Allene	0424000	2200	
Allene-methyl acetylene mixture	0262001	1060	
Allethrin	0425000	2902	
Allyl acetate	0426000	2333	
Allyl alcohol	0017000	1098	107-18-6
Allyl aldehyde	0010002	1092	79-06-1
Allyl bromide	0019000	1099	106-95-6
Allyl chloride	0020000	1100	107-05-1
Allyl chlorocarbonate	0021001	1722	2937-50-0
Allyl chloroformate	0021000	1722	2937-50-0
Allyl ether	0427000		
Allyl ethyl ether	0428000	2335	
Allyl iodide	0429000	1723	
Allyl isothiocyanate	0430000	1545	
Allylal	0017001	1098	107-18-6
Allylamine	0018000	2334	107-11-9
Allylic alcohol	0017003	1098	107-18-6
Allyltrichlorosilane	0022000	1724	107-37-9
alpha-Bromotoluene	0044001	1737	100-39-0
alpha-Chlorobenzaldehyde	0043002	1736	98-88-4
alpha-Chloropropionic acid	0101000	2511	598-78-7
alpha-Chlorotoluene	0045001	1738	100-44-7
alpha-Cumene hydroperoxide	0107001	2116	80-15-9
alpha-Endosulfan	0992000		
alpha-Methacrylic acid	0255002	2531	79-41-4
alpha-Methyalcrylic acid	0255001	2531	79-41-4
alpha-Methyl benzyl alcohol	1247000		
alpha-Methyl benzyl alcohol	1280000	2937	
alpha-Methyl styrene	0244002	2303	98-83-9
alpha-Naphthyl amine	1323000		
alpha-Naphthyl amine	1355000	2077	
alpha-Pinene	0337000	2368	80-56-8
alpha-Tolunitrile	0324001	2470	140-29-4
Aluminum (dust)	0431000	1396	
Aluminum borohydride	0432000	2870	
Aluminum chloride	0433000	1726	

CHEMICAL NAME	ID #	UN #	CAS #
Aluminum fluoride	0434000		
Aluminum nitrate	0435000	1438	
Aluminum oxide	0436000		
Aluminum phosphide	0437000	1397	
Aluminum sulfate	0438000		
Aluminum, triisobutyl	0395001		100-99-2
AMFO	0034001	0331	
AM-FOL	0024001	1005	7664-41-7
Aminic acid	0214001	1779	64-18-6
Aminobenzene	0035002	1547	62-53-3
Aminocyclohexane	0118001	2357	108-91-8
Aminoethane	0178001	1036	75-04-7
Aminoethyl ethanol amine	0442000		
Aminoethylethandiamine	0143001	2079	111-40-0
Aminohexahydrobenzene	0118002	2357	108-91-8
Aminomethane	1831000		
Aminophen	0035001	1547	62-53-3
Aminopyridine	0023000	2671	
Aminotoluene	0387001	1708	
Amiton	0446000	3017	
Amiton oxalate	0447000		
Amitrole	0448000		
Ammonia	0024000	1005	7664-41-7
Ammonia monohydrate	0027001		1336-21-6
Ammonia solution	0027002		1336-21-6
Ammonia water	0027003		1336-21-6
Ammonia, anhydrous	0024002	1005	7664-41-7
Ammonium acetate	0449000		
Ammonium aminoformate	0026001	9083	1111-78-0
Ammonium benzoate	0025000	9080	1863-63-4
Ammonium bicarbonate	0452000		
Ammonium bifluoride	0453000	1727	
Ammonium bisulfite	0454000	2693	
Ammonium bromide	0455000		
Ammonium carbamate	0026000	9083	1111-78-0
Ammonium carbonate	0456000	9084	
Ammonium chloride	0457000	9085	
Ammonium chromate	0458000	9086	
Ammonium citrate	0459000	9087	
Ammonium dichromate	0460000	1439	
Ammonium fluoborate	0461000	9088	
Ammonium fluoride	0462000	2505	
Ammonium formate	0463000		
Ammonium gluconate	0464000		
Ammonium hydroxide	0027000	2672	1336-21-6
Ammonium hydroxide (10-35% in water)	0027004	2672	1336-21-6
Ammonium hydroxide (35-50% in water)	0027005	2073	1336-21-6
Ammonium hypophosphite	0465000		

CHEMICAL NAME	ID #	UN #	CAS #
Ammonium iodide	0466000		
Ammonium lactate	0467000		
Ammonium lauryl sulfate	0468000		
Ammonium molybdate	0469000		
Ammonium monosulfide	0029001	2683	12135-76-1
Ammonium nitrate	0470000	1942	
Ammonium nitrate fertilizers	0471000	2072	
Ammonium nitrate:fuel oil	0034002	0331	
Ammonium nitrate-phosphate mixture	0472000	2070	
Ammonium nitrate-sulfate mixture	0473000	2069	
Ammonium nitrate-urea solution	0474000		
Ammonium oleate	0475000		
Ammonium oxalate	0476000	2449	
Ammonium pentaborate	0477000		
Ammonium perchlorate	0028000	1442	7790-98-9
Ammonium perchlorate high explosive	0028001	1442	7790-98-9
Ammonium perchlorate oxidizer	0028002	1442	7790-98-9
Ammonium permanganate	0478000	9190	
Ammonium persulfate	0479000	1444	
Ammonium phosphate	0480000		
Ammonium picrate(wet)	0481000	1310	
Ammonium rhodanate	0031000	9092	1762-95-4
Ammonium silicofluoride	0482000	2854	
Ammonium stearate	0483000		
Ammonium sulfamate	0484000	9089	
Ammonium sulfate	0485000		
Ammonium sulfide	0029000	2683	12135-76-1
Ammonium sulfite	0030000	9090	10196-04-0
Ammonium sulfocyanide	0031001	9092	1762-95-4
Ammonium tartrate	0486000	9091	
Ammonium thiocyanate	0031002	9092	1762-95-4
Ammonium thiosulfate	0487000	9093	
AMS	0244001	2303	98-83-9
Amthio	0031003	9092	1762-95-4
Amyl alcohol	0032000	1105	71-41-0
Amyl methyl ketone	0267001	1110	110-43-0
Amyl phthalate	0494000		
Amylol	0032002	1105	71-41-0
Amyltrichlorosilane	0033000	1728	107-72-2
AN/FO	0034000	0331	
Anhydrol	0177002	1170	64-17-5
Anhydrous ammonia	0024003	1005	7664-41-7
Anhydrous ethanol	0177003	1170	64-17-5
Anhydrous hydrobromic acid	0228001	1048	10035-10-6
Anhydrous hydrofluoric acid	0231001	1052	7664-39-3
Aniline	0035000	1547	62-53-3
Aniline oil	0035003	1547	62-53-3
Anisole	0498000	2222	

CHEMICAL NAME	ID #	UN #	CAS #
Anisoyl chloride	0499000	1729	
Anone	0116001	1915	108-94-1
Ansul ether 121	0150001	2252	110-71-4
Anthion	0340001	1492	7727-21-1
Anthracene	0500000		
Antimony pentachloride	0502000	1730	
Antimony pentafluoride	0503000	1732	
Antimony potassium tartrate	0504000	1551	
Antimony tribromide	0505000	1549	
Antimony trichloride	0506000	1733	
Antimony trifluoride	0507000	1549	
Antimony trioxide	0508000		
Antimony(powder)	0501000	2871	
ANTU	0509000	1651	
Aqua fortis	0302002		7697-37-2
Aqueous ammonia	0027006		1336-21-6
Aramite	0510000		
Arctic	0273001	1063	74-87-3
Argon	0511000	1006	
Arsenic	0512000	1558	
Arsenic acid	0513000	1561	
Arsenic butter	0036001	1560	7784-34-1
Arsenic chloride	0036002	1560	7784-34-1
Arsenic dichloroethane	0186001	1892	598-14-1
Arsenic disulfide	0514000	1557	
Arsenic hydride	0037001	2188	7784-42-1
Arsenic pentoxide	0515000	1559	
Arsenic trichloride	0036000	1560	7784-34-1
Arsenic trihydride	0037002	2188	7784-42-1
Arsenic trioxide	0516000	1561	
Arsenic trisulfide	0517000	1557	
Arsenous chloride	0036003	1560	7784-34-1
Arsenous trichloride	0036004	1560	7784-34-1
Arsine	0037000	2188	7784-42-1
Asbestos	0518000	2212	
Asphalt	0519000	1999	
Asphalt blending stocks: roofers flux	0520000	1999	
Asphalt blending stocks: straight run residue	0521000	1999	
asym-Dimethylhydrazine	0159001	1163	57-14-7
Atrazine	0522000		
Auramine	0523000		
Avitrol	0023007	2671	
Azabenzene	0354001	1282	110-86-1
Azacyclohexane	0338001	2401	110-89-4
Azacyclopropane	0198001	1185	151-56-4
Azide	0357001	1687	26628-22-8
Azine	0354002	1282	110-86-1
Azirane	0198002	1185	151-56-4
Aziridine	0198003	1185	151-56-4

CHEMICAL NAME	ID #	UN #	CAS #
Barium	0524000	1400	
Barium carbonate	0525000	1564	
Barium chlorate	0533000	1445	
Barium cyanide	0534000	1565	
Barium nitrate	0535000	1446	
Barium perchlorate	0536000	1447	
Barium permanganate	0537000	1448	
Barium peroxide	0538000	1449	
BCME	0133001	2249	542-88-1
BD	0059001	1010	106-99-0
Benomyl	0539000		
Bentazon	0540000		
Benzal chloride	0047001	1886	98-87-3
Benzaldehyde	1838000	1989	100-52-7
Benzaldehyde	1838001	1990	100-52-7
Benzamide	0038000		
Benzenamine	0035004	1547	62-53-3
Benzene	0039000	1114	71-43-2
Benzene arsonic acid	0541000		
Benzene chloride	0093001	1134	108-90-7
Benzene fluoride	0209001	2387	462-06-6
Benzene hexachloride	0542000	2729	
Benzene methylal	1838003		100-52-7
Benzene nitro	1842001	1662	98-95-3
Benzene phosphorous dichloride	0327001	2798	644-97-3
Benzene sulfonyl chloride	0543000	2225	
Benzeneacetonitrile	0324002	2470	140-29-4
Benzenecarbonal	1838002		100-52-7
Benzenecarbonyl chloride	0043001	1736	98-88-4
Benzenehexahydride	0115001	1145	108-94-1
Benzenenitrile	0040001	2224	100-47-0
Benzenethiol	0326001	2337	108-98-5
Benzenol	0323003		108-95-2
Benzidine	0544000	1885	
Benzin	0299001		8030-30-6
Benzo (A) anthracene	0545000		
Benzo (A) pyrene	0546000		
Benzo (B) fluoranthene	0547000		
Benzo (GHI) perylene	0548000		
Benzoic acid	0549000		
Benzoic acid amide	0038001		
Benzoic aldehyde	1838004		100-52-7
Benzoic trichloride	0042001	2226	98-07-7
Benzol	0039001	1114	71-43-2
Benzonitrile	0040000	2224	100-47-0
Benzophenone	0550000		
Benzoquinone	0041000	2587	106-51-4
Benzotrichloride	0042000	2226	98-07-7
Benzoyl chloride	0043000	1736	98-88-4

CHEMICAL NAME	ID #	UN #	CAS #
Benzoyl peroxide	0551000	2085	
Benzoylamide	0038002		
Benzyl acetate	0552000		
Benzyl alcohol	0553000		
Benzyl amine	0554000		
Benzyl bromide	0044000	1737	100-39-0
Benzyl carbonyl chloride	0046001	1739	501-53-1
Benzyl chloride	0045000	1738	100-44-7
Benzyl chlorocarbonate	0046002	1739	501-53-1
Benzyl chloroformate	0046000	1739	501-53-1
Benzyl cyanide	0324003	2470	140-29-4
Benzyl dichloride	0047002	1886	98-87-3
Benzyl dimethyl amine	0555000	2619	
Benzyl dimethyl octadecyl ammonium chloride	0556000		
Benzyl ether	0124001		103-50-4
Benzyl iodide	0557000	2653	
Benzyl nitrile	0324004	2470	140-29-4
Benzyl oxide	0124002		103-50-4
Benzyl trichloride	0042003	2226	98-07-7
Benzyl trimethyl ammonium chloride	0558000		
Benzyl violet	0559000		
Benzylene chloride	0047003	1886	98-87-3
Benzylidene chloride	0047000	1886	98-87-3
Beryllium	0560000	1567	
Beryllium chloride	0561000	1566	
Beryllium fluoride	0562000	1566	
Beryllium nitrate	0563000	2464	
Beryllium oxide	0564000	1566	
Beryllium sulfate	0565000	1566	
beta-Butyrolactone	0606000		
beta-Chloroprene	0100001	1991	126-99-8
beta-Endosulfan	0993000		
beta-Methyl acrolein	0106006	1143	4170-30-3
beta-Propiolactone	0344004	1993	57-57-8
BHA	0566000		
BHC, alpha-	0567000		
BHC, beta-	0568000		
BHC, delta-	0569000		
BHC, gamma-	0570000		
BIC	0069001	2485	111-36-4
Bicylcopentadiene	0137001	2048	77-73-6
Biethylene	0059002	1010	106-99-0
Bimethyl	0173002		74-84-0
Biocide	0010003	1092	79-06-1
Biogas	0257002		74-82-8
Bioxirane	0138001		1464-53-5
Biphenyl	0571000		
Bis(2-aminoethyl)amine	0143002	2079	111-40-0
Bis-(2-chloro-1-methyl ethyl) ether	0574000	2490	

CHEMICAL NAME	ID #	UN #	CAS #
Bis-(2-chloroethoxy) methane	0572000		
Bis-(2-chloroethyl) ether	0129001	1916	111-44-4
Bis-(2-chloroisopropyl) ether	0573000	2490	
Bis-(2-ethyl hexyl) adipate	0575000		
Bis-(2-ethyl hexyl) phthalate	0576000		
Bis(chloromethyl) ether	0133002	2249	542-88-1
Bis-(chloromethyl)ketone	0127001	2649	534-07-6
Bismuth oxychloride	0577000		
Bis-O,O-diethylpyrophosphoric anhydride	0377002		107-49-3
Bisphenol A	0578000		
Bisphenol A diglycidyl ether	0579000		
Bisulfite	0367001	1079	7446-09-5
Bithionol	0580000		
Bitoscanate	0581000		
Bivinyl	0059003	1010	106-99-0
B-K Liquid	0360001	1791	7681-52-9
Blasting oil	0306002	0143	55-63-0
Bleach	0360002	1791	7681-52-9
Blue oil	0035005	1547	62-53-3
Bolero	0582000		
Bondolane A	0364001		126-33-0
Bonoform	0374002	1702	79-34-5
Boric acid	0583000		
Borneol	0584000	1312	
Boroethane	0125001	1911	19287-45-7
Boron bromide	0048001	2692	10294-33-4
Boron chloride	0049001	1741	10294-34-5
Boron fluoride	0050001	1008	7637-07-2
Boron hydride	1820000		
Boron tribromide	0048000	2692	10294-33-4
Boron trichloride	0049000	1741	10294-34-5
Boron trifluoride	0050000	1008	7637-07-2
Boron trifluoride; dimethyl etherate	0585000	2965	
Bottled gas	0252001	1075	68476-85-7
BPL	0344001	1993	57-57-8
Brimstone	0365002	1350	7704-34-9
Brom	0051001	1744	7726-95-6
Bromacil	0586000		
Bromadiolone	0587000		
Bromide fluoride	0052001	1745	7789-30-2
Bromine	0051000	1744	7726-95-6
Bromine chloride	0588000	2901	
Bromine cyanide	0110000	1889	506-68-3
Bromine fluoride	0053001	1746	7787-71-5
Bromine pentafluoride	0052000	1745	7789-30-2
Bromine trifluoride	0053000	1746	7787-71-5
Bromoacetic acid	0589000	1938	
Bromoacetone	0590000	1569	

CHEMICAL NAME	ID #	UN #	CAS #
Bromoacetyl bromide	0054000	2513	598-21-0
Bromoallylene	0019001	1099	106-95-6
Bromobenzene	0055000	2514	108-86-1
Bromochloromethane	0592000	1887	
Bromocyan	0110001	1889	506-68-3
Bromoethanoyl bromide	0054001	2513	598-21-0
Bromoethene	0404001	1085	593-60-2
Bromoethylene	0404002	1085	593-60-2
Bromoform	0594000	2515	
Bromofume	0192001	1605	106-93-4
Brom-o-gas	0268001	1062	74-83-9
Bromomethane	0268002	1062	74-83-9
Bromophenylmethane	0044002	1737	100-39-0
Bromopropyne	0058001	2345	106-96-7
Bromotrifluoroethylene	0599000	2419	
Bromotrifluoromethane	0600000	1009	
Brucine	0601000	1570	
Butadiene	0059000	1010	106-99-0
Butadiene diepoxide	0138002		1464-53-5
Butadiene dioxide	0138003		1464-53-5
Butal	0073001	1129	123-72-8
Butaldehyde	0073000	1129	123-72-8
Butanal	0073003	1129	123-72-8
Butane	0060000	1011	106-97-8
Butane nitrile	0074001	2411	109-74-0
Butanedione	0602000	2346	
Butanethiol	0070002	2347	109-79-5
Butanoyl chloride	0075001	2353	141-75-3
Butene	0066001	1012	25167-67-3
Butyl acetic acid	0077001	2829	142-62-1
Butyl acid phosphate	0608000	1718	
Butyl acrylate	0062000	2348	141-32-2
Butyl alcohol	0063002	1120	75-65-0
Butyl aldehyde	0073004	1129	123-72-8
Butyl benzyl phthalate	0614000		
Butyl bromide	0056001	1126	109-65-9
Butyl butyrate	0615000		
Butyl chloride	0094001	1127	109-69-3
Butyl ethanoate	0061003	1123	123-86-4
Butyl ether	0619000	1149	
Butyl ethylene	0222001	2370	592-41-6
Butyl isocyanate	0069002	2485	111-36-4
Butyl isovalerate	0621000		
Butyl mercaptan	0070000	2347	109-79-5
Butyl methyl ether	0623000	2350	
Butyl nitrite	0624000	2351	
Butyl toluene	0629000	2667	
Butyl, decyl, cetyl-eicosyl methacrylate	0617000		
Butyl-2-propenoate	0062003	2348	141-32-2

CHEMICAL NAME	ID #	UN #	CAS #
Butylacetone	0267002	1110	110-43-0
Butylamine	0064002	1125	109-73-9
Butylated hydroxyanisole	0613000		
Butylene	0066000	1012	25167-67-3
Butylethylamine	0181001	2734	13360-63-9
Butylsilicon trichloride	0071001	1747	7521-80-4
Butyltrichlorosilane	0071000	1747	7521-80-4
Butynediol	0072003	2716	110-65-6
Butyral	0073005	1129	123-72-8
Butyraldehyde	0073002	1129	123-72-8
Butyric acid	0630000		
Butyric acid chloride	0075002	2353	141-75-3
Butyric acid nitrile	0074002	2411	109-74-0
Butyric acid, ethyl ester	0182001	1180	105-54-4
Butyric acid, methyl ester	0272001	1237	623-42-7
Butyric chloride	0075003	2353	141-75-3
Butyronitrile	0074000	2411	109-74-0
Butyryl chloride	0075000	2353	141-75-3
BZCF	0046003	1739	501-53-1
C.I. acid Blue 9, diammonium salt	0734000		
C.I. acid blue 9, disodium salt	0735000		
C.I. acid green 3	0736000		
C.I. basic green 4	0737000		
C.I. basic red 1	0738000		
C.I. disperse yellow 3	0739000		
C.I. food red 15	0741000		
C.I. food red 5	0740000		
C.I. solvent orange 7	0742000		
C.I. solvent yellow 14	0744000		
C.I. solvent yellow 3	0743000		
C.I. vat yellow 4	0747000		
Cacodylic acid	0633000	1572	
Cadmium acetate	0635000		
Cadmium bromide	0636000		
Cadmium chloride	0637000		
Cadmium fluoroborate	0638000		
Cadmium nitrate	0639000		
Cadmium oxide	0640000		
Cadmium stearate	0641000		
Cadmium sulfate	0642000		
Cadmium (powder)	0634000		
CADOXTBH	0068001		75-91-2
Calcium	0643000	1401	
Calcium acetylide	0076002	1402	75-20-7
Calcium arsenite	0644000	1574	
Calcium carbide	0076000	1402	75-20-7
Calcium chlorate	0645000	1452	
Calcium chloride	0646000		
Calcium chromate	0657000	9096	

CHEMICAL NAME	ID #	UN #	CAS #
Calcium cyanide	0658000	1575	
Calcium fluoride	0659000		
Calcium hydride	0660000	1404	
Calcium hydroxide	0661000		
Calcium hypochlorite	0662000	1748	
Calcium nitrate	0663000	1454	
Calcium oxide	0664000	1910	
Calcium peroxide	0665000	1457	
Calcium phosphate	0666000		
Calcium phosphide	0667000	1360	
Calcium resinate	0668000		
Camphene	0669000	9011	
Camphor oil	0670000	1130	
Cantharidin	0671000		
Caproic acid	0077000	2829	142-62-1
Caprolactam	0672000		
Capronic acid	0077002	2829	142-62-1
Caprylene	0313001		111-66-0
Capsine	0167001	1598	534-52-1
Captan	0673000	9099	
Carbachol	0078001		51-83-2
Carbachol chloride	0078000		51-83-2
Carbacholin	0078002		51-83-2
Carbacholine dichloride	0078003		51-83-2
Carbacryl	0013001	1093	107-13-1
Carbamic acid, ammonium salt	0026002	9083	1111-78-0
Carbamide peroxide	0401001	1511	124-43-6
Carbamiotin	0078004		51-83-2
Carbamoyl dimethyl chloride	0154001	2262	79-44-7
Carbamyl	0016001	2757	116-06-3
Carbaryl(solid)	0674000	2757	
Carbide	0076003	1402	75-20-7
Carbinol	0260001	1230	67-56-1
Carbofuran	0079000	2757	1563-66-2
Carbolic acid	0323004		108-95-2
Carbolic oil	0675000	2821	
Carbon bisulfide	0081001	1131	75-15-0
Carbon bisulphide	0081002	1131	75-15-0
Carbon chloride	0083002	1846	56-23-5
Carbon dichloride oxide	0329001	1076	75-44-5
Carbon difluoride oxide	0084002	2414	353-50-4
Carbon dioxide	0080000	1013	124-38-9
Carbon disulfide	0081000	1131	75-15-0
Carbon monoxide	0082000	1016	630-08-0
Carbon nitride	0109001	1026	460-19-5
Carbon oxide	0082002	1016	630-08-0
Carbon oxide sulfide	0085001	2204	463-58-1
Carbon oxychloride	0329002	1076	75-44-5
Carbon oxyfluoride	0084003	2414	353-50-4

CHEMICAL NAME	ID #	UN #	CAS #
Carbon oxysulfide	0085002	2204	463-58-1
Carbon sulfide	0081003	1131	75-15-0
Carbon tet	0083003	1846	56-23-5
Carbon tetrachloride	0083000	1846	56-23-5
Carbona	0083001	1846	56-23-5
Carbonic acid anhydride	0080001	1013	124-38-9
Carbonic acid gas	0080002	1013	124-38-9
Carbonic acid, diethyl ester	0142001	2366	105-58-8
Carbonic anhydride	0080003	1013	124-38-9
Carbonic difluoride	0084001	2414	353-50-4
Carbonic ether	0142002	2366	105-58-8
Carbonic oxide	0082001	1016	630-08-0
Carbonochloride acid, ethyl ester	0185001	1182	541-41-3
Carbonyl chloride	0329003	1076	75-44-5
Carbonyl fluoride	0084000	2414	353-50-4
Carbonyl sulfide	0085000	2204	463-58-1
Carene	0676000		
Casing head gasoline	0217001	1203	8006-61-9
Caswell No.805	0361001	1692	57-24-9
Catechol	0677000		
Caustic potash solution	0647000	1814	
Caustic soda	0359002		1310-73-2
Caustic soda, solution	0359003		1310-73-2
Cellon	0374003	1702	79-34-5
Certox	0361002	1692	57-24-9
Cesium	0678000	1407	
CHA	0118003	2357	108-91-8
Chloral	0086000	2075	75-87-6
Chloramben	0679000		
Chlorbisan	0680000		
Chlordane, flammable liquid	0681000	2762	
Chlordecone	0682000		
Chlorex	0129002	1916	111-44-4
Chlorfenvinfos	0683000		
Chloride of phosphorous	0335001	1809	7719-12-2
Chlorine	0087000	1017	7782-50-5
Chlorine cyanide	0111001	1589	506-78-5
Chlorine dioxide	0088002	9191	10049-04-4
Chlorine dioxide hydrate	0088000	9191	10049-04-4
Chlorine dioxide hydrate (frozen)	0088003	9191	10049-04-4
Chlorine fluoride	0089001	1749	7790-91-2
Chlorine monoxide	0684000		
Chlorine pentafluoride	0685000	2548	
Chlorine peroxide	0088004	9191	10049-04-4
Chlorine sulfide	0366001	1828	10545-99-0
Chlorine trifluoride	0089000	1749	7790-91-2
Chlormephos	0686000		
Chlormequat chloride	0687000		
Chloro methyl sulfane	0258001	3246	124-63-0

CHEMICAL NAME	ID #	UN #	CAS #
Chloro (chloromethoxy) methane	0133003	2249	542-88-1
Chloroacetaldehyde	0090000	2232	107-20-0
Chloroacetaldehyde monomer	0090002	2232	107-20-0
Chloroacetic acid	0688000	1751	
Chloroacetic acid chloride	0092001	1752	79-04-9
Chloroacetic acid, ethyl ester	0184001	1181	105-39-5
Chloroacetic acid, methyl ester	0274001	2295	96-34-4
Chloroacetic chloride	0092002	1752	79-04-9
Chloroacetone	0689000	1695	
Chloroacetonitrile	0091000	2668	107-14-2
Chloroacetophenone	0690000	1697	
Chloroacetyl chloride	0092000	1752	79-04-9
Chloroaldehyde	0090003	2232	107-20-0
Chloroallylene	0020001	1100	107-05-1
Chlorobenzene	0093000	1134	108-90-7
Chlorobenzilate	0692000		
Chlorobutadiene	0100002	1991	126-99-8
Chlorobutane	0094000	1127	109-69-3
Chlorocarbonic acid, ethyl ester	0185002	1182	541-41-3
Chlorocyan	0111002	1589	506-78-5
Chlorocyanogen	0111003	1589	506-78-5
Chlorodibromomethane	0695000		
Chlorodifluoromethane	0696000	1018	
Chloroethanal	0090004	2232	107-20-0
Chloroethane	1825000		
Chloroethanenitrile	0091001	2668	107-14-2
Chloroethanol	0189003	1135	107-07-3
Chloroethene	0405001	1086	75-01-4
Chloroethyl chloroformate	0095000	2742	627-11-2
Chloroethylene	0405002	1086	75-01-4
Chloroform	0096000	1888	67-66-3
Chloroformic acid, isopropyl ester	0247001	2407	108-23-6
Chloroformyl chloride	0329004	1076	75-44-5
Chlorohydrins	0699000		
Chloromethane	0273002	1063	74-87-3
Chloromethyl cyanide	0091002	2668	107-14-2
Chloromethyl ether	0133004	2249	542-88-1
Chloromethyl ethyl ether	0700000	2354	
Chloromethyl methyl ether	0701000	1239	
Chloromethyloxirane	0172002	2023	106-89-8
Chloronitrobenzene	0097000	1578	
Chlorophenyl methane	0045003	1738	100-44-7
Chloropicrin	0099000	1580	76-06-2
Chloropicrin: methyl chloride	0706000	1582	
Chloropivaloyl chloride	0707000	9263	
Chloroprene	0100000	1991	126-99-8
Chloropropene	0020002	1100	107-05-1
Chloropropham	0712000		
Chloropropylene	0020004	1100	107-05-1

CHEMICAL NAME	ID #	UN #	CAS #
Chloropropylene oxide	0172003	2023	106-89-8
Chlorosulfane	0369001	1828	10025-67-9
Chlorosulfonic acid	0103000	1454	7790-94-5
Chlorosulfuric acid	0103001	1454	7790-94-5
Chlorothalonil	0715000		
Chlorotoluene	0104000	2238	106-43-4
Chlorotrifluoride	0089002	1749	7790-91-2
Chlorotrifluoroethane	0718000	1983	
Chlorotrifluoroethylene	0394001	1082	79-38-9
Chlorotrifluoromethane	0719000	1022	
Chlorotrimethylsilane	0398001	1298	75-77-4
Chloroxuron	0720000		
Chlorpyrifos	0105000	2783	2921-88-2
Chlorthiophos	0721000		
Chlorylen	0389001	2831	71-55-6
Choline chloride carbamate	0078005		51-83-2
CHP	0107002	2116	80-15-9
Chromic acetate	0722000	9101	
Chromic acid	0723000	1755	
Chromic anhydride	0724000	1463	
Chromic sulfate	0729000	9100	
Chromium (dust)	0730000		
Chromium oxychloride	0731000	1758	
Chromous chloride	0732000	9102	
Chrysene	0733000		
Cinnamenol	0362001	2055	100-42-5
cis-Butene	0066002	1012	25167-67-3
Citric acid	0745000		
Citrus red No.2	0746000		
Clorox	0360003	1791	7681-52-9
CO	0082003	1016	630-08-0
Coal gas	0748000	1023	
Coal naptha	0039002	1114	71-43-2
Coal oil	0249001	1223	8008-20-6
Cobalt	0749000		
Cobalt acetate	0750000		
Cobalt bromide	0751000		
Cobalt carbonyl	0752000		
Cobalt chloride	0753000		
Cobalt fluoride	0754000		
Cobalt formate	0755000	9104	
Cobalt nitrate	0756000		
Cobalt sulfamate	0757000		
Cobalt sulfate	0758000		
Cocculus	0759000	1584	
Coconut oil:edible	0760000		
Colchicine	0761000		
Collodion	0762000	2059	
Copper	0763000		

CHEMICAL NAME	ID #	UN #	CAS #
Copper acetate	0764000	9106	
Copper acetoarsenite	0765000	1585	
Copper arsenite	0766000	1586	
Copper bromide	0767000		
Copper chloride	0768000	2802	
Copper cyanide	0769000	1587	
Copper fluoroborate	0770000		
Copper formate	0771000		
Copper glycinate	0772000		
Copper iodide	0773000		
Copper lactate	0774000		
Copper naphthenate	0775000		
Copper nitrate	0776000		
Copper oxalate	0777000		
Copper subacetate	0778000		
Copper sulfate	0779000		
Copper sulfate, ammoniated	0780000	9110	
Copper tartrate	0781000	9111	
Coumaphos	0782000	2783	
Coumatetralyl	0783000		
Creosote, coal tar	0784000	1993	
Cresols	0786000	2076	
Cresyl glycidyl ether	0787000		
Cresylate spent caustic solution	0788000		
Crimidine	0789000	2588	
Croton oil	0790000		
Crotonal	0106003	1143	4170-30-3
Crotonaldehyde (E)	0106004	1143	4170-30-3
Crotonaldehyde (Stabilized)	0106000	1143	4170-30-3
Crude oil	0791000		
CTFE	0394002	1082	79-38-9
Cumene	0246001	1918	98-82-8
Cumene hydroperoxide	0107000	2116	80-15-9
Cumyl hydroperoxide	0107003	2116	80-15-9
Cupferron	0792000		
Cupriethylene diamine solution	0793000	1761	
Curmol	0246002	1918	98-82-8
Cyanazine	0794000		
Cyanoacetic acid	0108000		372-09-8
Cyanoacetonitrile	0254001	2647	109-77-3
Cyanobenzene	0040002	2224	100-47-0
Cyanobromide	0110002	1889	506-68-3
Cyanoethane	0346001	2404	107-12-0
Cyanoethylene	0013002	1093	107-13-1
Cyanogen	0109000	1026	460-19-5
Cyanogen bromide	0110003	1889	506-68-3
Cyanogen chloride	0111000	1589	506-78-5
Cyanogen iodide	0112000		506-78-5
Cyanogen monoiodide	0112001		506-78-5

CHEMICAL NAME	ID #	UN #	CAS #
Cyanomethane	0006001	1648	75-05-8
Cyanomethanol	0213001		107-16-4
Cyanotoluene	0324005	2470	140-29-4
Cyanuric chloride	0113000	2670	108-77-0
Cycasin	0795000		
Cyclobutane	0796000	2601	
Cycloheptane	0114000	2241	291-64-5
Cycloheptatriene	0797000	2603	
Cycloheptene	0798000	2242	
Cyclohexane	0115000	1145	108-94-1
Cyclohexanol	0799000		
Cyclohexanone	0116000	1915	108-94-1
Cyclohexanone peroxide	0800000	2119	
Cyclohexatriene	0039003	1114	71-43-2
Cyclohexene	0801000	2256	
Cyclohexenyl trichlorosilane	0802000	1762	
Cycloheximide	0117000		66-81-9
Cyclohexyl acetate	0804000	2243	
Cyclohexyl isocyanate	0805000	2488	
Cyclohexylamine	0118000	2357	108-91-8
Cyclohexylketone	0116002	1915	108-94-1
Cyclohexylmethane	0276001	2296	108-87-2
Cyclopentane	0119000	1146	142-29-0
Cyclopentanol	0806000	2244	
Cyclopentanone	0807000	2245	
Cyclopentene	0120000	2246	142-29-0
Cyclopentimine	0338002	2401	110-89-4
Cyclopropane	0121000	1027	95-75-7
Dakins solution	0360004	1791	7681-52-9
Dalapon	0809000	1760	
DCE	0408001	1303	75-35-4
DCEE	0129003	1916	111-44-4
DCP	0137004	2048	77-73-6
DDC	0154002	2262	79-44-7
DDD	0810000	2761	
DEA	0140002	1154	109-89-7
DEAE	0141001	2686	100-37-8
Decaborane	0123000	1868	17702-41-9
Decaborane tetrahydride	0123002	1868	17702-41-9
Decaborane (14)	0123001	1868	17702-41-9
Decabromodiphenyl oxide	0812000		
Decahydronaphthalene	0813000	1147	
Decaldehyde	0814000		
Decanoic acid	0815000		
DEK	0146001	1156	96-22-0
Demeton	0820000		
Demeton-s-methyl	0821000		
DEN	0140003	1154	109-89-7
Denatured alcohol	0177004	1170	64-17-5

CHEMICAL NAME	ID #	UN #	CAS #
DETA	0143003	2079	111-40-0
Deuterium	0822000	1957	
Dextrose solution	0823000		
Diacetone alcohol	0824000	1148	
Diacetone alcohol peroxide	0825000	2163	
Diacetyl	0826000	2346	
Diacetylmethane	0320003	2310	123-54-6
Diaflan	0394003	1082	79-38-9
Diakon	0290001	1247	80-62-6
Dialifos	0828000	3018	
Diallate	0829000		
Diallyl ether	0831000	2360	
Diallylamine	0830000	2359	
Diamide	0223002		302-02-2
Diamine	0223004		302-02-2
Diamine hydrate	0223003		302-02-2
Diamine sulfate	0224001		10034-93-2
Diaminotoluene	0385001	1709	95-80-7
Diammonium sulfate	0833000		
Diammonium sulfide	0029002	2683	12135-76-1
Diammonium sulfite	0030001	9090	10196-04-0
Diatol	0142003	2366	105-58-8
Diazan	0171001		514-73-8
Diazinon	0836000	2783	
Diazomethane	0837000		
Dibenzo (A,E) pyrene	0838000		
Dibenzo (A,E) pyrene	0839000		
Dibenzo (A,H) anthracene	0845000		
Dibenzo (A,H) pyrene	0846000		
Dibenzo (A,I) pyrene	0847000		
Dibenzo (A,J) acridine	0848000		
Dibenzo (A,L) pyrene	0849000		
Dibenzofuran	0851000		
Dibenzoyl peroxide	0852000	2087	
Dibenzyl ether	0124000		103-50-4
Diborane	0125000	1911	19287-45-7
Diborane hexahydride	0125002	1911	19287-45-7
Dibromoethane	0192003	1605	106-93-4
Dibromomethane	0126000	2664	74-95-3
Dibutyl phenol	0860000		
Dibutyl phthalate	0861000		
Dicamba	0863000		
Dichlobenil	0864000		
Dichlone	0865000		
Dichloricide	0128002	1592	106-46-7
Dichloro-1,2-propane	0351002	1279	78-87-5
Dichloroacetic acid	0866000	1764	
Dichloroacetic acid, methyl ester	0278001	2299	116-54-1
Dichloroacetyl chloride	0867000	1765	

CHEMICAL NAME	ID #	UN #	CAS #
Dichloroacetylene	0868000		
Dichlorobromomethane	0870000		
Dichlorobutene	1839000	2924	
Dichlorobutene	1839001	2920	
Dichlorodifluoromethane	0871000	1028	
Dichlorodimethylsilane	0155001	1162	75-78-5
Dichlorodimethylsilicon	0155002	1162	75-78-5
Dichloroethane	0193002	1184	107-06-2
Dichloroether	0129004	1916	111-44-4
Dichloroethyl ether	0129005	1916	111-44-4
Dichloroethylarsine	0186002	1892	598-14-1
Dichloroethylphenylsilane	0204001	2435	1125-27-5
Dichloroethylsilane	0187001	1183	1789-58-8
Dichloromethane	0132000	1593	75-09-2
Dichloromethyl benzene	0047004	1886	98-87-3
Dichloromethyl ether	0133000	2249	542-88-1
Dichloromethylphenylsilane	0873000		
Dichloromethylsilane	0279001	1242	75-54-7
Dichloromonofluoromethane	0874000	1029	
Dichlorophenoxyacetic acid	0122001	2765	94-75-7
Dichlorophenoxyacetic esters	0876000		
Dichlorophenyl phosphine	0327002	2798	644-97-3
Dichlorophenylarsine	0325001	1556	696-28-6
Dichlorophenyltrichlorosilane	0134000	1766	27137-85-5
Dichloropropene	0135000	2047	542-75-6
Dichloropropionic acid	0878000	1760	
Dichloropropylene	0135003	2047	542-75-6
Dichlorosilane	0136000	2189	4109-96-0
Dichlorosilicone	0136001	2189	4109-96-0
Dichlorosulfane	0366002	1828	10545-99-0
Dichlorotetrafluoroethane	0879000	1958	
Dichlorvos	0882000	2783	
Dicofol	0883000		
Dicrotophos	0884000		
Dicyan	0109002	1026	460-19-5
Dicyanogen	0109003	1026	460-19-5
Dicyanomethane	0254002	2647	109-77-3
Dicyclopentadiene	0137000	2048	77-73-6
Dieldrin	0885000	2761	
Diepoxybutane	0138000		1464-53-5
Diesel	0139001		
Diesel fuel	0139000	1202	
Diethanol amine	0886000		
Diethyl	0060002	1011	106-97-8
Diethyl benzene	0891000	2049	
Diethyl carbamazine citrate	0892000		
Diethyl carbonate	0142000	2366	105-58-8
Diethyl cellosolve	0195002	1153	629-14-1
Diethyl chlorophosphate	0893000		

CHEMICAL NAME	ID #	UN #	CAS #
Diethyl ether	0144000	1155	60-29-7
Diethyl glycol	0195003	1153	629-14-1
Diethyl oxide	0144001	1155	60-29-7
Diethyl phthalate	0901000		
Diethyl stilbestrol	0902000		
Diethyl sulfate	0903000	1594	
Diethyl sulfide	0904000	2375	
Diethyl zinc	0905000	1366	
Diethylaluminum chloride	0887000		
Diethylaluminum hydride	0888000		
Diethylamine	0140000	1154	109-89-7
Diethylaminoethanol	0141000	2686	100-37-8
Diethylene ether	0169002	1165	123-91-1
Diethylene glycol	0894000		
Diethylene glycol dibutyl ether	0895000		
Diethylene glycol dimethyl ether	0896000		
Diethylene glycol monobutyl ether	0897000		
Diethylene glycol monobutyl ether acetate	0898000		
Diethylene glycol monoethyl ether	0899000		
Diethylene glycol monomethyl ether	0900000		
Diethylene oxide	1823000		
Diethylene oximide	0298001	2054	110-91-8
Diethylenetriamine	0143000	2079	111-40-0
Diethylenimide oxide	0298002	2054	110-91-8
Diethylethanolamine	0141003	2686	100-37-8
Diethylketone	0146000	1156	96-22-0
Difluorine	0207002		7782-41-4
Difluorine monoxide	0316001	2190	7783-41-7
Difluorochloromethane	0906000	1018	
Difluorodichloromethane	0907000	1028	
Difluoroethane	0147000	1030	75-37-6
Difluorophosphoric acid	0909000	1768	
Diglycidyl ether	0910000		
Diheptyl phthalate	0911000		
Dihydrogen dioxide	0232001	2015	7722-84-1
Dihydrogen selenide	0233001	2202	7783-07-5
Dihydrooxirene	0199001	1040	75-21-8
Diisobutyl amine	0913000	2361	
Diisobutyl carbinol	0914000		
Diisobutyl ketone	0916000	1157	
Diisobutyl phthalate	0917000		
Diisobutylene	0915000	2050	
Diisodecyl phthalate	0918000		
Diisononyl phthalate	0919000		
Diisooctyl phthalate	0920000		
Diisopropanol amine	0921000		
Diisopropyl benzene (all isomers)	0922000		
Diisopropyl benzene hydroperoxide	0923000	2171	

CHEMICAL NAME	ID #	UN #	CAS #
Diisopropyl ether	0924000	1159	
Diisopropylamine	0148000	1158	108-18-9
Diketene	0149000	2521	674-82-8
Dimefox	0925000	3018	
Dimethoate	0926000		
Dimethyamine, anhydrous	0152000	1032	124-40-3
Dimethyl	0173003		74-84-0
Dimethyl adipate	0927000		
Dimethyl carbonate	0931000	1161	
Dimethyl cellosolve	0150002	2252	110-71-4
Dimethyl disulfide	0156000	2381	624-92-0
Dimethyl ether	0157000	1033	115-10-6
Dimethyl formamide	0158000	2265	68-12-2
Dimethyl glutarate	0934000		
Dimethyl hexane dihydroperoxide	0935000	2174	
Dimethyl hydrogen phosphite	0936000		
Dimethyl ketone	0004001	1090	67-64-1
Dimethyl mercury	0937000		
Dimethyl monosulfide	0163001	1164	75-18-3
Dimethyl phenylamine	0153003	2253	121-69-7
Dimethyl phosphorochloridothioate	0161000	2267	2524-03-0
Dimethyl phthalate	0940000		
Dimethyl polysiloxane	0941000		
Dimethyl succinate	0944000		
Dimethyl sulfate	0162000	1595	77-78-1
Dimethyl sulfide	0163000	1164	75-18-3
Dimethyl sulfoxide	0945000		
Dimethyl terephthalate	0946000		
Dimethyl tetracholorterephthalate	0947000		
Dimethyl thiophosphoryl chloride	0161001	2267	2524-03-0
Dimethyl zinc	0164000	1370	544-97-8
Dimethylacetamide	0151000		127-19-5
Dimethylacetone	0146002	1156	96-22-0
Dimethylamide acetate	0151002		127-19-5
Dimethylamine solution	0928000	1160	
Dimethylaminobenzene	0153001	2253	121-69-7
Dimethylanaline	0153002	2253	121-69-7
Dimethylbenzyl hydroperoxide	0107004	2116	80-15-9
Dimethylcarbamic chloride	0154003	2262	79-44-7
Dimethylcarbamoyl chloride	0154000	2262	79-44-7
Dimethylcarbinol	0242001	1219	67-63-0
Dimethyldichlorosilane	0155000	1162	75-78-5
Dimethylene diamine	0191001	1604	107-15-3
Dimethylene oxide	0199002	1040	75-21-8
Dimethylenimine	0198004	1185	151-56-4
Dimethylethanolamine	0933000	2051	
Dimethylmethane	0341001	1978	74-98-6
Dimetilan	0948000		
Di-n-amyl phthalate	0835000		

CHEMICAL NAME	ID #	UN #	CAS #
Di-n-amylamine	0834000	2841	
Di-n-butyl amine	0854000	2248	
Di-n-butyl ether	0855000	1149	
Di-n-butyl ketone	0857000		
Di-n-butyl phthalate	0862000		
Dinitrobenzene	0166000	1597	
Dinitrochlorobenzene	0949000	1577	
Dinitrocresol	0167003	1598	534-52-1
Dinitrogen monoxide	0311002		10024-97-2
Dinitrogen tetroxide	0305001	1067	10102-44-0
Dinitro-o-cresol	0167000	1598	534-52-1
Dinitrophenol(dry)	0168000		51-28-5
Dinitrophenol(solution)	0168001		51-28-5
Dinitrophenol(wetted with >15% water)	0168002		51-28-5
Di-n-octyl phthalate	0956000		
Dinofan	0168006		51-28-5
Dinonyl phthalate	0952000		
Dinoterb	0953000		
Di-n-propylamine	0170001	2383	142-84-7
Dioctyl adipate	0954000		
Dioctyl phthalate	0955000		
Dioctyl sodium sulfosuccinate	0957000		
Dioform	0131003	1150	540-59-0
Dioxathion	0958000		
Dioxygen	0315002		7782-44-7
DIPA	0148001	1158	108-18-9
Dipentene	0959000	2052	
Diphacinone	0960000		
Diphenamide	0961000		
Diphenyl	0962000		
Diphenyl amine	0963000		
Diphenyl amine chloroarsine	0964000	1698	
Diphenyl ether	0966000		
Diphenyl methane diisocyanate	0967000	2489	
Diphenyldichlorosilane	0965000	1769	
Diphosgene	0329005	1076	75-44-5
Diphosphorus pentasulfide	0333001	1340	1314-80-3
Dipotassium persulfate	0340002	1492	7727-21-1
Diproanoate	0106005	1143	4170-30-3
Dipropylamine	0170000	2383	142-84-7
Dipropylene dlycol methyl ether	0970000		
Dipropylene glycol	0968000		
Dipropylene glycol dibenzoate	0969000		
Diquat	0971000	2781	
Direct black 38	0972000		
Direct blue 6	0973000		
Direct brown 95	0974000		
Disulfoton	0975000	2783	

CHEMICAL NAME	ID #	UN #	CAS #
Disulfur dichloride	0369002	1828	10025-67-9
Disulfuric acid	0314001	1831	8014-95-7
Di-tert-butyl peroxide	0858000	2102	
Dithane A-4	0166007	1597	
Dithiabutane	0156001	2381	624-92-0
Dithiazanine iodide	0171000		514-73-8
Dithiobiuret	0976000		
Ditridecyl phthalate	0977000		
Diundecyl phthalate	0978000		
Diuron	0979000		
Divinyl	0059005	1010	106-99-0
Divinylene oxide	0215001	2389	110-00-9
DMA	1822000		
DMAC	0151004		127-19-5
DMCC	0154004	2262	79-44-7
DMF	0158001	2265	68-12-2
DMFA	0158002	2265	68-12-2
DMH	0159002	1163	57-14-7
DMPD	0160002		99-98-9
DMS	0163002	1164	75-18-3
DMSO	0980000		
DNA	0165004	1596	97-02-9
DNBP	0981000		
Dodecanol	0982000		
Dodecene	0983000		
Dodecyl benzene	0984000		
Dodecyl benzene sulfonic acid	0985000	2584	
Dodecyl benzene sulfonic acid, calcium	0986000		
Dodecyl benzene sulfonic acid, isopropyl amine	0987000		
Dodecyl benzene sulfonic acid, sodium salt	0988000		
Dodecyl benzene sulfonic acid, triethanolamine	0989000		
Dodecyl diphenyl ether disulfonate	0990000		
Dodecyl methacrylate	0994000		
Dodecyl sulfate, diethanolamine salt	0996000		
Dodecyl sulfate, magnesium salt	0997000		
Dodecyl sulfate, sodium salt	0998000		
Dodecyl sulfate, triethanolamine salt	0999000		
Dodecyl/pentadecyl methacrylate	0995000		
Dodecyltrichlorosilane	1000000	1771	
Dorlone	0135004	2047	542-75-6
Doryl	0078006		51-83-2
Dowcide 7	0318001	3155	87-86-5
Dowclene LS	0389002	2831	71-55-6
Dowfume	1826000		
Dowtherm	0991000		
Dry ice	0080004	1013	124-38-9

CHEMICAL NAME	ID #	UN #	CAS #
Dursban	0105001	2783	2921-88-2
Dutch oil	0193003	1184	107-06-2
EB	0179001	1175	100-41-4
ECH	0172004	2023	106-89-8
ED	0186003	1892	598-14-1
EDB	0192004	1605	106-93-4
EGM	0197001	1188	109-86-4
EGME	0197002	1188	109-86-4
Elemental phosphorous	0331002		7723-14-0
Endosulfan	1001000	2761	
Endosulfan sulfate	1004000		
Endothion	1005000		
Endrin	1006000	2761	
Endrin aldehyde	1007000		
EPI	0172005	2023	106-89-8
Epichlorohydrin	0172000	2023	106-89-8
EPN	1008000		
Epoxy propane	0353001	1280	75-56-9
Epoxyethane	0199003	1040	75-21-8
Epoxyethylbenzene	0363001		96-09-3
Erythrene	0059006	1010	106-99-0
Estradiol 17 b	1009000		
Estrone	1010000		
Ethanal	0002002	1089	75-07-0
Ethanamine	0178002	1036	75-04-7
Ethane dinitrate	0109004	1026	460-19-5
Ethane(compressed gas)	0173000		74-84-0
Ethane(refrigerated liquid)	0173001		74-84-0
Ethanediol dimethyl ether	0150004	2252	110-71-4
Ethanenitrile	0006002	1648	75-05-8
Ethanethiol	0202001	2363	75-08-1
Ethanoic acid	1840002		64-19-7
Ethanoic anhydride	0003005	1715	108-24-7
Ethanol	0177005	1170	64-17-5
Ethanolamine	0174000	2491	141-43-5
Ethanoyl bromide	0007002	1716	506-96-7
Ethanoyl chloride	0008003	1717	75-36-5
Ethene	0188002	1038	74-85-1
Ethenoxide	0199005	1040	75-21-8
Ethenylbenzene	0362002	2055	100-42-5
Ether	0144002	1155	60-29-7
Etherin	0188003	1038	74-85-1
Ethienocarb	1011000		
Ethine	0009001	1001	74-86-2
Ethinylcarbinol	0343001	1986	107-19-7
Ethinylestradiol	1012000		
Ethion	1013000	2783	
Ethoprophos	1014000		
Ethoxy triglycol	1022000		

CHEMICAL NAME	ID #	UN #	CAS #
Ethoxydihydropyran	1015000		
Ethoxyethylbenzene	1016000		
Ethoxylated dodecanol	1017000		
Ethoxylated nonylphenol	1018000		
Ethoxylated pentadecanol	1019000		
Ethoxylated tetradecanol	1020000		
Ethoxylated tridecanol	1021000		
Ethyl acetate	0175000	1173	141-78-6
Ethyl acetoacetate	1023000		
Ethyl acetylene	1024000	2452	
Ethyl acrylate	0176000	1917	140-88-5
Ethyl alcohol	0177000	1170	64-17-5
Ethyl aluminum dichloride	1025000		
Ethyl aluminum sesquichloride	1026000		
Ethyl amyl ketone	1027000	2271	
Ethyl azinphos	1029000		
Ethyl bromide	1031000	1891	
Ethyl bromoacetate	1032000	1603	
Ethyl butanoate	0182002	1180	105-54-4
Ethyl butanol	1033000	2275	
Ethyl butyl ether	1034000	1179	
Ethyl butyrate	0182000	1180	105-54-4
Ethyl carbamate	1036000		
Ethyl carbonate	0142004	2366	105-58-8
Ethyl cellosolve	0196002	1171	110-80-5
Ethyl chloride	0183000	1037	75-00-3
Ethyl chloroacetate	0184000	1181	105-39-5
Ethyl chlorocarbonate	0185003	1182	541-41-3
Ethyl chloroformate	0185000	1182	541-41-3
Ethyl chloromethanoate	0185004	1182	541-41-3
Ethyl chlorothioformate	1037000	2826	
Ethyl cyanide	0346002	2404	107-12-0
Ethyl cyclohexane	1038000		
Ethyl ethanoate	0175003	1173	141-78-6
Ethyl ether	0144003	1155	60-29-7
Ethyl formate	0200000	1190	109-94-4
Ethyl glycol	0196004	1171	110-80-5
Ethyl glyme	0195005	1153	629-14-1
Ethyl hexaldehyde	1051000	1191	
Ethyl hexyl tallate	1055000		
Ethyl hydrosulfide	0202002	2363	75-08-1
Ethyl isocyanate	0201000	2481	109-90-0
Ethyl ketone	0146003	1156	96-22-0
Ethyl lactate	1057000	1192	
Ethyl mercaptan	0202000	2363	75-08-1
Ethyl methacrylate	1058000	2277	
Ethyl methane sulfonate	1059000		
Ethyl methanoate	0200001	1190	109-94-4
Ethyl methyl ether	1060000	1039	
Ethyl methyl ketone	0280002	1193	78-93-3
Ethyl monochloroacetate	0184002	1181	105-39-5
Ethyl nitrate	1061000	1993	
Ethyl nitrile	0006003	1648	75-05-8
Ethyl nitrite	0203000	1194	109-95-5
Ethyl oxide	1821000		
Ethyl phenol	1836000		
Ethyl phosphonothioic dichloride	1062000	2927	
Ethyl phosphorodichloridate	1063000	2927	
Ethyl pirimifos	1064000		
Ethyl propenoate	0176002	1917	140-88-5
Ethyl rhodanate	0205001		542-90-5
Ethyl S	0180002	2734	538-07-8
Ethyl silicate	1066000	1292	
Ethyl sulfate	1067000	1594	
Ethyl sulfhydrate	0202003	2363	75-08-1
Ethyl sulfocyanate	0205002		542-90-5
Ethyl t-butyl ether	1035000		
Ethyl t-butyl ether	1070000		
Ethyl thiocyanate	0205000		542-90-5
Ethyl vinyl ether	0406001	1302	109-92-2
Ethyl-2-propenoate	0176003	1917	140-88-5
Ethyl-3-ethoxypropionate	1050000		
Ethylaldehyde	0002003	1089	75-07-0
Ethylamine	0178000	1036	75-04-7
Ethylbenzene	0179000	1175	100-41-4
Ethyl-bis-(2-chloroethyl) amine	0180000	2734	538-07-8
Ethylbutylamine	0181000	2734	13360-63-9
Ethyldichloroarsine	0186000	1892	598-14-1
Ethyldichlorosilane	0187000	1183	1789-58-8
Ethylene	0188000	1038	74-85-1
Ethylene bromide	0192005	1605	106-93-4
Ethylene carboxylic acid	0012002	2218	79-10-7
Ethylene chloride	0193004	1184	107-06-2
Ethylene chlorohydrin	0189000	1135	107-07-3
Ethylene cyanohydrin	0190000		109-78-4
Ethylene dibromide	0192000	1605	106-93-4
Ethylene dichloride	0193000	1184	107-06-2
Ethylene fluoride	0147002	1030	75-37-6
Ethylene fluorohydrin	0194000		371-62-0
Ethylene glycol	1041000		
Ethylene glycol acetate	1042000		
Ethylene glycol diacetate	1043000		
Ethylene glycol diethyl ether	0195000	1153	629-14-1
Ethylene glycol dimethyl ether	0150005	2252	110-71-4
Ethylene glycol ethyl ether	0196003	1171	110-80-5
Ethylene glycol isopropyl ether	1044000		
Ethylene glycol methyl ether	0197003	1188	109-86-4
Ethylene glycol monobutyl ether	1045000	2369	

CHEMICAL NAME	ID #	UN #	CAS #
Ethylene glycol monobutyl ether acetate	1046000		
Ethylene glycol monoethyl ether	0196000	1171	110-80-5
Ethylene glycol monoethyl ether acetate	1047000	1172	
Ethylene glycol monomethyl ether	0197000	1188	109-86-4
Ethylene glycol phenyl ether	1048000		
Ethylene oxide	0199000	1040	75-21-8
Ethylene tetrachloride	0375001	1897	127-18-4
Ethylene thiourea	1049000		
Ethylene trichloride	0390002	1710	79-01-6
Ethylenediamine	0191000	1604	107-15-3
Ethylenediamine tetracetic acid	1040000	9117	
Ethyleneimine	0198000	1185	151-56-4
Ethylformic acid	0345001	1848	79-09-4
Ethylic acid	1840003		64-19-7
Ethylidene norbornene	1056000		
Ethylidine chloride	0130001	2362	75-34-3
Ethylidine dichloride	0130002	2362	75-34-3
Ethylimine	0198005	1185	151-56-4
Ethylphenyldichlorosilane	0204000	2435	1125-27-5
Ethyltrichlorosilane	0206000	1196	115-21-9
Ethyne	0009002	1001	74-86-2
ETN	0178003	1036	75-04-7
ETOH	0177006	1170	64-17-5
Eufin	0142005	2366	105-58-8
F-12	1072000	1028	
F-22	1073000	1018	
FAA	0208001	2642	144-49-0
Fenamiphos	1074000		
Fenitrothion	1075000		
Fensulfothion	1076000	2783	
Ferric ammonium citrate	1077000	9118	
Ferric ammonium oxalate	1078000	9119	
Ferric chloride	1079000	1773	
Ferric fluoride	1080000	9120	
Ferric glycerophosphate	1081000		
Ferric nitrate	1082000	1466	
Ferric sulfate	1083000	9121	
Ferrous ammonium sulfate	1084000	9122	
Ferrous chloride	1085000	1759	
Ferrous fluoroborate	1086000		
Ferrous oxalate	1087000		
Ferrous sulfate	1088000	9125	
Firedamp	0257003		74-82-8
FKS	0210001	1778	16961-83-4
Flue gas	0082004	1016	630-08-0
Fluenetil	1089000		
Fluoboric acid	1090000	1775	
Fluometuron	1091000		

CHEMICAL NAME	ID #	UN #	CAS #
Fluoranthene	1092000		
Fluorene	1093000		
Fluoric acid	0231002	1052	7664-39-3
Fluorine monoxide	0316002	2190	7783-41-7
Fluorine oxide	0316003	2190	7783-41-7
Fluorine(compressed gas)	0207000	1045	7782-41-4
Fluorine(cryogenic liquid)	0207001	9192	7782-41-4
Fluoroacetamide	1094000		
Fluoroacetic acid	0208000	2642	144-49-0
Fluoroacetyl chloride	1095000		
Fluorobenzene	0209000	2387	462-06-6
Fluoroethanoic acid	0208003	2642	144-49-0
Fluoroethene	0407001	1860	75-02-5
Fluoroethylene	0407003	1860	75-02-5
Fluorophosgene	0084004	2414	353-50-4
Fluorosilicic acid	0210000	1778	16961-83-4
Fluorosulfonic acid	0211000	1777	7789-21-1
Fluorosulfuric acid	0211001	1777	7789-21-1
Fluosilicic acid	0210002	1778	16961-83-4
Fonofos	1099000	2783	
Forane 22B	1100000		
Formaldehyde cyanohydrin	0213000		107-16-4
Formaldehyde (solution)	0212001	2209	50-00-0
Formaldehyde (solution, flammable)	0212000	1198	50-00-0
Formalin	0212002		50-00-0
Formamide	1101000		
Formetanate hydrochloride	1102000		
Formic acid	0214000	1779	64-18-6
Formic acid, ethyl ester	0200002	1190	109-94-4
Formic acid, isopropyl ester	0248001	2408	625-55-8
Formic acid, methy lester	0281001	1243	107-31-3
Formic ether	0200003	1190	109-94-4
Formothion	1103000		
Formparanate	1104000		
Formyl hydrazino-4-(5-nitro-2-furyl) thiazole	1105000		
Formyl trichloride	0096001	1888	67-66-3
Formylic acid	0214002	1779	64-18-6
Fosthietan	1106000		
Fosvex	0377003		107-49-3
Freon 10	0083004	1846	56-23-5
Freon 12	1107000	1028	
Freon 150	0193006	1184	107-06-2
Freon 152	0147003	1030	75-37-6
Freon 20	0096002	1888	67-66-3
Freon 22	1108000	1018	
Freon 40	0273003	1063	74-87-3
Freon F12	1109000		
Fuberidazole	1110000		

CHEMICAL NAME	ID #	UN #	CAS #
Fuel oil #1	1828000		
Fuel oil #2	0139002		
Fuel oil #4	0139003		
Fumaric acid	1111000		
Fumette	0259001		558-25-8
Fuming sulfuric acid	0314002	1831	8014-95-7
Furadan	0079001	2757	1563-66-2
Furadan 3G	0079002	2757	1563-66-2
Furaldehyde	0216002	1199	98-01-1
Furan	0215000	2389	110-00-9
Furfural	0216000	1199	98-01-1
Furfuryl alcohol	1112000	2874	
Furodan	0079003	2757	1563-66-2
Fusel Oil	1113000	1201	
GAA	0012003	2218	79-10-7
Gallic acid	1114000		
Gallium trichloride	1116000		
Gallium, metal	1115000	2803	
Gasoline	0217000	1203	8006-61-9
GDME	0150006	2252	110-71-4
Germane	1117000	2192	
Gettysolve B	0221001	1208	110-54-3
Glacial acetic acid	1840004		64-19-7
Glacial acrylic acid	0012004	2218	79-10-7
Glutaraldehyde solution	1118000		
Glycerine	1119000		
Glycerol trinitrate	0306003	0143	55-63-0
Glycidaldehyde	1120000	2622	
Glycidyl methacrylate	1121000		
Glycinol	0174002	2491	141-43-5
Glycol cyanohydrin	0190003		109-78-4
Glycol dimethyl ether	0150007	2252	110-71-4
Glycol methyl ether	0197004	1188	109-86-4
Glycolonitrile	0213002		107-16-4
Glyconitrile	0213003		107-16-4
Glyme	0150008	2252	110-71-4
Glyme-1	0195006	1153	629-14-1
Glyoxal	1122000		
Gly-oxide	0401002	1511	124-43-6
Glyphosate	0218000		1071-83-6
Grain alcohol	0177007	1170	64-17-5
Grasex	0086001	2075	75-87-6
Halon 10001	0283001	2644	74-88-4
Halon 1001	0268003	1062	74-83-9
HCl	0229002		7647-01-0
HCN	0230001	1051	74-90-8
Hendecane	1123000	2330	
Heptachlor	1124000		
Heptachlor epoxide	1125000		
Heptachlorodibenzofurans	1126000		
Heptachlorodibenzo-p-dioxins	1127000		
Heptamethylene	0114001	2241	291-64-5
Heptane	0219000	1206	142-82-5
Heptanoic acid	1128000		
Heptanol	1129000		
Heptyl acetate	1130000		
Heptylene	0220002	2278	592-76-7
Hexachloroacetone	1131000	2661	
Hexachlorobenzene	1132000	2729	
Hexachlorobutadiene	1133000	2279	
Hexachlorocyclohexanes	1134000		
Hexachlorocyclopentadiene	1135000	2646	
Hexachlorodibenzofurans	1136000		
Hexachlorodibenzo-p-dioxins	1137000		
Hexachloroethane	1138000	9037	
Hexachloronaphthalene	1139000		
Hexachlorophene	1140000	2875	
Hexadecyl sulfate, sodium salt	1141000		
Hexadecyl trimethyl ammonium chloride	1142000		
Hexaethyl tetraphosphate and compressed gas	1143000	1612	
Hexafluoroacetone	1144000	2420	
Hexafluoroethane	1145000	2193	
Hexafluosilicic acid	0210003	1778	16961-83-4
Hexahydroanaline	0118004	2357	108-91-8
Hexahydrobenzene	0115002	1145	108-94-1
Hexahydropyridine	0338003	2401	110-89-4
Hexahydrotoluene	0276002	2296	108-87-2
Hexamethyl phosphoramide	1147000		
Hexamethylene	0115003	1145	108-94-1
Hexamethylene diamine	1148000	2280	
Hexamethylene diisocyanate	1149000	2281	
Hexamethylene tetramine	1151000	1328	
Hexamethyleneimine	1150000	2493	
Hexane	0221000	1208	110-54-3
Hexanedinitrile	0015003	2205	111-69-3
Hexanoic acid	0077003	2829	142-62-1
Hexanon	0116003	1915	108-94-1
Hexene	0222000	2370	592-41-6
Hexone	0285001	1245	108-10-1
Hexyl acetate	1155000		
Hexylene	0222003	2370	592-41-6
Hexylene glycol	1156000		
HF	0231003	1052	7664-39-3
HN1	0180003	2734	538-07-8
Hydracrylonitrile	0190004		109-78-4
Hydrazine hydrate	0223005		302-02-2

CHEMICAL NAME	ID #	UN #	CAS #
Hydrazine hydrogen sulfate	0224002		10034-93-2
Hydrazine monosulfate	0224003		10034-93-2
Hydrazine sulfate	0224000		10034-93-2
Hydrazine (<64%)	0223000	2030	302-02-2
Hydrazine (anhydrous or >64%)	0223001	2029	302-02-2
Hydrazinium sulfate	0224004		10034-93-2
Hydrazoic acid, sodium salt	0357002	1687	26628-22-8
Hydrazomethane	0282001	1244	60-34-4
Hydrochloric acid	0225000	1789	7647-01-0
Hydrochloric ether	0183001	1037	75-00-3
Hydrocyanic acid	0230003	1051	74-90-8
Hydrocyanic acid, sodium salt	0358001	1689	143-33-9
Hydrocyanic acid, solution	0230002	1051	74-90-8
Hydrofluoric acid	0226000	1790	7664-39-3
Hydrofuran	0379002	2056	109-99-9
Hydrogen arsenic	0037003	2188	7784-42-1
Hydrogen bromide	0228000	1048	10035-10-6
Hydrogen bromide, anhydrous	0228002	1048	10035-10-6
Hydrogen carboxylic acid	0214003	1779	64-18-6
Hydrogen chloride (gas)	0229000	1050	7647-01-0
Hydrogen chloride (refrigerated liquid)	0229001	2186	7647-01-0
Hydrogen chloride (solution)	0225001	1789	7647-01-0
Hydrogen cyanide	0230000	1051	74-90-8
Hydrogen dioxide	0232002	2015	7722-84-1
Hydrogen fluoride	0231000	1052	7664-39-3
Hydrogen fluoride, solution	0226001	1790	7664-39-3
Hydrogen hexafluorosilicate	0210004	1778	16961-83-4
Hydrogen iodide, anhydrous	1157000	2197	
Hydrogen nitrate	0302003		7697-37-2
Hydrogen oxide	0232003	2015	7722-84-1
Hydrogen peroxide (>60%)	0232000	2015	7722-84-1
Hydrogen peroxide (35% solution)	1158000	2014	
Hydrogen phosphide	0330001	2199	7803-51-2
Hydrogen selenide	0233000	2202	7783-07-5
Hydrogen sulfate	0368001	1830	7664-93-9
Hydrogen sulfide	0234000	1053	7783-06-4
Hydrogen (compressed gas)	0227000	1049	1333-74-0
Hydrogen (cryogenic liquid)	0227001	1966	1333-74-0
Hydroquinone	1159000	2662	
Hydrosulfuric acid	0234001	1053	7783-06-4
Hydroxyacetonitrile	0213004		107-16-4
Hydroxybenzene	0323005		108-95-2
Hydroxylamine	0235000		7803-49-8
Hydroxylamine sulfate	1161000	2865	
Hydroxypropinonitrile	0250002	3275	78-97-7
Hydroxypropyl acrylate	1162000		
Hydroxypropyl methacrylate	0236000		27813-02-1
Hypochlorite	0360005	1791	7681-52-9

CHEMICAL NAME	ID #	UN #	CAS #
Hyponitrous ether	0203001	1194	109-95-5
Indeno (1,2,3-CD) pyrene	1163000		
Inerton- DW-DMC	0155003	1162	75-78-5
Inerton-DMCS	0155004	1162	75-78-5
Iodine cyanide	0112002		506-78-5
Iodomethane	0283002	2644	74-88-4
Iron (powder)	1164000		
Iron carbonyl	0237001	1994	13463-40-6
Iron pentacarbonyl	0237000	1994	13463-40-6
Isobenzan	1165000		
Isobutane	0238000	1969	75-28-5
Isobutanol	1166000	1212	
Isobutenyl methyl ketone	1841001	1229	141-79-7
Isobutyl aldehyde	1167000	2045	
Isobutyl formate	1169000	2393	
Isobutyl methyl carbinol	0284001	2053	108-11-2
Isobutyl methyl ketone	0285002	1245	108-10-1
Isobutylamine	1168000	1214	
Isobutylene	0239000	1055	115-11-7
Isobutylene	0291001	2288	691-37-2
Isobutyric acid	1170000	2529	
Isobutyronitrile	0240000	2284	78-82-0
Isocumene	0348001	2364	103-65-1
Isocyanatoethane	0201002	2481	109-90-0
Isocyanic acid, ethyl ester	0201001	2481	109-90-0
Isocyanic acid, methyl ester	0286001	2480	624-83-9
Isodecaldehyde	1171000		
Isodrin	1172000		
Isofluorophate	1173000		
Isohexene	0291002	2288	691-37-2
Isooctaldehyde	1174000	1191	
Isooctane	1175000	1262	
Isooctyl alcohol	1176000		
isooctyl ester	1710000		
Isopentadiene	0241001	1218	78-79-5
Isopentane	1177000	1265	
Isophorone	1178000		
Isophorone diamine	1179000	2289	
Isophorone diisocyanate (IPDI)	1180000	2290	
Isophthalic acid	1181000		
Isoprene	0241000	1218	78-79-5
Isopropanol	0242000	1219	67-63-0
Isopropanolamine	0243000		78-96-6
Isopropene cyanide	0264002	3079	126-98-7
Isopropenyl acetate	1182000	2403	
Isopropenyl benzene	0244000	2303	98-83-9
Isopropenyl methyl ketone	0287001	1246	814-78-8
Isopropyl alcohol	0242003	1219	67-63-0
Isopropyl bromide	0057001	2344	75-26-3

CHEMICAL NAME	ID #	UN #	CAS #
Isopropyl chloride	1183000	2356	
Isopropyl chlorocarbonate	0247002	2407	108-23-6
Isopropyl chloroformate	0247000	2407	108-23-6
Isopropyl cyanide	0240002	2284	78-82-0
Isopropyl cyclohexane	1184000		
Isopropyl ether	1185000		
Isopropyl formate	0248000	2408	625-55-8
Isopropyl methyl ketone	0269001	2397	563-80-4
Isopropyl nitrate	1188000	1222	
Isopropyl nitrile	0240003	2284	78-82-0
Isopropyl percarbonate,	1189000		
Isopropyl peroxydicarbonate	1190000	2133	
Isopropyl propionate	1191000	2409	
Isopropyl-3-methylpyrazolyl dimethylcarbamate	1187000		
Isopropylamine	0245000	1221	75-31-0
Isopropylbenzene	0246000	1918	98-82-8
Isopropylcyanohydrin	0005003	1541	75-86-5
Isopropylidene acetone	1841002	1229	141-79-7
Isothiocyanic acid, methyl ester	0288001	2477	556-61-6
Isothiourea	0382001		62-56-6
JP-1	0249002	1223	8008-20-6
Kepone	1192000		
Kerosene	0249000	1223	8008-20-6
Kerosine	0249003	1223	8008-20-6
Ketene	1193000		
Ketene dimer	0149003	2521	674-82-8
Kwik-Kil	0361003	1692	57-24-9
Lacquer	1194000	1263	
Lacquer thinner	1195000	1263	
Lactic acid	1196000		
Lactonitrile	0250000	3275	78-97-7
Lasiocarpine	1197000		
Laughing gas	0311003		10024-97-2
Lauric acid	1198000		
Lauroyl peroxide	1199000	2124	
Lauroyl peroxide (<42%)	1200000	2893	
Lauryl mercaptan	1201000		
Lead	1202000		
Lead acetate	1203000	1616	
Lead arsenate	1204000	1617	
Lead chloride	1205000	2291	
Lead fluoride	1206000	2811	
Lead fluoroborate	1207000	2291	
Lead iodide	1208000		
Lead nitrate	1209000	1469	
Lead phosphate	1210000		
Lead stearate	1211000		
Lead sulfate	1212000	1794	
Lead sulfide	1213000		
Lead tetraacetate	1214000		
Lead thiocyanate	1215000		
Lead thiosulfate	1216000		
Lead tungstate	1217000		
Lentin	0078007		51-83-2
Leptophos	1218000		
Lewisite	1219000		
Li	0253001	1415	7439-93-2
Lindane	1220000	2761	
Linseed oil	1221000		
Liquefied natural gas	0251000	1972	74-82-8
Liquefied petroleum gas	0252000	1075	68476-85-7
Liquid chlorine	0087001	1017	7782-50-5
Liquid oxygen	0315003		7782-44-7
Litharge	1222000		
Lithium	0253000	1415	7439-93-2
Lithium aluminum hydride	1223000	1410	
Lithium bichromate	1224000		
Lithium borohydride	1225000	1413	
Lithium chromate	1226000		
Lithium hydride	1227000	1414	
Lithium metal	0253002	1415	7439-93-2
LNG	0251001	1972	74-82-8
Lorsban	0105002	2783	2921-88-2
LOX	0315004		7782-44-7
LPG	0252002	1075	68476-85-7
Luprisol	0345002	1848	79-09-4
Lye	0359004		1310-73-2
Madone	0116004	1915	108-94-1
Magnesium perchlorate	1229000	1475	
Magnesium phosphide	1230000	2011	
Magnesium (powder)	1228000	1418	
Malathion	1231000	2783	
Maleic acid	1232000	2215	
Maleic anhydride	1233000	2215	
Maleic hydrazide	1234000		
Malonic acid dinitrile	0254003	2647	109-77-3
Malonic dinitrile	0254004	2647	109-77-3
Malonic mononitrile	0108001		372-09-8
Malononitrile	0254000	2647	109-77-3
m-Aminopyridine	0023004	2671	
Maneb	1235000	2968	
Manganese (dust)	1236000		
MAOH	0284002	2053	108-11-2
MAPP gas	0262002	1060	
Marsh gas	0257004		74-82-8
MB	0268004	1062	74-83-9
MBK	0271002	1224	591-78-6

CHEMICAL NAME	ID #	UN #	CAS #
MCB	0093002	1134	108-90-7
m-Chloronitrobenzene	0097002	1578	
m-Dinitrobenzene	0166004	1597	
MEA	1824000		
MEK	0280003	1193	78-93-3
Melamine	1237000		
Melinite	0336002		88-89-1
Mephosfolan	1238000		
Mercaptobenzene	0326002	2337	108-98-5
Mercaptodimethur	1239000	2784	
Mercaptomethane	0289001	1064	74-93-1
Mercuric acetate	1240000	1629	
Mercuric ammonium chloride	1241000	1630	
Mercuric chloride	1242000	1624	
Mercuric cyanide	1243000	1636	
Mercuric iodide	1244000	1638	
Mercuric nitrate	1245000	1625	
Mercuric oxide	1246000	1641	
Mercuric sulfate	1248000	1645	
Mercuric sulfide	1249000		
Mercuric thiocyanate	1250000	1646	
Mercurous acetate	1251000	1629	
Mercurous chloride	1252000		
Mercurous nitrate	1253000	1627	
Mercury	1254000	2809	
Mercury oxide	1255000	1641	
Mesityl oxide	1841000	1229	141-79-7
Mestranol	1256000		
Mesyl chloride	0258002	3246	124-63-0
Metaldehyde	1257000	1332	
meta-Xylene	0412005	1307	
Methacetone	0146004	1156	96-22-0
Methacrolein diacetate	1258000		
Methacrylaldehyde	1259000	2396	
Methacrylic acid	0255000	2531	79-41-4
Methacrylic acid chloride	0256001		920-46-7
Methacrylic anhydride	1260000		
Methacryloyl chloride	0256000		920-46-7
Methacryloyloxyethyl isocyanate	1261000		
Methaldehyde	0212003		50-00-0
Methallyl chloride	1262000		
Methamidophos	1263000		
Methanal	0212004		50-00-0
Methane carboxylic acid	1840005		64-19-7
Methane sulfonyl chloride	0258000	3246	124-63-0
Methane sulfonyl fluoride	0259000		558-25-8
Methane sulfuryl chloride	0258004	3246	124-63-0
Methane trichloride	0096003	1888	67-66-3
Methane (compressed gas)	0257000	1971	74-82-8

CHEMICAL NAME	ID #	UN #	CAS #
Methane (cryogenic liquid)	0257001	1972	74-82-8
Methanearsonic acid, sodium salt	1264000		
Methanecarbonitrile	0006004	1648	75-05-8
Methanephosphonyl chloride	0293001	9602	676-97-1
Methanesulfonic acid chloride	0258003	3246	124-63-0
Methanethiol	0289002	1064	74-93-1
Methanoic acid	0214004	1779	64-18-6
Methanol	0260000	1230	67-56-1
Methiocarb	1265000		
Methomyl	1266000		
Methoxycarbonylethylene	0263003	1919	96-33-3
Methoxychlor	1268000		
Methoxyethyl mercuric acetate	1269000		
Methoxyethylene	0409001	1087	107-25-5
Methoxymethyl isocyanate	1270000	2605	
Methyl 2-benzimidazole carbamate	1278000		
Methyl 2-chloroacrylate	0275000		80-63-7
Methyl 2-chloropropenoate	0275002		80-63-7
Methyl 2-methyl-2-propenoate	0290003	1247	80-62-6
Methyl acetate	0261000	1231	79-20-9
Methyl acetic acid	0345003	1848	79-09-4
Methyl acetic ester	0261002	1231	79-20-9
Methyl acetoacetate	1271000		
Methyl acetone	1272000	1232	
Methyl acetylene	1273000		
Methyl acetylene-allene mixture	0262003	1060	
Methyl acetylene-propadiene mixture	0262000	1060	
Methyl acrylate	0263000	1919	96-33-3
Methyl acrylonitrile	0264000	3079	126-98-7
Methyl alcohol	0260002	1230	67-56-1
Methyl amyl acetate	1274000	1233	
Methyl amyl alcohol	0284003	2053	108-11-2
Methyl amyl ketone	0267000	1110	110-43-0
Methyl azinphos	1276000	2783	
Methyl azoxymethanol acetate	1277000		
Methyl benzoate	1279000	2938	
Methyl bromide	0268000	1062	74-83-9
Methyl butenol	1284000		
Methyl butyl ketone	0271000	1224	591-78-6
Methyl butyrate	0272000	1237	623-42-7
Methyl carbinol	0177008	1170	64-17-5
Methyl carbylamine	0286002	2480	624-83-9
Methyl cellosolve	0197006	1188	109-86-4
Methyl chloride	0273000	1063	74-87-3
Methyl chloroacetate	0274000	2295	96-34-4
Methyl chloroformate	1286000	1238	
Methyl chloromethyl ether	1287000	1239	
Methyl cyanide	0006005	1648	75-05-8
Methyl cyclohexanone	1288000	2297	

CHEMICAL NAME	ID #	UN #	CAS #
Methyl cyclopentadiene dimer	1289000		
Methyl cyclopentadienyl manganese tricarbonyl	1290000		
Methyl dichloroacetate	0278000	2299	116-54-1
Methyl dichloroarsine	1291000	1556	
Methyl dichloroethanoate	0278002	2299	116-54-1
Methyl disulfide	0156002	2381	624-92-0
Methyl ether	0157001	1033	115-10-6
Methyl ethyl ketone	0280000	1193	78-93-3
Methyl ethyl pyridine	1300000	2300	
Methyl fluoroacetate	1301000		
Methyl fluorosulfate	1302000		
Methyl formal	1303000	1234	
Methyl formate	0281000	1243	107-31-3
Methyl heptyl ketone	1304000		
Methyl hydride	0257005		74-82-8
Methyl hydroxide	0260003	1230	67-56-1
Methyl iodide	0283000	2644	74-88-4
Methyl isobutenyl ketone	1841003	1229	141-79-7
Methyl isobutyl carbinol	0284000	2053	108-11-2
Methyl isobutyl ketone	0285000	1245	108-10-1
Methyl isocyanate	0286000	2480	624-83-9
Methyl isopropenyl ketone	0287000	1246	814-78-8
Methyl isopropyl ketone	0269003	2397	563-80-4
Methyl isothiocyanate	0288000	2477	556-61-6
Methyl ketone	0004002	1090	67-64-1
Methyl mercaptan	0289000	1064	74-93-1
Methyl mercaptopropionaldehyde	1306000		
Methyl mercuric dicyanamide	1307000		
Methyl mercury	1308000		
Methyl methacrylate	0290000	1247	80-62-6
Methyl methane sulfonate	1309000		
Methyl methanoate	0281002	1243	107-31-3
Methyl monochloroacetate	0274002	2295	96-34-4
Methyl mustard	0288002	2477	556-61-6
Methyl n-butyrate	0272003	1237	623-42-7
Methyl nitrite	1311000	2455	
Methyl orthosilicate	1314000	2606	
Methyl oxide	0157002	1033	115-10-6
Methyl parathion	1315000	2783	
Methyl PCT	0161002	2267	2524-03-0
Methyl pentyl ketone	0267004	1110	110-43-0
Methyl phenkapton	1320000		
Methyl phosphonic dichloride	0293000	9602	676-97-1
Methyl phosphonothioic dichloride	0294000	1760	676-98-2
Methyl phosphonous dichloride	1321000	2845	
Methyl phosphorous dichloride	0294001	1760	676-98-2
Methyl propenoate	0263002	1919	96-33-3
Methyl propionate	1324000	1248	
Methyl propyl ether	1325000	2612	
Methyl propyl ketone	1326000	1249	
Methyl rhodanate	0295001		556-64-9
Methyl salicylate	1328000		
Methyl styrene	0410001	2618	25013-15-4
Methyl sulfate	0162001	1595	77-78-1
Methyl sulfhydrate	0289003	1064	74-93-1
Methyl sulfide	0163003	1164	75-18-3
Methyl sulfocyanate	0295002		556-64-9
Methyl tert-butyl ether	0270000	2398	1634-04-4
Methyl thiocyanate	0295000		556-64-9
Methyl vinyl ether	0409003	1087	107-25-5
Methyl vinyl ketone	0297000	1251	78-94-4
Methyl zinc	0164001	1370	544-97-8
Methylacryl chloride	0256002		920-46-7
Methylaldehyde	0212005		50-00-0
Methylamine (anhydrous)	0265000	1061	74-89-5
Methylamine (solution)	0266000	1235	74-89-5
Methylaziridine	0352001	1921	75-55-8
Methylbenzene	0384001	1294	108-88-3
Methylbenzol	0384002	1294	108-88-3
Methylchloroform	0389003	2831	71-55-6
Methylcyclohexane	0276000	2296	108-87-2
Methylcyclopentane	0277001	2298	96-37-7
Methyldichlorosilane	0279000	1242	75-54-7
Methylene	0350001	1077	115-07-1
Methylene acetone	0297002	1251	78-94-4
Methylene bichloride	0132001	1593	75-09-2
Methylene bis-(phenyl isocyanate) (or MBI)	1294000	2489	
Methylene bromide	0126001	2664	74-95-3
Methylene chloride	0132002	1593	75-09-2
Methylene cyanide	0254005	2647	109-77-3
Methylene cyanohydrin	0213005		107-16-4
Methylene dibromide	0126002	2664	74-95-3
Methylene dichloride	0132003	1593	75-09-2
Methylene diisocyanate	1296000		
Methylene oxide	0212006		50-00-0
Methylethylamine	1297000		
Methylethylene	0350002	1077	115-07-1
Methylhydrazine	0282000	1244	60-34-4
Methylmethane	0173004		74-84-0
Methyl-n-butanoate	0272002	1237	623-42-7
Methylol	0260004	1230	67-56-1
Methyloxirane	0353003	1280	75-56-9
Methylpentamethylene	0277002	2298	96-37-7
Methylpentane	1316000	2462	
Methylpiperidine	1322000	2399	
Methyltetrahydrofuran	1329000	2536	

CHEMICAL NAME	ID #	UN #	CAS #
Methyltrichloroacetate	1330000	2533	
Methyltrichloromethane	0389004	2831	71-55-6
Methyltrichlorosilane	0296000	1250	75-79-6
Metolachlor	1332000		
Metolcarb	1333000		
Mevinphos	1334000	2783	
Mexacarbate	1335000	2757	
MFA	0208004	2642	144-49-0
MFB	0209002	2387	462-06-6
MIBC	0284005	2053	108-11-2
MIBK	1830000		
MIC	0286003	2480	624-83-9
Michler's ketone	1336000		
MIK	0285004	1245	108-10-1
Mineral naphtha	0039004	1114	71-43-2
Mineral oil	1337000		
Mineral spirits	0299002		8030-30-6
Miostat	0078008		51-83-2
MIPK	0269004	2397	563-80-4
Mirbane oil	1842004	1662	98-95-3
Mirex	1338000		
MIT	0288003	2477	556-61-6
MITC	0288004	2477	556-61-6
MMA	1832000		
MME	0290004	1247	80-62-6
MMH	0282003	1244	60-34-4
MNBK	0271003	1224	591-78-6
m-Nitrophenol	1339000		
m-Nitrophenol	1394000	1663	
m-Nitrotoluene	0310001	1664	
Molecular oxygen	0315005		7782-44-7
Molten phosphorous	0331003		7723-14-0
Molybdinum trioxide	1340000		
Monoallylamine	0018003	2334	107-11-9
Monobutylamine	0064003	1125	109-73-9
Monochlorethane	0183002	1037	75-00-3
Monochlorobenzene	0093003	1134	108-90-7
Monochloroethylene	0405003	1086	75-01-4
Monochloromethane	0273004	1063	74-87-3
Monochlorotetrafluoroethane	1341000		
Monochlorotrifluoromethane	1342000		
Monocrotaline	1343000		
Monocrotophos	1344000		
Monoethanolamine	0174003	2491	141-43-5
Monoethylamine	0178004	1036	75-04-7
Monoethyldichlorosilane	0187002	1183	1789-58-8
Monofluoroacetate	0208005	2642	144-49-0
Monofluorobenzene	0209003	2387	462-06-6
Monofluoroethene	0407004	1860	75-02-5

CHEMICAL NAME	ID #	UN #	CAS #
Monoisopropanolamine	0243004		78-96-6
Monomethylamine	0265001	1061	74-89-5
Monomethylhydrazine	0282004	1244	60-34-4
Morpholine	0298000	2054	110-91-8
Motor fuel	0217002	1203	8006-61-9
Motor spirit	0217003	1203	8006-61-9
Mous-con	0413001	1714	
Mouse-Rid	0361004	1692	57-24-9
MPTD	0294002	1760	676-98-2
MSF	0259002		558-25-8
MTBE	0270003	2398	1634-04-4
m-Toluidine	0387002	1708	
Muriatic acid	1827000		
Muriatic ether	0183003	1037	75-00-3
Mustard gas	1345000		
Muster	0218001		1071-83-6
MVK	0297003	1251	78-94-4
MVP (2-Methyl-5-vinyl pyridine)	1346000	3073	
m-Xylene	0412004	1307	
m-Xylene	0412009	1307	
Myrcene	1347000		
N-(2-chlorophenylthiourea)	0098001		5344-82-1
N-(2-methylphenyl) thiourea	0292000		614-78-8
N,N'-bis(2-aminoethyl)-1,2-ethanediamine	0393001	2259	112-24-3
N,N'-Diacetyl benzidine	0827000		
N,N'-diacetyl benzidine	0843000		
N,N'-Dibutyl hexamethylene diamine	0856000		
N,N'-dibutyl hexamethylene diamine	0881000		
N,N-diethyl aniline	0890000	2432	
N,N'-diethylaniline	1069000		
N,N-diethylethanamine	0392002	1296	121-44-8
N,N-dimethyl carbamoyl chloride	0154005	2262	79-44-7
N,N-dimethyl cyclohexylamine	1837000		
N,N-dimethyl formamide	0158003	2265	68-12-2
N,N-dimethylacetamide	0151003		127-19-5
N,N-dimethylaniline	0153000	2253	121-69-7
N,N-dimethyl-p-phenylenediamine	0160000		99-98-9
Nabam	1348000		
Nafenopin	1349000		
Naled	1350000		
N-aminoethyl piperazine	0443000	2815	
N-aminoethyl piperazine	0450000		
n-Amyl acetate	0488000	1104	
n-Amyl acetate	0489000	1107	
n-Amyl alcohol	0032001	1105	71-41-0
n-Amyl alcohol	0032003	1105	71-41-0
n-Amyl chloride	0490000	1111	
n-Amyl mercaptan	0491000	1112	

CHEMICAL NAME	ID #	UN #	CAS #
n-Amyl nitrate	0492000	1113	
n-Amyl nitrite	0493000		
Naphtha	0299000		8030-30-6
Naphtha: coal tar	1351000	2553	
Naphtha: stoddard solvent	1352000	1271	
Naphtha: VM & P	1353000		
Naphthalene	1354000	1334	
Napthylthiourea	1356000	1651	
Napthylurea	1357000	1652	
Naramycin	0117003		66-81-9
Natural gas	1829000		
Naturium	0356000	1428	7440-23-5
n-Butane	0060001	1011	106-97-8
n-Butanol	0603000	1120	
n-Butene	0066003	1012	25167-67-3
n-Butyl acetate	0061000	1123	123-86-4
n-Butyl acrylate	0062002	2348	141-32-2
n-Butyl alcohol	0609000	1120	
n-Butyl bromide	0056002	1126	109-65-9
n-Butyl carbinol	0032004	1105	71-41-0
n-Butyl chloroformate	0616000	2743	
n-Butyl isocyanate	0069000	2485	111-36-4
n-Butyl mercaptan	0070003	2347	109-79-5
n-Butyl methacrylate	0622000	2227	
n-Butylamine	0064000	1125	109-73-9
n-Butylaniline	0612000	2738	
n-Butylchloride	0094002	1127	109-69-3
n-Butylene	0066005	1012	25167-67-3
n-Butyric acid	0631000	2820	
n-Decyl acrylate	0817000		
n-Decyl alcohol	0818000		
n-Decyl benzene	0819000		
n-Dipropylamine	0170002	2383	142-84-7
Nemex	0135005	2047	542-75-6
Neodecanoic acid	1358000		
Neohexane	0300000	1208	75-83-2
Neon	1359000	1065	
Neoprene	0100005	1991	126-99-8
N-ethyl butylamine	0181002	2734	13360-63-9
N-ethyl cyclohexylamine	1039000		
N-ethylaniline	1028000	2272	
N-ethylbutylamine	0181003	2734	13360-63-9
N-formyldimethylamine	0158004	2265	68-12-2
n-Heptane	0219001	1206	142-82-5
n-Heptene	0220000	2278	592-76-7
n-Hexaldehyde	1146000	1207	
n-Hexane	0221002	1208	110-54-3
Nickel	1360000	2881	
Nickel acetate	1361000		

CHEMICAL NAME	ID #	UN #	CAS #
Nickel ammonium sulfate	1362000	9138	
Nickel bromide	1363000		
Nickel carbonyl	0301000	1259	13463-39-3
Nickel chloride	1364000		
Nickel cyanide	1365000	1653	
Nickel fluoroborate	1366000		
Nickel formate	1367000		
Nickel hydroxide	1368000	9140	
Nickel nitrate	1369000	2725	
Nickel subsulfide	1370000		
Nickel sulfate	1371000		
Nickel tetracarbonyl	0301001	1259	13463-39-3
Nicotine	1372000	1654	
Nicotine sulfate	1373000	1658	
Nitrador	0167004	1598	534-52-1
Nitralin	1374000		
Nitric acid (fuming)	0302000	2032	7697-37-2
Nitric acid (nonfuming, >40%)	0302001	2031	7697-37-2
Nitric oxide	0303000	1660	10102-43-9
Nitric oxide (mixture with nitrogen tetroxide)	0303001	1975	10102-43-9
Nitrilotriacetic acid	1375000		
Nitrilotriacetic acid, disodium salt	1376000		
Nitrilotriacetic acid, sodium salt	1377000		
Nitrilotriacetic acid, trisodium salt	1378000		
Nitrobenzene	1842000	1662	98-95-3
Nitrobenzol	1842002	1662	98-95-3
Nitrocarbol	0307001	1261	75-52-5
Nitrocellulose (with >25% Water)	1383000	2555	
Nitrocellulose (with plasticizer >18%)	1384000	0343	
Nitrochlorobenzene	0097005	1578	
Nitrochloroform	0099001	1580	76-06-2
Nitrocresols	1385000	2446	
Nitrocyclohexane	1386000		
Nitroethane	1387000	2842	
Nitrofan	0167005	1598	534-52-1
Nitrofen	1388000		
Nitrogen chloride oxide	0309001	1069	2696-92-6
Nitrogen dioxide	0305000	1067	10102-44-0
Nitrogen gas	0304002		7727-37-9
Nitrogen liquid	0304003		7727-37-9
Nitrogen monoxide	0303002	1660	10102-43-9
Nitrogen mustard	1389000		
Nitrogen mustard hydrochloride	1390000		
Nitrogen mustard N-oxide	1391000		
Nitrogen mustard N-oxide hydrochloride	1392000		
Nitrogen oxide	0303004		
Nitrogen oxychloride	0309002	1069	2696-92-6

CHEMICAL NAME	ID #	UN #	CAS #
Nitrogen tetroxide	0305002	1067	10102-44-0
Nitrogen trifluoride	1393000	2451	
Nitrogen (compressed gas)	0304000	1066	7727-37-9
Nitrogen (refrigerated liquid)	0304001	1977	7727-37-9
Nitroglycerin	0306000	0143	55-63-0
Nitroglycerin (1-10% solution in alcohol)	0306001	0144	55-63-0
Nitromethane	0307000	1261	75-52-5
Nitrophen	0168007		51-28-5
Nitropropane	0308000	2608	
Nitro-Sil	0024004	1005	7664-41-7
Nitrostarch (dry or wetted with < 20% water)	1403000	0146	
Nitrostarch (wetted with >20% water)	1404000	1337	
Nitrosyl chloride	0309000	1069	2696-92-6
Nitrosylsulfuric acid	1405000	2308	
Nitrotoluene	0310000	1664	
Nitrous acid, ethyl ester	0203002	1194	109-95-5
Nitrous oxide (compressed gas)	0311000	1070	10024-97-2
Nitrous oxide (cryogenic liquid)	0311001	2201	10024-97-2
N-methylaniline	1275000	2294	
N-methylaniline	1285000		
N-methyl-methanamine	0152001	1032	124-40-3
N-nitrosodiethanolamine	1406000		
N-nitrosodiethylamine	1407000		
N-nitrosodimethylamine	1408000		
N-nitrosodi-n-butylamine	1409000		
N-nitrosodi-n-propylamine	1410000		
N-nitrosodiphenylamine	1411000		
N-nitrosomethylethylamine	1412000		
N-nitrosomethylvinylamine	1413000		
N-nitrosomorpholine	1414000		
N-nitroso-N-ethyl urea	1415000		
N-nitroso-N-methyl urea	1416000		
N-nitroso-N-methyl urethane	1417000		
N-nitrosonornicotine	1418000		
N-nitrosopiperidine	1419000		
N-nitrosopyrrolidine	1420000		
N-nitrososarcosine	1421000		
NO	0303003	1660	10102-43-9
n-Octane	0312001	1262	111-65-9
Nonane	1422000	1920	
Nonanol	1423000		
Nonene	1424000	2057	
Nonylphenol	1425000		
Norbormide	1426000		
Norethisterone	0037004	2188	7784-42-1
n-Pentane	0321001	1265	109-66-0
N-phenylthiourea	0328001	2767	103-85-5

CHEMICAL NAME	ID #	UN #	CAS #
N-phosphonomethylglycine	0218002		1071-83-6
N-propanolamine	1509000		
N-propanolamine	1529000		
n-Propyl acetate	0347000	1276	109-60-4
n-Propyl benzene	0348000	2364	103-65-1
n-Propyl chloroformate	0349000	2740	109-61-5
n-Propyl mercaptan	0342003	2402	107-03-9
n-Propyl nitrate	1543000	1865	
n-Undecylbenzene	1757000		
n-Undecylbenzene	1762000		
o-Aminopyridine	0023005	2671	
o-Anisidine	0495000	2431	
o-Anisidine hydrochloride	0496000		
o-Chloronitrobenzene	0097003	1578	
o-Chloronitrobenzene	0097006	1578	
o-Chlorophenol	0704000	2021	
Octachloronaphthalene	1427000		
Octamethyl diphosphoramide	1428000		
Octane	0312000	1262	111-65-9
Octanoic acid	1429000		
Octanol	1430000		
Octene	0313000		111-66-0
Octyl epoxy tallate	1431000		
Octylene	0313003		111-66-0
o-Dinitrobenzene	0166005	1597	
Oil of bitter almonds	1842006	1662	98-95-3
Oil of turpentine	0400001	1299	8006-64-2
Oil of vitrol	0368002	1830	7664-93-9
Olamine	0174004	2491	141-43-5
Oleic acid	1434000		
Oleic acid, potassium salt	1435000		
Oleic acid, sodium salt	1436000		
Oleum	0314000	1831	8014-95-7
o-Nitrobenzene	1842005	1662	98-95-3
o-Nitrophenol	1395000	1663	
o-Nitrophenol	1433000		
o-Nitrotoluene	0310005	1664	
o-Phenyl phenate, sodium	1470000		
o-Phenyl phenate, sodium	1476000		
o-Phenyl phenol	1471000		
o-Phenyl phenol	1477000		
Orange oil SS	1437000		
Ordram (or molinate)	1438000		
ortho-Xylene	0412006	1307	
Orvinylecarbinol	0017004	1098	107-18-6
Osmium tetroxide	1439000	2471	
o-Toluidine	0387003	1708	
o-Tolyl thiourea	0292002		614-78-8
Oxacyclopentadiene	0215002	2389	110-00-9

CHEMICAL NAME	ID #	UN #	CAS #
Oxacyclopentane	0379003	2056	109-99-9
Oxalic acid	1440000		
Oxalonitrile	0109005	1026	460-19-5
Oxalyl cyanide	0109006	1026	460-19-5
Oxammonium	0235001		7803-49-8
Oxamyl	1441000		
Oxane	0199006	1040	75-21-8
Oxetanone	0149005	2521	674-82-8
Oxide of nitrogen	0305003	1067	10102-44-0
Oxidoethane	0199007	1040	75-21-8
Oxirane	0199008	1040	75-21-8
Oxyacyclopropane	0199009	1040	75-21-8
Oxybenzene	0323006		108-95-2
Oxydisulfoton	1397000		
Oxygen difluoride	0316000	2190	7783-41-7
Oxygen (compressed gas)	0315000	1072	7782-44-7
Oxygen (refrigerated liquid)	0315001	1073	7782-44-7
o-Xylene	0412007	1307	
Oxymethylene	0212007		50-00-0
Ozone	1442000		
Paint thinner	1445000	1263	
Paint, latex	1443000		
Paint, oil base	1444000	1263	
p-Aminopyridine	0023006	2671	
p-Aminopyridine	0023008	2671	
Panfuran S	1446000		
p-Anisidine	0497000	2431	
Paraformaldehyde	1447000	2213	
Paraldehyde	1448000	1264	
Paramoth	0128003	1592	106-46-7
Paraquat	1449000	2781	
Paraquat methosulfate	1450000		
Parathion	1451000	2783	
para-Xylene	0412008	1307	
Parazene	0128004	1592	106-46-7
Paris green	1452000	1585	
p-Benzoquinone	0041002	2587	106-51-4
PCE	0375002	1897	127-18-4
p-Chloro -m-cresol	0727000		
p-Chloroaniline	0691000	2018	
p-Chloro-m-cresol	0694000		
p-Chloronitrobenzene	0097004	1578	
p-Chloronitrobenzene	0097007	1578	
p-Chloro-o-toluidine	0717000		
p-Chlorotoluene	0104004	2238	106-43-4
PCP	0318002	3155	87-86-5
p-Cresidine	0785000		
p-Cymene	0808000	2046	
PDB	0128005	1592	106-46-7

CHEMICAL NAME	ID #	UN #	CAS #
p-Dichlorobenzene	0128000	1592	106-46-7
Penta-2,4-dione	0320000	2310	123-54-6
Pentaborane	0317000	1380	19642-22-7
Pentaborane monohydride	0317001	1380	19642-22-7
Pentacarbonyliron	0237002	1994	13463-40-6
Pentachlorodibenzo-p-dioxins	1454000		
Pentachloroethane	1455000	1669	
Pentachlorophenate, sodium	1456000	2567	
Pentachlorophenol	0318000	3155	87-86-5
Pentadecanol	1457000		
Pentadecylamine	1458000		
Pentadione	0320004	2310	123-54-6
Pentaerythritol	1459000		
Pentamethylene	0119001	1146	142-29-0
Pentane	0321000	1265	109-66-0
Pentanoic acid	1460000	1760	
Pentyltrichlorosilane	0033001	1728	107-72-2
Peracetic acid	1463000	2131	
PERC	0375003	1897	127-18-4
Percarbamide	0401003	1511	124-43-6
Perchlor	0375004	1897	127-18-4
Perchloric acid	0322000	1873	7601-90-3
Perchloroethylene	0375005	1897	127-18-4
Perchloromethyl mercaptan	1464000	1670	
Perchloryl fluoride	1465000	3083	
Perclene	0375006	1897	127-18-4
Perfluoroethylene	0378001	1081	116-14-3
Petrol	0217004	1203	8006-61-9
Petrolatum	1466000		
Petroleum	0299003		8030-30-6
Petroleum distillate	0299004		8030-30-6
Petroleum ether	0299005		8030-30-6
Petroleum gas, liquified	0252003	1075	68476-85-7
Petroleum naphtha	1467000	1255	
Petroleum solvent	0299006		8030-30-6
Phenanthrene	1468000		
Phenic acid	0323007		108-95-2
Phenol trinitrate	0336003		88-89-1
Phenol (molten)	0323000	2312	108-95-2
Phenol (solid)	0323001	1671	108-95-2
Phenol (solution)	0323002	2821	108-95-2
Phenyl alcohol	0323008		108-95-2
Phenyl bromide	0055001	2514	108-86-1
Phenyl chloride	0093004	1134	108-90-7
Phenyl ethylene	0362003	2055	100-42-5
Phenyl fluoride	0209004	2387	462-06-6
Phenyl isocyanate	1474000	2487	
Phenyl mercaptan	0326000	2337	108-98-5
Phenyl phosphorous dichloride	0327000	2798	644-97-3

CHEMICAL NAME	ID #	UN #	CAS #
Phenyl phosphorous thiodichloride	1478000	2799	
Phenyl silatrane	1479000		
Phenyl trichloromethane	0042004	2226	98-07-7
Phenylacetonitrile	0324000	2470	140-29-4
Phenylamine	0035006	1547	62-53-3
Phenylarsinedichloride	0325002	1556	696-28-6
Phenylcarboxyamide	0038003		
Phenylcarbylamine chloride	1469000	1672	
Phenylcyanide	0040003	2224	100-47-0
Phenyldichloroarsine	0325000	1556	696-28-6
Phenylenediamine	1472000	1673	
Phenylethane	0179002	1175	100-41-4
Phenylhydrazine hydrochloride	1473000		
Phenylic acid	0323009		108-95-2
Phenylmercuric acetate	1475000	1674	
Phenylmethane	0384003	1294	108-88-3
Phenylphosphine dichloride	0327003	2798	644-97-3
Phenylthiocarbamide	0328002	2767	103-85-5
Phenylthiourea	0328000	2767	103-85-5
Phorate	1480000	3018	
Phosacetim	1481000		
Phosfolan	1482000	2783	
Phosgen	0329006	1076	75-44-5
Phosgene	0329000	1076	75-44-5
Phosmet	1483000		
Phosphamidon	1484000		
Phosphine	0330000	2199	7803-51-2
Phosphoric acid	1485000	1805	
Phosphoric sulfide	0333002	1340	1314-80-3
Phosphorochloridothioic acid, 0,0-dimethyl ester	0161003	2267	2524-03-0
Phosphorus (black)	1487000		
Phosphorus bromide	0334001	1808	7789-60-8
Phosphorus chloride	0335002	1809	7719-12-2
Phosphorus chloride oxide	0332001	1810	10025-87-3
Phosphorus hydride	0330002	2199	7803-51-2
Phosphorus oxide trichloride	0332002	1810	10025-87-3
Phosphorus oxychloride	0332000	1810	10025-87-3
Phosphorus oxytrichloride	0332003	1810	10025-87-3
Phosphorus pentachloride	1488000	1806	
Phosphorus pentafluoride	1489000	2198	
Phosphorus pentasulfide	0333000	1340	1314-80-3
Phosphorus pentoxide	1490000	1807	
Phosphorus persulfide	0333003	1340	1314-80-3
Phosphorus tribromide	0334000	1808	7789-60-8
Phosphorus trichloride	0335000	1809	7719-12-2
Phosphorus trihydride	0330003	2199	7803-51-2
Phosphorus trioxide	1491000	2578	
Phosphorus (amorphous, red)	1486000	1338	

CHEMICAL NAME	ID #	UN #	CAS #
Phosphorus (dry or under water)	0331000	1381	7723-14-0
Phosphorus (white molten)	0331001	2447	7723-14-0
Phosphoryl chloride	0332004	1810	10025-87-3
Phosvin	0413002	1714	
Phthalic anhydride	1492000	2214	
Pic-chlor	0099002	1580	76-06-2
Picfume	0099003	1580	76-06-2
Picoline	1493000	2313	
Picral	0336004		88-89-1
Picric acid (>10% water)	0336000	1344	88-89-1
Picric acid (dry or <30% water)	0336001	0154	88-89-1
Picride	0099004	1580	76-06-2
Picrotoxin	1494000	1584	
Pimelic ketone	0116005	1915	108-94-1
Pine oil	1495000		
Pinene	0337001	2368	80-56-8
Piperazine	1496000	2579	
Piperidine	0338000	2401	110-89-4
Piperylene	0319002		504-60-9
Piprotal	1497000		
Platinum tetrachloride	1498000		
p-Nitrobenzene	1842003	1662	98-95-3
p-Nitrophenol	1396000	1663	
p-Nitrotoluene	0310006	1664	
Polybrominated biphenyls	1499000	3152	
Polybutene	1500000		
Polychlorinated biphenyls	1501000	2315	
Polyethylene polyamines	1502000		
Polyphosphoric acid	1503000		
Polypropylene	1504000		
Polypropylene glycol	1505000		
Polypropylene glycol methyl ether	1506000		
Ponceau 3R	1507000		
Potassium	0339000	2257	7440-09-7
Potassium arsenite	1508000	1678	
Potassium binoxalate	1510000		
Potassium bromate	1511000	1484	
Potassium chlorate	1512000	1485	
Potassium chromate	1513000		
Potassium cyanide	1514000	1680	
Potassium dichloro-s-triazinetrione	1515000	2465	
Potassium dichromate	1516000	1479	
Potassium hydroxide	1517000	1813	
Potassium hydroxide solution	1518000	1814	
Potassium iodide	1519000		
Potassium oxalate	1520000		
Potassium permanganate	1521000	1490	
Potassium peroxide	1522000	1491	
Potassium peroxysulfate	0340003	1492	7727-21-1

CHEMICAL NAME	ID #	UN #	CAS #
Potassium persulfate	0340000	1492	7727-21-1
Potassium silver cyanide	1523000		
Progesterone	1524000		
Promecarb	1525000		
Prometryne	1526000		
Propadiene	1527000	2200	
Propane	0341000	1978	74-98-6
Propane sultone	1528000		
Propanethiol	0342000	2402	107-03-9
Propanoic acid	0345004	1848	79-09-4
Propargite	1530000		
Propargyl alcohol	0343000	1986	107-19-7
Propargyl bromide	0058002	2345	106-96-7
Propellant 12	1531000	1028	
Propenamide	0011002	2074	79-06-1
Propene	0350003	1077	115-07-1
Propene acid	0012005	2218	79-10-7
Propene oxide	0353004	1280	75-56-9
Propene-3-yl trichlorosilane	0022002	1724	107-37-9
Propenenitrile	0013003	1093	107-13-1
Propenoic acid	0012006	2218	79-10-7
Propenoic acid, ethyl ester	0176004	1917	140-88-5
Propenoic acid, methyl ester	0263004	1919	96-33-3
Propenol	0017005	1098	107-18-6
Propenoyl chloride	0014003	9188	814-68-6
Propenyl alcohol	0017007	1098	107-18-6
Propenyl chloride	0020005	1100	107-05-1
Propiolactone	0344000	1993	57-57-8
Propionaldehyde	1532000	1275	
Propionic acid	0345000	1848	79-09-4
Propionic anhydride	1533000	2496	
Propionic nitrile	0346003	2404	107-12-0
Propionitrile	0346000	2404	107-12-0
Propoxur	1534000		
Propyl bromide	0057002	2344	75-26-3
Propyl chlorocarbonate	0349001	2740	109-61-5
Propyl chloroformate	0349002	2740	109-61-5
Propyl cyanide	0074003	2411	109-74-0
Propyl mercaptan	0342002	2402	107-03-9
Propylacetone	0271004	1224	591-78-6
Propylamine	1535000	1277	
Propylene	0350000	1077	115-07-1
Propylene butylene polymer	1536000		
Propylene dichloride	0351000	1279	78-87-5
Propylene glycol	1538000		
Propylene glycol ethyl ether	1539000		
Propylene glycol methyl ether	1540000		
Propylene glycol monomethacrylate	0236002		27813-02-1
Propylene oxide	0353000	1280	75-56-9

CHEMICAL NAME	ID #	UN #	CAS #
Propylene tetramer	1541000	2850	
Propylene trimer	1542000	2057	
Propyleneimine	0352000	1921	75-55-8
Propylnitrile	0346004	2404	107-12-0
Propynyl alcohol	0343004	1986	107-19-7
Prothoate	1544000	2783	
Prozoin	0345005	1848	79-09-4
Prussic acid	0230004	1051	74-90-8
Prussite	0109007	1026	460-19-5
p-tert-Butyl phenol	0628000	2229	
p-Toluene sulfonic acid	1689000	2585	
p-Toluene sulfonic acid	1818000		
p-Toluidine	0387004	1708	
p-Tolyl chloride	0104005	2238	106-43-4
p-Tricresyl phosphate	1717000		
PTU	0328004	2767	103-85-5
p-Xylene	0412010	1307	
Pyrene	1545000		
Pyrethrins	1546000	9184	
Pyridine	0354000	1282	110-86-1
Pyriminil	1547000		
Pyrogallic acid	1548000		
Pyrophosphoric acid, tetraethyl ester	0377004		107-49-3
Pyrosulfuryl chloride	1549000	1817	
Pyrrolidone	1550000		
Quinoline	1552000	2656	
Quinone	0041004	2587	106-51-4
R12	1555001	1028	
R20	0096004	1888	67-66-3
R22	1556001	1018	
R40	0273005	1063	74-87-3
R50	0257006		74-82-8
Range oil	0249004	1223	8008-20-6
Ratal	0413003	1714	
Refrigerant 12	1555000	1028	
Refrigerant 22	1556000	1018	
Refrigerant R717	0024005	1005	7664-41-7
Resorcinol	1557000	2876	
Rodeo	0218003		1071-83-6
Ro-Dex	0361005	1692	57-24-9
Roundup	0218004		1071-83-6
Rubbing alcohol	0242007	1219	67-63-0
Rubidium	1558000	1423	
Saccharin	1559000		
Safrole	1560000		
Salicylaldehyde	1561000		
Salicylic acid	1562000		
Saltpeter	1563000	1942	
Sand acid	0210005	1778	16961-83-4

CHEMICAL NAME	ID #	UN #	CAS #
Sarin	1564000		
sec-Butanol	0604000	1120	
sec-Butyl alcohol	0610000	1120	
sec-Butylamine	0611000		
sec-Propyl alcohol	0242006	1219	67-63-0
Selenic acid	1565000	1905	
Selenium (powder)	1566000	2658	
Selenium dihydride	0233002	2202	7783-07-5
Selenium dioxide	1567000	2811	
Selenium hexafluoride	1568000	2194	
Selenium oxychloride	1569000	2879	
Selenium trioxide	1570000		
Semicarbazide hydrochloride	1571000		
Sewer gas	0234002	1053	7783-06-4
Sextone	0116006	1915	108-94-1
Silane	1572000	2203	
Silica gel	1574000		
Silica, crystalline	1573000		
Silicochloroform	0391001	1295	10025-78-2
Silicofluoric acid	0210006	1778	16961-83-4
Silicon chloride	0355000	1818	10026-04-7
Silicon tetrachloride	0355001	1818	10026-04-7
Silicon (powder)	1575000	1346	
Silver	1576000		
Silver acetate	1577000		
Silver carbonate	1578000		
Silver iodate	1579000		
Silver nitrate	1580000	1493	
Silver oxide	1581000		
Silver sulfate	1582000		
Silvex	1583000	2765	
Simazine	1584000		
Sinox	0167006	1598	534-52-1
Skellysolve A	0321002	1265	109-66-0
Soda lye	0359005		1310-73-2
Sodium	0356001	1428	7440-23-5
Sodium 2-mercaptobenzothiazol solution	1607000		
Sodium alkyl sulfates	1586000		
Sodium alkylbenzene sulfonates	1585000		
Sodium amide	1587000		
Sodium arsenate	1588000	1685	
Sodium arsenite	1589000	2027	
Sodium azide	0357000	1687	26628-22-8
Sodium bifluoride	1590000	2439	
Sodium bisulfite	1591000	2693	
Sodium borate	1592000		
Sodium borohydride	1593000	1426	
Sodium borohydride (15% or less)	1594000		

CHEMICAL NAME	ID #	UN #	CAS #
Sodium cacodylate	1595000	1688	
Sodium chlorate	1596000	1495	
Sodium chlorate solution	1597000	2428	
Sodium chromate	1598000		
Sodium cyanide	0358000	1689	143-33-9
Sodium dichloro-s-triazinetrione	1599000	2465	
Sodium dichromate	1600000	1479	
Sodium ferrocyanide	1601000		
Sodium fluoride	1602000	1690	
Sodium fluoroacetate	1603000	2629	
Sodium fluorosilicate	1604000	2674	
Sodium hydrate	0359006		1310-73-2
Sodium hydride	1605000	1427	
Sodium hydrosulfide solution	1606000	2922	
Sodium hydroxide (dry)	0359000	1823	1310-73-2
Sodium hydroxide (solution)	0359001	1824	1310-73-2
Sodium hypochlorite	0360000	1791	7681-52-9
Sodium hypochlorite solution	0360006	1791	7681-52-9
Sodium methylate	1608000	1431	
Sodium nitrate	1609000	1498	
Sodium nitrite	1610000	1500	
Sodium oxalate	1611000		
Sodium perchlorate	1612000	1502	
Sodium persulfate	1613000		
Sodium phosphate	1614000	9147	
Sodium phosphate tribasic	1615000		
Sodium phosphide	1616000	1432	
Sodium saccharin	1617000		
Sodium selenate	1618000	2630	
Sodium selenite	1619000	2630	
Sodium silicate	1620000		
Sodium sulfate	1621000		
Sodium sulfide	1622000	1385	
Sodium sulfite	1623000		
Sodium tellurite	1624000		
Sodium thiocyanate	1625000		
Solvent 111	0389005	2831	71-55-6
Sorbitol	1626000		
Spirits of turpentine	0400002	1299	8006-64-2
Stannous fluoride	1627000		
Stearic acid	1628000		
Sterigmatocystin	1629000		
s-Tetrachloroethane	0374004	1702	79-34-5
Stibine	1630000	2676	
Stoddard solvent	0299007		8030-30-6
Strontium chromate	1631000		
Strychnine	0361000	1692	57-24-9
Strychnine sulfate	1632000	1692	
Styrene	0362000	2055	100-42-5

CHEMICAL NAME	ID #	UN #	CAS #
Styrene monomer	0362004	2055	100-42-5
Styrene oxide	0363000		96-09-3
Styrene-7,8-oxide	0363003		96-09-3
Styrol	0362005	2055	100-42-5
Styrolene	0362006	2055	100-42-5
Suberane	0114002	2241	291-64-5
Sucrose	1633000		
Sulfallate	1634000		
Sulfan	0371001	1829	7446-11-9
Sulfinyl chloride	0381001	1836	7719-09-7
Sulfolane	0364000		126-33-0
Sulfolane W	0364002		126-33-0
Sulfonyl chloride	0372001	1834	7791-25-5
Sulfotep	1635000	1704	
Sulfur	0365000	1350	7704-34-9
Sulfur anhydride	0371002	1829	7446-11-9
Sulfur chloride	0369003	1828	10025-67-9
Sulfur chloride oxide	0381002	1836	7719-09-7
Sulfur dichloride	0366000	1828	10545-99-0
Sulfur dioxide	0367000	1079	7446-09-5
Sulfur hydride	0234004	1053	7783-06-4
Sulfur monochloride	0369000	1828	10025-67-9
Sulfur oxide	0367005	1079	7446-09-5
Sulfur oxychloride	0372003	1834	7791-25-5
Sulfur pentafluoride	1637000		
Sulfur phosphide	0333004	1340	1314-80-3
Sulfur subchloride	0369004	1828	10025-67-9
Sulfur tetrafluoride	0370000	2418	7783-60-0
Sulfur trioxide	0371000	1829	7446-11-9
Sulfur (molten)	0365001	2448	7704-34-9
Sulfureted hydrogen	0234003	1053	7783-06-4
Sulfuric acid	0368000	1830	7664-93-9
Sulfuric acid, dimethyl ester	0162002	1595	77-78-1
Sulfuric acid, fuming	0314003	1831	8014-95-7
Sulfuric anhydride	0371003	1829	7446-11-9
Sulfuric chlorohydrin	0103002	1454	7790-94-5
Sulfuric oxide	0371004	1829	7446-11-9
Sulfuric oxychloride	0372002	1834	7791-25-5
Sulfurous acid	1636000	1833	
Sulfurous acid anhydride	0367002	1079	7446-09-5
Sulfurous acid, diammonium salt	0030002	9090	10196-04-0
Sulfurous anhydride	0367003	1079	7446-09-5
Sulfurous oxide	0367004	1079	7446-09-5
Sulfurous oxychloride	0381003	1836	7719-09-7
Sulfuryl chloride	0372000	1834	7791-25-5
Supracide	1638000		
Sweet spirit of nitre	0203003	1194	109-95-5
sym-Allene	0451000		
Tabun	1639000		

CHEMICAL NAME	ID #	UN #	CAS #
Tannic acid	1640000		
Tar	1641000	1999	
t-Butanol	0063001	1120	75-65-0
t-Butyl alcohol	0063000	1120	75-65-0
t-Butyl methyl ether	0270001	2398	1634-04-4
t-Butylamine	0065000	2734	75-64-9
TCE	0390003	1710	79-01-6
TCM	0096005	1888	67-66-3
TDI	0386001	2078	584-84-9
TEA	0392003	1296	121-44-8
TEL	0376001	1649	78-00-2
Tellurium fluoride	0373001	2195	7783-80-4
Tellurium hexafluoride	0373000	2195	7783-80-4
Tellurium (powder)	1642000		
Telmicid	0171003		514-73-8
Telmid	0171004		514-73-8
Telone 2	0135006	2047	542-75-6
Telone C	0135007	2047	542-75-6
Temik	0016003	2757	116-06-3
TEN	0392004	1296	121-44-8
TEP	0377005		107-49-3
TEPP	0377006		107-49-3
Terbufos	1643000		
Terephthalic acid	1644000		
Terphenyl	1645000		
Terpinoline	1646000	2541	
tert-Butyl ether	0620000	1149	
tert-Butyl hydroperoxide	0068000		75-91-2
tert-Butyl peroxybenzoate	0625000	2097	
tert-Butylamine	0065002	2734	75-64-9
tert-Octyl mercaptan	1432000	3023	
Testosterone and its esters	1647000		
TETA	0393002	2259	112-24-3
Tetrabutyl titanate	1648000		
Tetracarbonyl nickel	0301002	1259	13463-39-3
Tetrachloroethane	0374000	1702	79-34-5
Tetrachloroethylene	0375000	1897	127-18-4
Tetrachloromethane	0083005	1846	56-23-5
Tetrachlorosilane	0355002	1818	10026-04-7
Tetrachlorotitanium	0383001	1838	7550-45-0
Tetrachlorvinphos	1651000		
Tetradecanol	1652000		
Tetradecyl benzene	1654000		
Tetraethyl dithiopyrophosphate	1655000	1704	
Tetraethyl lead	0376000	1649	78-00-2
Tetraethyl pyrophosphate (liquid)	0377001	3018	107-49-3
Tetraethyl pyrophosphate (solid)	0377000	2783	107-49-3
Tetraethyl tin	1658000		
Tetraethylene glycol	1656000		

CHEMICAL NAME	ID #	UN #	CAS #
Tetraethylene pentamine	1657000	2320	
Tetraethylplumbane	0376002	1649	78-00-2
Tetrafluoroethylene	0378000	1081	116-14-3
Tetrafluorohydrazine	1659000	1955	
Tetrafluoromethane	1660000	1982	
Tetrafluorosulfurane	0370001	2419	7783-60-0
Tetrahydro-1,4-oxazine	0298004	2054	110-91-8
Tetrahydrofuran	0379000	2056	109-99-9
Tetrahydronaphthalene	1661000		
Tetrahydrothiophene-1	0364003		126-33-0
Tetramethyl lead	1663000		
Tetramethyl silane	1664000	2749	
Tetramethylene cyanide	0015004	2205	111-69-3
Tetramethylene oxide	0379004	2056	109-99-9
Tetramethylene sulfone	0364004		126-33-0
Tetran	0380001	1510	509-14-8
Tetranitromethane	0380000	1510	509-14-8
Tetrasol	0083006	1846	56-23-5
Thallium	1665000		
Thallium acetate	1666000		
Thallium carbonate	1667000		
Thallium nitrate	1668000	2727	
Thallium sulfate	1669000	1707	
Thallous carbonate	1670000		
Thallous chloride	1671000		
Thallous malonate	1672000		
Thallous sulfate	1673000		
THF	0379005	2056	109-99-9
Thioacetamide	1675000		
Thioacetic acid	1676000	2436	
Thiobencarb	1677000		
Thiobutyl alcohol	0070004	2347	109-79-5
Thiocarbamide	0382002		62-56-6
Thiocarbazide	1678000		
Thiocyanic acid, ethyl ester	0205003		542-90-5
Thiocyanomethane	0295003		556-64-9
Thioethanol	0202004	2363	75-08-1
Thioethyl alcohol	0202005	2363	75-08-1
Thiofanox	1680000		
Thiolane-1,1-dioxide	0364005		126-33-0
Thiomethyl alcohol	0289004	1064	74-93-1
Thionazin	1681000	3018	
Thionyl chloride	0381000	1836	7719-09-7
Thiophan sulfone	0364006		126-33-0
Thiophenol	0326003	2337	108-98-5
Thiophosgene	1682000	2474	
Thiophosphoric anhydride	0333005	1340	1314-80-3
Thiosemicarbazide	1683000		
Thiourea	0382000		62-56-6
Thiourea (2-chlorophenyl)	0098002		5344-82-1
Thiram	1684000	2771	
Thorium dioxide	1685000		
Thorium nitrate	1686000	2976	
TIBAL	0395002		100-99-2
Titanium chloride	0383002	1838	7550-45-0
Titanium dioxide	1687000		
Titanium tetrachloride	0383000	1838	7550-45-0
Titanium(IV) chloride	0383003	1838	7550-45-0
TL 214	0186004	1892	598-14-1
TL 69	0325003	1556	696-28-6
TMA	0397001	1083	75-50-3
TNM	0380002	1510	509-14-8
TNT (dry or wetted with<30% water)	1688000	0209	
Toluene	0384000	1294	108-88-3
Toluene 2,4-diisocyanate	0386003	2078	584-84-9
Toluene diamine	0385003	1709	95-80-7
Toluene diisocyanate	0386000	2078	584-84-9
Toluene-2,4-diamine	0385004	1709	95-80-7
Toluidine	0387000	1708	
Toluol	0384005	1294	108-88-3
Tolu-sol	0384004	1294	108-88-3
Toxaphene	1690000	2761	
trans-2-Butenal	0106002	1143	4170-30-3
trans-Butene	0066004	1012	25167-67-3
Tri	0389006	2831	71-55-6
TRI	0390004	1710	79-01-6
Triamiphos	1692000		
Triaziquone	1693000		
Triazofos	1694000		
Tribromoborane	0048002	2692	10294-33-4
Tribromophosphine	0334002	1808	7789-60-8
Tributyl phosphate	1696000		
Tributylamine	1695000	2542	
Tricarbonyl methyl cyclopentadienyl manganese	1697000		
Trichlor	0390005	1710	79-01-6
Trichlorfon	1698000	2783	
Trichloro-(chloromethyl) silane	1703000		
Trichloroacetaldehyde	0086002	2075	75-87-6
Trichloroacetic acid	1699000	1839	
Trichloroacetic acid chloride	0388001	2442	76-02-8
Trichloroacetyl chloride	0388000	2442	76-02-8
Trichloroallylsilane	0022003	1724	107-37-9
Trichloroamylsilane	0033002	1728	107-72-2
Trichlorobenzene	1700000	2321	
Trichloroborane	0049002	1741	10294-34-5
Trichloroboron	0049003	1741	10294-34-5
Trichlorobutene	1702000	2322	

CHEMICAL NAME	ID #	UN #	CAS #
Trichlorobutylsilane	0071002	1747	7521-80-4
Trichloroethanal	0086003	2075	75-87-6
Trichloroethene	0390006	1710	79-01-6
Trichloroethyenylsilane	0411002	1305	75-94-5
Trichloroethyl silicon	0206002	1196	115-21-9
Trichloroethylene	0390000	1710	79-01-6
Trichloroethylsilane	0206001	1196	115-21-9
Trichlorofluoromethane	1704000		
Trichloroform	0096006	1888	67-66-3
Trichloromethane	0096007	1888	67-66-3
Trichloromethyl benzene	0042005	2226	98-07-7
Trichloromethylsilane	0296001	1250	75-79-6
Trichloromethylsilicon	0296002	1250	75-79-6
Trichloromonosilane	0391002	1295	10025-78-2
Trichloronate	1705000		
Trichloronitromethane	0099005	1580	76-06-2
Trichlorophenyl silane	1711000		
Trichlorophosphine	0335003	1809	7719-12-2
Trichlorosilane	0391000	1295	10025-78-2
Trichloro-s-triazinetrione	1713000	2468	
Trichlorotoluene	0042006	2226	98-07-7
Trichlorotrifluoroethane	1714000		
Trichlorovinylsilicon	0411003	1305	75-94-5
Tri-clor	0099006	1580	76-06-2
Tridecane	1718000		
Tridecanol	1719000		
Tridecyl benzene	1721000		
Trien	0393003	2259	112-24-3
Triethane	0389007	2831	71-55-6
Triethanol amine	1722000		
Triethoxysilane	1723000		
Triethyl aluminum	1724000		
Triethyl benzene	1725000		
Triethyl phosphate	1728000		
Triethyl phosphite	1729000	2323	
Triethylamine	0392000	1296	121-44-8
Triethylene glycol	1726000		
Triethylene thiophosphoramide	1727000		
Triethylenetetramine	0393000	2259	112-24-3
Trifluoroacetic acid	1730000	2699	
Trifluoroboron	0050002	1008	7637-07-2
Trifluorochlorine	0089003	1749	7790-91-2
Trifluorochloroethylene	0394000	1082	79-38-9
Trifluorovinyl chloride	0394004	1082	79-38-9
Trifluralin	1732000		
Triisobutyl aluminum	0395000		100-99-2
Triisobutylalane	0395003		100-99-2
Triisobutylene	1733000	2324	
Triisopropanol amine	1734000		

CHEMICAL NAME	ID #	UN #	CAS #
Trimethoxysilane	0396000	9269	2487-90-3
Trimethyl benzene	1738000	2325	
Trimethyl hexamethylene diamine	1739000	2327	
Trimethyl hexamethylene diisocyanate	1740000	2328	
Trimethyl phosphite	1741000	2329	
Trimethyl tin chloride	1742000		
Trimethylacetic acid	1735000		
Trimethylacetyl chloride	1736000	2438	
Trimethylamine (anhydrous)	0397000	1083	75-50-3
Trimethylchlorosilane	0398000	1298	75-77-4
Trimethylene	0121001	1027	95-75-7
Trimethylmethane	0238003	1969	75-28-5
Trinitrobenzene (dry or wetted with < 30% water)	1743000	0213	
Trinitrobenzene (wetted with > 30% water)	1744000	1354	
Trinitrobenzoic acid (dry or wetted with <30% water)	1746000	1355	
Trinitrobenzoic acid (wetted with >30% water)	1745000	0215	
Trinitroglycerin	0306004	0143	55-63-0
Trinitrophenol	0336005		88-89-1
Trinitrotoluene (dry or wetted with <30% water)	1747000	0209	
Trinitrotoluene (wetted with >30% water)	1748000	1356	
Tri-p-cresyl phosphate	1716000	2574	
Triphenyl tin chloride	1749000		
Tripropylene glycol	1750000		
Tripropylene glycol methyl ether	1751000		
Tris-(2,3-dibromopropyl) phosphate	1753000		
Tris-(2-chloroethyl)amine	0399000		555-77-1
Tris-(aziridinyl)phosphine oxide	1752000	2501	
Trithene	0394005	1082	79-38-9
Trithion	1754000		
Trixylenyl phosphate	1755000		
Trona	0048003	2692	10294-33-4
Trypan blue	1756000		
TS160	0399002		555-77-1
Turpentine	0400000	1299	8006-64-2
Turpentine oil	0400003	1299	8006-64-2
Turpentine spirits	0400004	1299	8006-64-2
UDMH	0159003	1163	57-14-7
Undecane	1758000	2330	
Undecanoic acid	1759000		
Undecanol	1760000		
Unifume	0192006	1605	106-93-4
unsym-Dimethylhydrazine	0159004	1163	57-14-7
Uracil mustard	1763000		
Uranium hexafluoride	1765000	2978	
Uranium metal (pyrophoric)	1764000	2979	

CHEMICAL NAME	ID #	UN #	CAS #
Uranium peroxide	1766000		
Uranyl acetate	1767000	9180	
Uranyl nitrate	1768000	2981	
Uranyl sulfate	1769000		
Urea	1770000		
Urea hydrogen peroxide	0401004	1511	124-43-6
Urea peroxide	0401000	1511	124-43-6
Urea, ammonium nitrate soln (w/ aqua ammonia)	1771000		
Urethane	1772000		
USAFST-40	0264004	3079	126-98-7
VAC	0403004	1301	108-05-4
Valeraldehyde	1773000	2058	
Valeric acid	1774000	1760	
VAM	0403005	1301	108-05-4
Vanadium	1775000	3285	
Vanadium oxychloride	0402001	2243	7727-18-6
Vanadium oxytrichloride	0402000	2243	7727-18-6
Vanadium pentoxide	1776000	2862	
Vanadium trichloride oxide	0402002	2243	7727-18-6
Vanadyl sulfate	1777000	2931	
Vanadyl trichloride	0402003	2243	7727-18-6
Vapotone	0377007		107-49-3
VC	0405004	1086	75-01-4
VCM	0405005	1086	75-01-4
VDC	0408003	1303	75-35-4
Vidden D	0135008	2047	542-75-6
Vinyl A monomer	0403006	1301	108-05-4
Vinyl acetate	0403000	1301	108-05-4
Vinyl acetylene	1778000		
Vinyl allyl ether	1779000		
Vinyl amide	0011003	2074	79-06-1
Vinyl benzene	0362007	2055	100-42-5
Vinyl bromide	0404000	1085	593-60-2
Vinyl carbinol	0017008	1098	107-18-6
Vinyl chloride	0405000	1086	75-01-4
Vinyl chloride monomer	0405006	1086	75-01-4
Vinyl cyanide	0013005	1093	107-13-1
Vinyl ethyl ether	0406000	1302	109-92-2
Vinyl fluoride	0407000	1860	75-02-5
Vinyl formic acid	0012008	2218	79-10-7
Vinyl isobutyl ether	1780000	1304	
Vinyl methyl ether	0409000	1087	107-25-5
Vinyl methyl ketone	0297004	1251	78-94-4
Vinyl neodecanoate	1781000		
Vinyl toluene	0410000	2618	25013-15-4
Vinyl trichlorosilane	0411000	1305	75-94-5
Vinylethylene	0059007	1010	106-99-0
Vinylidene chloride	0408000	1303	75-35-4
Vinylsilicon trichloride	0411004	1305	75-94-5
Vorlex	0288005	2477	556-61-6
Vulnoc AB	0025001	9080	1863-63-4
Weedone	0122003	2765	94-75-7
White caustic	0359007		1310-73-2
White phosphorus	0331004		7723-14-0
Wood alcohol	0260005	1230	67-56-1
Wood ether	0157003	1033	115-10-6
Woodtreat	0318003	3155	87-86-5
Xenon	1782000	2036	
Xylene	0412000	1307	
Xylenol	1783000	2261	
Xylol	0412011	1307	
Yellow phosphorus	0331005		7723-14-0
Zectran	1785000		
Zinc	1786000	1436	
Zinc acetate	1787000	9153	
Zinc ammonium chloride	1788000	9154	
Zinc arsenate	1789000	1712	
Zinc bichromate	1790000		
Zinc borate	1791000		
Zinc bromide	1792000	9156	
Zinc carbonate	1793000	9157	
Zinc chloride	1794000	2331	
Zinc chromate	1795000		
Zinc dialkyldithiophosphate	1797000		
Zinc dithionite	1798000	1931	
Zinc fluoride	1799000	9158	
Zinc fluoroborate	1800000		
Zinc fluorosilicate	1801000	2855	
Zinc formate	1802000	9159	
Zinc methyl	0164002	1370	544-97-8
Zinc nitrate	1803000	1514	
Zinc oxide	1804000		
Zinc phenolsulfonate	1805000	9160	
Zinc phosphide	0413000	1714	
Zinc potassium chromate	1806000		
Zinc sulfate	1807000	9161	
Zinccyanide	1796000	1713	
Zineb	1808000		
Ziram	1809000		
Zirconium	1810000	2008	
Zirconium acetate	1811000		
Zirconium nitrate	1812000	2728	
Zirconium oxychloride	1813000		
Zirconium potassium fluoride	1814000	9162	
Zirconium sulfate	1815000	9163	
Zirconium tetrachloride	1816000	2503	
ZP	0413004	1714	
Zylylene dichloride	1817000		

DOT Hazard Classification - Section B

10 Class 1 – Explosives, other (conversion only).
11 Division 1.1 Explosives with mass explosion hazard.
12 Division 1.2 Explosives with projectile hazard.
13 Division 1.3 Explosives w/predominant fire hazard.
14 Division 1.4 Explosives with no significant blast hazard.
15 Division 1.5 Very insensitive explosives; blasting agents.
16 Division 1.6 Extremely insensitive detonating substances.
20 Class 2 – Gases, other (conversion only).
21 Division 2.1 Flammable gases.
22 Division 2.2 Non-flammable.
23 Division 2.3 Gases toxic by inhalation.
24 Division 2.4 Corrosive gases (Canada).
30 Class 3 - Flammable/Combustible Liquids.
40 Class 4 - Flammable Solids, other (conversion only).
41 Division 4.1 Flammable solids.
42 Division 4.2 Spontaneously combustible materials.
43 Division 4.3 Dangerous-when-wet materials.
50 Class 5 - Oxidizers and Organic peroxides, other (conversion only).
51 Division 5.1 Oxidizers.
52 Division 5.2 Organic peroxides.
60 Class 6 - Toxic, Infectious material or sub., other (conversion only).
61 Division 6.1 Toxic materials.
62 Division 6.2 Infectious substances.
70 Class 7 - Radioactive materials.
80 Class 8 - Corrosive materials.
90 Class 9 - Miscellaneous dangerous goods, other (conversion only).
91 Division 9.1 Miscellaneous dangerous goods- Canada.
92 Division 9.2 Environmentally hazardous substances.
93 Division 9.3 Dangerous wastes (Canada).
UU Undetermined.

Container Type - Section C1

00 Container type, other.

1 ***Portable Container***
10 Portable container, other.
11 Drum.
12 Cylinder.
13 Can or bottle.
14 Carboy.
15 Box or carton.
16 Bag or sack.
17 Cask.
18 Hose.

2 ***Fixed Container***
20 Fixed container, other.
21 Tank or silo.
22 Pipe or pipeline.
23 Bin.
24 Machinery or process equipment.
28 Hose.

3 ***Natural Containment***
30 Natural container, other.
31 Sump or pit.
32 Pond or surface impoundment.
33 Well.
34 Dump site or landfill.

4 ***Mobile Container***
40 Mobile container, other.
41 Vehicle fuel tank and associated piping.
42 Product tank on or towed by vehicle.
43 Piping associated with mobile product tank loading or offloading.
48 Hose.

9 ***Other Containers***
91 Rigid Intermediate Bulk Container (RIBC).
00 Container type, other.
NN None.
UU Undetermined.

Units: Capacity - Section C3

1 ***Volume Units***
11 Ounces (liquid).
12 Gallons.
13 Barrels (42 gal).
14 Liters.
15 Cubic feet.
16 Cubic meters.

2 ***Weight Units***
21 Ounces (weight).
22 Pounds.

Units: Capacity - Section C3 (continued)

23 Grams.
24 Kilograms.
3 ***Micro Units.***
31 Parts per billion.
32 Parts per million.
33 Micro Roentgen.
34 Milli Roentgen.
35 Roentgen.
36 RAD.
37 REM.
38 Curie.

Units: Released - Section D2

Please Note:
The code set table used for this data element is the same set that is used for ***Units: Capacity***, section C3 in the Hazmat Module. Please refer to page 238 for the codes listed for that data element.

Physical State When Released - Section E1

1 Solid.
2 Liquid.
3 Gas.
U Undetermined.

Released Into - Section E2

1 Air.
2 Water.
3 Ground.
4 Water and ground.
5 Air and ground.
6 Water and air.
7 Air, water, and ground.
8 Confined, no environmental impact.
U Undetermined (conversion only).

Released From - Section F1

1 Inside or on structure.
2 Outside of structure.

Population Density - Section F2

1 Urban center - Densely populated.
2 Suburban - Predominantly single-family residential.
3 Rural - Scattered small communities and farms.

Area Affected - Section G1

1 Square feet.
2 Blocks.
3 Square miles.

Area Evacuated - Section G2

Please Note:
The code set table used for this data element is the same set that is used for ***Area Affected***, section G1 in the HazMat Module. Please see the codes listed above.

HazMat Actions Taken - Section H

1 ***Hazardous Condition***
11 Identify, analyze hazardous materials.
12 HazMat detection, monitoring, sampling, & analysis.
13 HazMat spill control and confinement.
14 HazMat leak control and containment.
15 Remove hazard or hazardous materials.
16 Decontaminate persons or equipment.
2 ***Isolation and Evacuation***
21 Determine materials to be non-hazardous.
22 Isolate area & establish hazard control zones.
23 Provide apparatus.
24 Provide equipment.
25 Provide water.
26 Control crowd.
27 Control traffic.
28 Protect-in-place operations.
3 ***Information, Investigation & Enforcement***
31 Refer to proper authority.
32 Notify other agencies.
33 Provide information to public or media.
34 Investigate.
35 Standby.
00 Action taken, other.

Release/Ignition Sequence - Section I

1 Ignition.
2 Release.
U Undetermined.

Cause of Release - Section J

1 Intentional.
2 Unintentional release.
3 Container or containment failure.
4 Act of nature.
5 Cause under investigation.
U Cause undetermined after investigation.

Factors Contributing to Release - Section K

3 ***Failure to Control Hazardous Material***
31 Abandoned or discarded hazardous material.
32 Failure to maintain proper temperature.
33 Fell asleep and lost control of operations.
34 Inadequate control of hazardous materials.
37 Person possibly impaired by drugs or alcohol.
38 Person otherwise impaired or unconscious.
30 Failure to control hazardous materials, other.

4 ***Misuse of Hazardous Materials***
42 Improper mixing technique.
43 Hazardous materials used improperly.
45 Improper container.
46 Improper movement of hazardous materials container.
47 Improper storage procedures.
48 Children playing with hazardous materials.
49 Criminal activity.
40 Misuse of hazardous materials, other.

5 ***Mechanical Failure, Malfunction***
51 Automatic control failure.
52 Manual control failure.
53 Short circuit, ground fault.
54 Other part failure, leak, or break.
55 Other electrical failure.
56 Lack of maintenance, worn out.
50 Mechanical failure, malfunction, other.

6 ***Design, Construction, Installation Deficiency***
61 Design deficiency.
62 Construction deficiency.
64 Installation deficiency.
60 Design/construction/installation deficiency, other.

7 ***Operational Deficiency***
71 Collision, overturn, knockdown.
72 Accidentally turned on, not turned off.
73 Equipment unattended.
74 Equipment overload.
75 Failure to clean equipment.
76 Improper startup, shutdown procedures.
77 Equipment used for purpose not intended.
78 Equipment not being operated properly.
70 Operational deficiency, other.

8 ***Natural Condition***
81 High wind.
82 Earthquake.
83 High water, flood.
84 Lightning.
85 Low humidity.
86 High humidity.
87 Low temperature.
88 High temperature.
80 Natural condition, other.

9 ***Special Release Factors***
91 Animal.
92 Secondary release following previous release.
93 Reaction with other chemical.
97 Failure to use ordinary care.
00 Factors contributing to release, other.
UU Undetermined.

Factors Affecting Mitigation - Section L

1 ***Site Factors***
11 Released into water table.
12 Released into sewer system.
13 Released into wildland/wetland area.
14 Released in residential area.
15 Released in occupied building.
16 Air release in confined area.
17 Released, slick on waterway.
18 Released on major roadway.
10 Site factors, other.

2 ***Release Factors***
21 Release of extremely dangerous agent.
22 Threatened release of extremely dangerous agent.
23 Combination of release and fire impeded mitigation.
24 Multiple chemicals released, unknown effects.
25 Release of unidentified chemicals, unknown effects.
20 Release factors, other.

3 ***Impediment or Delay Factors***
31 Access to release area.
32 HazMat apparatus unavailable.
33 HazMat apparatus failure.
34 Traffic delay.
35 Trouble finding location.
36 Communications delay.
37 HazMat-trained crew unavailable or delayed.
30 Impediment or delay factors, other.

4 ***Natural Conditions***

Factors Affecting Mitigation - Section L (continued)

41 High wind.
42 Storm.
43 High water, including floods.
44 Earthquake.
45 Extreme high temperature.
46 Extreme low temperature.
47 Ice or snow conditions.
48 Lightning.
49 Animal.
40 Natural conditions, other.
00 Factors affecting mitigation, other.
NN None.

Equipment Involved in Release - Section M

Please Note:
The code set table used for this data element is the same set that is used for ***Equipment Involved In Ignition***, section F1 in the Fire Module. Please refer to page 180 for the codes listed for that data element.

Mobile Property Type - Section N

Please Note:
The code set table used for this data element is the same set that is used for ***Mobile Property Type***, section H2 in the Fire Module. Please refer to page 185 for the codes listed for that data element.

Mobile Property Make - Section N

Please Note:
The code set table used for this data element is the same set that is used for ***Mobile Property Make***, section H2 in the Fire Module. Please refer to page 186 for the codes listed for that data element.

HazMat Disposition - Section O

1 Completed by fire service only.
2 Completed with fire service present.
3 Released to local agency.
4 Released to county agency.
5 Released to state agency.
6 Released to federal agency.
7 Released to private agency.
8 Released to property owner or manager.

Wildland Module Data Dictionary

Subsection

NENE	Northeast by Northeast
NENW	Northeast by Northwest
NESE	Northeast by Southeast
NESW	Northeast by Southwest
NWNW	Northwest by Northwest
NWNE	Northwest by Northeast
NWSE	Northwest by Southeast
NWSW	Northwest by Southwest
SESE	Southeast by Southeast
SESW	Southeast by Southwest
SENE	Southeast by Northeast
SENW	Southeast by Northwest
SWSW	Southwest by Southwest
SWSE	Southwest by Southeast
SWNE	Southwest by Northeast
SWNW	Southwest by Northwest

Meridian - Section B

01	First Principal
02	Second Principal
03	Third Principal
04	Fourth Principal
05	Fifth Principal
06	Sixth Principal
07	Black Hills
08	Boise
09	Chickasaw
10	Choctaw
11	Cimarron
12	Copper River
13	Fairbanks
14	Gila and Salt River
15	Humboldt
16	Huntsville
17	Indian
18	Louisiana
19	Michigan
20	Principal
21	Mt. Diablo
22	Navajo
23	New Mexico
24	St. Helena
25	St. Stephens
26	Salt Lake
27	San Bernardino
28	Seward
29	Tallahassee
30	Uintah
31	Ute
32	Washington
33	Willamette
34	Wind River
35	Ohio
36	Great Miami River
37	Muskingum River
38	Ohio River
39	First Scioto River
40	Second Scioto River
41	Third Scioto River
42	Ellicotts Line
43	12 Mile Square
44	Kateel River
45	Umiat
UU	Undetermined

Area Type - Section C

1	Rural, including farms >50 acres
2	Urban, heavily populated areas
3	Rural/urban or suburban
4	Urban/wildland interface area

Wildland Fire Cause - Section D1

1	Natural source
2	Equipment
3	Smoking
4	Open/outdoor fire
5	Debris, vegetation burn
6	Structure (exposure)
7	Incendiary
8	Misuse of fire
0	Other cause
U	Undetermined

Human Factors Contributing to Ignition - Section D2

Please Note:
The code set table used for this data element is the same set that is used for **Human Factors Contributing to Ignition**, section E3 in the Fire Module. Please refer to page 180 for the codes listed for that data element.

Factors Contributing to Ignition - Section D3

Please Note:
The code set table used for this data element is the same set that is used for **Factors Contributing to Ignition**, section E2 in the Fire Module. Please refer to page 179 for the codes listed for that data element.

Fire Suppression Factors - Section D4

Please Note:
The code set table used for this data element is the same set that is used for **Fire Suppression Factors**, section G in the Fire Module. Please refer to page 184 for the codes listed for that data element.

Heat Source - Section E

Please Note:
The code set table used for this data element is the same set that is used for **Heat Source**, section D2 in the Fire Module. Please refer to page 176 for the codes listed for that data element.

Mobile Property Type - Section F

Please Note:
The code set table used for this data element is the same set that is used for **Mobile Property Type**, section H2 in the Fire Module. Please refer to page 185 for the codes listed for that data element.

Equipment Involved in Ignition - Section G

Please Note:
The code set table used for this data element is the same set that is used for **Equipment Involved in Ignition**, section F1 in the Fire Module. Please refer to page 180 for the codes listed for that data element.

Weather Type - Section H

10	Clear, less than 1/10 cloud cover
11	Scattered clouds, 1/10 to 5/10 cloud cover
12	Broken clouds, 6/10 to 9/10 cloud cover
13	Overcast, over 9/10 cloud cover
14	Foggy
15	Drizzle or mist
16	Rain
17	Snow or sleet
18	Shower
19	Thunderstorm in progress
00	Other weather type

Wind Direction - Section H

1	North
2	Northeast
3	East
4	Southeast
5	South
6	Southwest
7	West
8	Northwest
9	Shifting winds
N	None/Calm
U	Undetermined

Fire Danger Rating - Section H

1	Low fire danger
2	Moderate fire danger
3	High fire danger
4	Very high fire danger
5	Extreme fire danger
U	Undetermined

Property Management - Section J

Private

1	Tax paying
2	Non-tax paying

Public

3	City, town, village or other locality
4	County or parish
5	State or province
6	Federal
7	Foreign
8	Military
0	Other
U	Undetermined

Federal Agency Codes

Code	Agency - Wildland
AKCGF	USDA Forest Service - Chugach National Forest
AKTNF	USDA Forest Service (Tongass National Forest)
AKANA	USDI Bureau of Indian Affairs (Anchorage Agency)
AKBEA	USDI Bureau of Indian Affairs (Bethel Agency)
AKCIA	USDI Bureau of Indian Affairs (Chugachmiut Agency)
AKFAA	USDI Bureau of Indian Affairs (Fairbanks Agency)
AKJAO	USDI Bureau of Indian Affairs (Juneau Area Office)
AKMEA	USDI Bureau of Indian Affairs (Metlakatla Agency)
AKNOA	USDI Bureau of Indian Affairs (Nome Agency)
AKAMR	USDI Fish & Wildlife Service (Alaska Maritime NWR)
AKAPR	USDI Fish & Wildlife Service (Alaska Peninsula NWR)
AKARR	USDI Fish & Wildlife Service (Arctic NWR)
AKBCR	USDI Fish & Wildlife Service (Becharof NWR)
AKINR	USDI Fish & Wildlife Service (Innoko NWR)
AKIZR	USDI Fish & Wildlife Service (Izembek NWR)
AKKAR	USDI Fish & Wildlife Service (Kanuti NWR)
AKKDR	USDI Fish & Wildlife Service (Kodiak NWR)
AKKNR	USDI Fish & Wildlife Service (Kenai NWR)
AKKUR	USDI Fish & Wildlife Service (Koyukuk NWR)
AKNOR	USDI Fish & Wildlife Service (Nowitna NWR)
AKSWR	USDI Fish & Wildlife Service (Selawik NWR)
AKTER	USDI Fish & Wildlife Service (Tetlin NWR)
AKTGR	USDI Fish & Wildlife Service (Togiak NWR)
AKYDR	USDI Fish & Wildlife Service (Yukon Delta NWR)
AKYFR	USDI Fish & Wildlife Service (Yukon Flats NWR)
AKANP	USDI National Park Service (Aniakchak NM & Preserve)
AKBLP	USDI National Park Service (Bering Land Bridge National Preserve)
AKDEP	USDI National Park Service (Denali National Park & Preserve)
AKEAP	USDI National Park Service (Eastern Alaska Park Group)
AKGAP	USDI National Park Service (Gates of the Arctic NP & Preserve)
AKGBP	USDI National Park Service (Glacier Bay National Park & Preserve)
AKKAP	USDI National Park Service (Katmai National Park & Preserve)
AKKEP	USDI National Park Service (Kenai Fjords National Park)
AKKLP	USDI National Park Service (Klondike Gold Rush NHP)
AKKOP	USDI National Park Service (Kobuk Valley National Park)
AKKRP	USDI National Park Service (Cape Krusenstern NM)
AKLCP	USDI National Park Service (Lake Clark National Park & Preserve)
AKNOP	USDI National Park Service (Noatak Preserve)
AKROP	USDI National Park Service (AKRO Default Park Group)
AKSIP	USDI National Park Service (Sitka NHP)
AKWEP	USDI National Park Service (Western Alaska Park Group)
AKWSP	USDI National Park Service (Wrangell-St. Elias NP & Preserve)
AKYCP	USDI National Park Service (Yukon-Charlie Rivers Nat'l Preserve)
CAENF	USDA Forest Service (Eldorado National Forest)
CAKNF	USDA Forest Service (Klamath National Forest)
CALNF	USDA Forest Service (Lassen National Forest)
CAMDF	USDA Forest Service (Modoc National Forest)
CAMNF	USDA Forest Service (Mendoci National Forest)
CAPNF	USDA Forest Service (Plumas National Forest)
CASHF	USDA Forest Service (Shasta-Trinity National Forest)
CASRF	USDA Forest Service (Six Rivers National Forest)
CATNF	USDA Forest Service (Tahoe National Forest)
CAANF	USDA Forest Service (Angeles National Forest)
CABDF	USDA Forest Service (San Bernardino National Forest)
CACNF	USDA Forest Service (Cleveland National Forest)
CAINF	USDA Forest Service (Inyo National Forest)
CALPF	USDA Forest Service (Los Padres National Forest)
CASNF	USDA Forest Service (Sierra National Forest)
CASQF	USDA Forest Service (Sequoia National Forest)
CASTF	USDA Forest Service (Stanislaus National Forest)
CANWS	USDC National Weather Service (National Weather Service)
CAFBA	USDI Bureau of Indian Affairs (Fort Bidwell Agency)
CAHIA	USDI Bureau of Indian Affairs (Hoopa Agency)
CANCA	USDI Bureau of Indian Affairs (Northern California Agency)

Code	Agency - Wildland
CASCA	USDI Bureau of Indian Affairs (SCA Southern California Agency)
CASYC	USDI Bureau of Indian Affairs (SYC Sycuan Agency)
CATIA	USDI Bureau of Indian Affairs (TIA Tule River Agency)
CANOD	USDI Bureau of Land Management (Northern California District)
CABBD	USDI Bureau of Land Management (Bakersfield District)
CACDD	USDI Bureau of Land Management (California Desert District)
CABRL	USDI Bureau Of Reclaimation (Mid-Pacific Region)
CACLR	USDI Fish & Wildlife Service (Clear Lake)
CAFWR	USDI Fish & Wildlife Service (San Francisco Bay)
CAHBR	USDI Fish & Wildlife Service (Humboldt Bay)
CALKR	USDI Fish & Wildlife Service (Lower Klamath)
CAMDR	USDI Fish & Wildlife Service (Modoc)
CASWR	USDI Fish & Wildlife Service (Sacramento)
CATLR	USDI Fish & Wildlife Service (Tule Lake)
HIHIR	USDI Fish & Wildlife Service (Hawaiian Islands)
HIHLR	USDI Fish & Wildlife Service (Huleia)
HIHNR	USDI Fish & Wildlife Service (Hanalei)
HIJCR	USDI Fish & Wildlife Service (James C. Campbell)
HIKKR	USDI Fish & Wildlife Service (Kakahaia)
HIPHR	USDI Fish & Wildlife Service (Pearl Harbor)
NVSAR	USDI Fish & Wildlife Service (Sheldon Antelope NV)
CACBR	USDI Fish & Wildlife Service (Cibola)
CAKRR	USDI Fish & Wildlife Service (Kern)
CALUR	USDI Fish & Wildlife Service (San Luis)
CASSR	USDI Fish & Wildlife Service (Salton Sea)
CATNR	USDI Fish & Wildlife Service (Tijuana Slough)
CABNP	USDI National Park Service (Lava Beds NM)
CAGNP	USDI National Park Service (Golden Gate NRA)
CAJMP	USDI National Park Service (John Muir NHS)
CALNP	USDI National Park Service (Lassen Volcanic NP)
CAPRP	USDI National Park Service (Presidio of San Francisco)
CARNP	USDI National Park Service (Point Reyes National Seashore)
CARWP	USDI National Park Service (Redwood NP)
CAWNP	USDI National Park Service (Whiskeytown NRA)
GUAMP	USDI National Park Service (American Memorial Park)
GUWPP	USDI National Park Service (War in Pacific NHP)
HIHKP	USDI National Park Service (Haleakala NP)
HIHVP	USDI National Park Service (Hawaii Volcaes NP)
HIKAP	USDI National Park Service (Kalaupapa NHP)
HIKHP	USDI National Park Service (Kaloko-Hokohau NHP)
HIPHP	USDI National Park Service (Puukohola Heiau NHS)
HIPUP	USDI National Park Service (Puuohonua O Honaunau NHP)
HIUSP	USDI National Park Service (U.S.S. Arizona Memorial)
CACAP	USDI National Park Service (Cabillio NM)
CACNP	USDI National Park Service (Channel Islands NP)
CADPP	USDI National Park Service (Devils Postpile NM)
CADVP	USDI National Park Service (Death Valley NP)
CAJTP	USDI National Park Service (Joshua Tree NM)
CAKNP	USDI National Park Service (Sequoia & Kings Canyon NP)
CAMNP	USDI National Park Service (Mojave NP)
CAPIP	USDI National Park Service (Pinnacles NM)
CASMP	USDI National Park Service (Santa Moni Mountains NRA)
CAYNP	USDI National Park Service (Yosemite NP)
NVFNA	DOD Dept Defense (Fallon Naval Air Station)
NVNTE	DOD Dept Defense (Nevada Test Site)
IDBOF	USDA Forest Service (Boise National Forest)
IDCTF	USDA Forest Service (Caribou-Targhee National Forest)
IDPAF	USDA Forest Service (Payette National Forest)
IDSCF	USDA Forest Service (Salmon-Challis National Forest)
IDSTF	USDA Forest Service (Sawtooth National Forest)
UTASF	USDA Forest Service (Ashley National Forest)
UTDIF	USDA Forest Service (Dixie National Forest)
UTFIF	USDA Forest Service (Fishlake National Forest)
UTMLF	USDA Forest Service (Manti-Lasal National Forest)
UTUIF	USDA Forest Service (Uinta National Forest)
UTWCF	USDA Forest Service (Wasatch-Cache National Forest)
WYBTF	USDA Forest Service (Bridger-Teton National Forest)
NVHTF	USDA Forest Service (Humboldt-Toiyabe National Forest)
IDBLR	USDI Fish & Wildlife Service (Bear Lake)
IDCSR	USDI Fish & Wildlife Service (Camas)
IDDFR	USDI Fish & Wildlife Service (Deer Flat)
IDGLR	USDI Fish & Wildlife Service (Grays Lake)

Code	Agency - Wildland
IDHFR	USDI Fish & Wildlife Service (Hagerman National Fish Hatchery)
IDMNR	USDI Fish & Wildlife Service (Minidoka)
UTBBR	USDI Fish & Wildlife Service (Bear River Migratory Bird Refuge)
UTFSR	USDI Fish & Wildlife Service (Fish Springs)
UTOWR	USDI Fish & Wildlife Service (Ouray)
WYNER	USDI Fish & Wildlife Service (National Elk Refuge)
NVAIR	USDI Fish & Wildlife Service (Anaho Island)
NVAMR	USDI Fish & Wildlife Service (Ash Meadows)
NVDSR	USDI Fish & Wildlife Service (Desert)
NVFLR	USDI Fish & Wildlife Service (Fallon)
NVMVR	USDI Fish & Wildlife Service (Moapa Valley)
NVPRR	USDI Fish & Wildlife Service (Pahranagat)
NVRLR	USDI Fish & Wildlife Service (Ruby Lake)
NVSWR	USDI Fish & Wildlife Service (Stillwater)
IDCMP	USDI National Park Service (Craters of the Moon NM)
IDCRP	USDI National Park Service (City of Rocks National Reserve)
IDHFP	USDI National Park Service (Hagerman Fossil Beds NM)
UTARP	USDI National Park Service (Arches NP)
UTBRP	USDI National Park Service (Bryce Canyon NP)
UTCAP	USDI National Park Service (Canyonlands NP)
UTCBP	USDI National Park Service (Cedar Breaks)
UTCRP	USDI National Park Service (Capitol Reef NP)
UTDSP	USDI National Park Service (Dinosaur NM)
UTGLP	USDI National Park Service (Glen Canyon NRA)
UTGSP	USDI National Park Service (Golden Spike NHS)
UTHOP	USDI National Park Service (Hovenweep NM)
UTNBP	USDI National Park Service (Natural Bridges NM)
UTRAP	USDI National Park Service (Rainbow Bridge NM)
UTTIP	USDI National Park Service (Timpanogos Cave NM)
UTZIP	USDI National Park Service (Zion NP)
WYGTP	USDI National Park Service (Grand Teton NP)
NVGBP	USDI National Park Service (Great Basin NP)
NVLAP	USDI National Park Service (Lake Mead NRA)
ILMPF	USDA Forest Service (Midewin National Tall Grass Prairie)
ILSHF	USDA Forest Service (Shawnee NF)
INHOF	USDA Forest Service (Hoosier NF)
MIHIF	USDA Forest Service (Hiawatha NF)
MIHMF	USDA Forest Service (Huron-Manistee NF)
MIOTF	USDA Forest Service (Ottawa NF)
MNCPF	USDA Forest Service (Chippewa NF)
MNSUF	USDA Forest Service (Superior NF)
MOMTF	USDA Forest Service (Mark Twain NF)
NHWMF	USDA Forest Service (White Mountain NF)
OHWAF	USDA Forest Service (Wayne NF)
PAALF	USDA Forest Service (Allegheny NF)
VTGMF	USDA Forest Service (Green Mountain NF)
WICNF	USDA Forest Service (Chequamegon-Nicolet NF)
WVMOF	USDA Forest Service (Monongahela NF)
IASFA	USDI Bureau of Indian Affairs (Sac & Fox Agency)
MEPAA	USDI Bureau of Indian Affairs (Passamaquoddy Agency)
MEPEA	USDI Bureau of Indian Affairs (Penobscot Agency)
MIMIA	USDI Bureau of Indian Affairs (Michigan Agency)
MNMNA	USDI Bureau of Indian Affairs (Minnesota Agency)
MNRLA	USDI Bureau of Indian Affairs (Red Lake Agency)
WIGLA	USDI Bureau of Indian Affairs (Grt Lakes Agency)
WIMEA	USDI Bureau of Indian Affairs (Menominee Agency)
IADAR	USDI Fish & Wildlife Service (Driftless)
IADSR	USDI Fish & Wildlife Service (DeSoto)
IANSR	USDI Fish & Wildlife Service (Neal Smith)
IAPLR	USDI Fish & Wildlife Service (Port Louisa)
IAUSR	USDI Fish & Wildlife Service (Union Slough)
ILCOR	USDI Fish & Wildlife Service (Crab Orchard)
ILCTR	USDI Fish & Wildlife Service (Chautauqua)
ILCYR	USDI Fish & Wildlife Service (Cypress Creek)
ILILR	USDI Fish & Wildlife Service (Illinois River)
ILMTR	USDI Fish & Wildlife Service (Mark Twain)
ILSVR	USDI Fish & Wildlife Service (Savanna District, Upper Mississippi)
ILTWR	USDI Fish & Wildlife Service (Two Rivers)
INBOR	USDI Fish & Wildlife Service (Big Oaks)
INMSR	USDI Fish & Wildlife Service (Muscatatuck)
INPKR	USDI Fish & Wildlife Service (Patoka River)
MIDRR	USDI Fish & Wildlife Service (Detroit River IWR)
MIHAR	USDI Fish & Wildlife Service (Harbor Island)
MIHFR	USDI Fish & Wildlife Service (Hiawatha Forest NFH)
MIHUR	USDI Fish & Wildlife Service (Huron)
MIKWR	USDI Fish & Wildlife Service (Kirtlandsrbler)
MIMIR	USDI Fish & Wildlife Service (Michigan Island)
MIMWR	USDI Fish & Wildlife Service (Michigan)
MIPCR	USDI Fish & Wildlife Service (Pendills Creek NFH)
MISNR	USDI Fish & Wildlife Service (Seney)
MISSR	USDI Fish & Wildlife Service (Shiawassee)
MNAGR	USDI Fish & Wildlife Service (Agassiz)
MNBGR	USDI Fish & Wildlife Service (Big Stone)

Code	Agency - Wildland
MNBNR	USDI Fish & Wildlife Service (Morris)
MNCMR	USDI Fish & Wildlife Service (Crane Meadows)
MNDLR	USDI Fish & Wildlife Service (Detroit Lakes)
MNFFR	USDI Fish & Wildlife Service (Fergus Falls)
MNHSR	USDI Fish & Wildlife Service (Hamden Slough)
MNLFR	USDI Fish & Wildlife Service (Litchfield)
MNMGR	USDI Fish & Wildlife Service (McGregor District, Upper Mississippi)
MNMVR	USDI Fish & Wildlife Service (Minnesota Valley)
MNRLR	USDI Fish & Wildlife Service (Rice Lake)
MNRYR	USDI Fish & Wildlife Service (Rydell)
MNSBR	USDI Fish & Wildlife Service (Sherburne)
MNTMR	USDI Fish & Wildlife Service (Tamarac)
MNWWR	USDI Fish & Wildlife Service (Windom)
MOBMR	USDI Fish & Wildlife Service (Big Muddy)
MOGRR	USDI Fish & Wildlife Service (Great Rivers)
MOMOR	USDI Fish & Wildlife Service (Mingo)
MOSQR	USDI Fish & Wildlife Service (Squaw Creek)
MOSWR	USDI Fish & Wildlife Service (Swan Lake)
OHOTR	USDI Fish & Wildlife Service (Ottawa)
WILPR	USDI Fish & Wildlife Service (Leopold)
WIGNR	USDI Fish & Wildlife Service (Genoa NFH)
WIHRR	USDI Fish & Wildlife Service (Horicon)
WIIRR	USDI Fish & Wildlife Service (Illinois River)
WIJRR	USDI Fish & Wildlife Service (Jordan River NFH)
WILCR	USDI Fish & Wildlife Service (LaCrosse District, Upper Mississippi)
WINCR	USDI Fish & Wildlife Service (Necedah)
WISCR	USDI Fish & Wildlife Service (St. Croix)
WITPR	USDI Fish & Wildlife Service (Trempeleau)
WIWCR	USDI Fish & Wildlife Service (Whittlesey Creek)
WIWNR	USDI Fish & Wildlife Service (WInona District, Upper Mississippi)
WVCVR	USDI Fish & Wildlife Service (Canaan Valley)
WVOHR	USDI Fish & Wildlife Service (Ohio River Islands)
CTSMR	USDI Fish & Wildlife Service (Stewart B. McKinney)
DEBHR	USDI Fish & Wildlife Service (Bombay Hook)
DEPHR	USDI Fish & Wildlife Service (Prime Hook)
MAEMR	USDI Fish & Wildlife Service (Eastern Massachusetts Complex)
MAPRR	USDI Fish & Wildlife Service (Parker River)
MASCR	USDI Fish & Wildlife Service (Sylvio O. Conte)
MDBWR	USDI Fish & Wildlife Service (Chesapeake Marshlands Complex)
MDENR	USDI Fish & Wildlife Service (Eastern Neck)
MDPWR	USDI Fish & Wildlife Service (Patuxent)
MEARR	USDI Fish & Wildlife Service (Arrostook)
MECMR	USDI Fish & Wildlife Service (Maine Coastal Islands Complex)
MEMHR	USDI Fish & Wildlife Service (Moosehorn)
MERCR	USDI Fish & Wildlife Service (Rachel Carson)
MESHR	USDI Fish & Wildlife Service (Sunkhaze Mdows)
NHGBR	USDI Fish & Wildlife Service (Grt Bay NH)
NHUBR	USDI Fish & Wildlife Service (Lake Umbagog NH)
NJCMR	USDI Fish & Wildlife Service (Cape May NJ)
NJERR	USDI Fish & Wildlife Service (Edwin B. Forsythe NJ)
NJGSR	USDI Fish & Wildlife Service (Grt Swamp NJ)
NJSPR	USDI Fish & Wildlife Service (Supawna Mdows NJ)
NJWKR	USDI Fish & Wildlife Service (Walkill River NJ)
NYIRR	USDI Fish & Wildlife Service (Iroquois NY)
NYLIR	USDI Fish & Wildlife Service (Long Island Complex NY)
NYMZR	USDI Fish & Wildlife Service (Montezuma NY)
PAERR	USDI Fish & Wildlife Service (Erie PA)
PATNR	USDI Fish & Wildlife Service (John Heinz at Tinicum PA)
RIRIR	USDI Fish & Wildlife Service (Rhode Island Complex RI)
VTMQR	USDI Fish & Wildlife Service (Missisquoi VT)
CTWFP	USDI National Park Service (Weir Farm NHS)
MAADP	USDI National Park Service (Adams NHS)
MABOP	USDI National Park Service (Boston NHP)
MABSP	USDI National Park Service (Boston Support Office)
MACCP	USDI National Park Service (Cape Cod National Seashore)
MAFRP	USDI National Park Service (Frederick Law Olmsted NHS)
MAJFP	USDI National Park Service (John Fitzgerald Kennedy NHS)
MALOP	USDI National Park Service (Longfellow NHS)
MALWP	USDI National Park Service (Lowell NHP)
MAMIP	USDI National Park Service (Minute Man NHP)
MASAP	USDI National Park Service (Salem Maritime NHS)
MASIP	USDI National Park Service (Saugus Iron Works NHS)
MASPP	USDI National Park Service (Springfield Armory NHS)
MDAIP	USDI National Park Service (Assateague Island NS)
MDFMP	USDI National Park Service (Ft. McHenry NM)
MDHAP	USDI National Park Service (Hampton NHS)

Code	Agency - Wildland
MDTSP	USDI National Park Service (Thomas Stone NHS)
MEACP	USDI National Park Service (Acadia NP)
MERCP	USDI National Park Service (Roosevelt-Campabello Int'l Park)
NHSGP	USDI National Park Service (Saint-Gaudens NHS)
NJEDP	USDI National Park Service (Edison NHS)
NJMOP	USDI National Park Service (Morristown NHP)
NYFDP	USDI National Park Service (Home of Franklin D. Roosevelt NHS)
NYFIP	USDI National Park Service (Fire Island National Seashore)
NYFOP	USDI National Park Service (Ft. Sanwix NM)
NYGAP	USDI National Park Service (Gateway NRA)
NYMAP	USDI National Park Service (Manhattan Sites)
NYMVP	USDI National Park Service (Martin Van Buren NHS)
NYRVP	USDI National Park Service (Roosevelt/Vanderbilt NHS)
NYSHP	USDI National Park Service (Sagamore Hill NHS)
NYSPP	USDI National Park Service (Saint Paul's Church NHS)
NYSRP	USDI National Park Service (Saratoga NHP)
NYSTP	USDI National Park Service (Statue of Liberty NM)
NYUDP	USDI National Park Service (Upper Delaware NSR)
NYWOP	USDI National Park Service (Woman's Rights NHP)
PAAPP	USDI National Park Service (Allegheny Portage Railroad NHS)
PADWP	USDI National Park Service (Delaware Water Gap NRA)
PAFHP	USDI National Park Service (Friendship Hill NHS)
PAFNP	USDI National Park Service (Ft. Necessity NB)
PAGEP	USDI National Park Service (Gettysburg NMP)
PAHEP	USDI National Park Service (Hopwell Furnace NHS)
PAINP	USDI National Park Service (Independence NHP)
PAJFP	USDI National Park Service (Johnstown Flood NM)
PASTP	USDI National Park Service (Steamtown NHS)
PAVFP	USDI National Park Service (Valley Forge NHP)
RIROP	USDI National Park Service (Roger Williams NM)
VTMBP	USDI National Park Service (Marsh-Billings-Rockefeller NHP)
WVNRP	USDI National Park Service (New River Gorge NR)
IAEMP	USDI National Park Service (Effigy Mounds NM)
IAHHP	USDI National Park Service (Herbert Hoover NHS)
ILCPP	USDI National Park Service (Chicago Portage NHS)
ILIMP	USDI National Park Service (Illinois and Michigan Canal NHC)
ILLHP	USDI National Park Service (Lincoln Home NHS)
INGRP	USDI National Park Service (George Rogers Clark NHP)
INIDP	USDI National Park Service (Indiana Dunes National Lakeshore)
INLBP	USDI National Park Service (Lincoln Boyhood NM)
MILBP	USDI National Park Service (Automobile NHA I)
MIFMP	USDI National Park Service (Father Marquette NM)
MIIRP	USDI National Park Service (Isle Royale NP)
MIKWP	USDI National Park Service (Keweenaw NHP)
MIPRP	USDI National Park Service (Pictured Rocks National Lakeshore)
MISDP	USDI National Park Service (Sleeping Bear Dunes National Lakeshore MI)
MNGPP	USDI National Park Service (Grand Portage NM)
MNMSP	USDI National Park Service (Mississippi NRA)
MNPSP	USDI National Park Service (Pipestone NM)
MNVOP	USDI National Park Service (Voyageurs NP)
MOGWP	USDI National Park Service (George Washington Carver NM)
MOHTP	USDI National Park Service (Harry S. Truman NHS)
MOJEP	USDI National Park Service (Jefferson National Expansion Memorial)
MOOZP	USDI National Park Service (Ozark NSR)
MOUGP	USDI National Park Service (Ulysses S. Grant NHS)
MOWCP	USDI National Park Service (Wilson's Creek NB)
OHCVP	USDI National Park Service (Cuyahoga Valley NRA)
OHDAP	USDI National Park Service (Dayton Aviation Heritage NHP)
OHDBP	USDI National Park Service (David Berger NM)
OHFLP	USDI National Park Service (First Ladies NHS)
OHHCP	USDI National Park Service (Hopewell Culture NHP)
OHJGP	USDI National Park Service (James A. Garfield NHS)
OHPVP	USDI National Park Service (Perry's Victory & International Peace Memorial)
OHWHP	USDI National Park Service (William Howard Taft NHS)
WIAIP	USDI National Park Service (Apostle Islands NL)
WIIAP	USDI National Park Service (Ice Age NP)
WINCP	USDI National Park Service (North Country NST)
WISCP	USDI National Park Service (Saint Croix NSR)
IDCWF	USDA Forest Service (Clearwater National Forest)
IDIPF	USDA Forest Service (Idaho Panhandle National Forest)
IDNPF	USDA Forest Service (Nez Perce National Forest)
MTBDF	USDA Forest Service (Beaverhead/Deerlodge National Forest)

Code	Agency - Wildland
MTBRF	USDA Forest Service (Bitterroot National Forest)
MTCNF	USDA Forest Service (Custer National Forest)
MTFNF	USDA Forest Service (Flathead National Forest)
MTGNF	USDA Forest Service (Gallatin National Forest)
MTHNF	USDA Forest Service (Helena National Forest)
MTKNF	USDA Forest Service (Kootenai National Forest)
MTLCF	USDA Forest Service (Lewis & Clark National Forest)
MTLNF	USDA Forest Service (Lolo National Forest)
NDDPF	USDA Forest Service (Dakota Prairie National Grasslands)
MTBLW	USDC National Weather Service (NWS Billings Weather Service)
MTGFW	USDC National Weather Service (Great Falls Weather Service)
MTGGW	USDC National Weather Service (Glasgow Weather Service)
MTMSW	USDC National Weather Service (Missoula Weather Service)
NDBMW	USDC National Weather Service (Bismark Weather Service)
NDGFW	USDC National Weather Service (Grand Forks Weather Service)
IDNIA	USDI Bureau of Indian Affairs (North Idaho Agency)
MTBFA	USDI Bureau of Indian Affairs (Blackfeet Agency)
MTCRA	USDI Bureau of Indian Affairs (Crow Agency)
MTFBA	USDI Bureau of Indian Affairs (Fort Belknap Agency)
MTFHA	USDI Bureau of Indian Affairs (Flathead Agency)
MTFPA	USDI Bureau of Indian Affairs (Fort Peck Agency)
MTNCA	USDI Bureau of Indian Affairs (Northern Cheyenne Agency)
MTRBA	USDI Bureau of Indian Affairs (Rocky Boys Agency)
MTRNA	USDI Bureau of Indian Affairs (Ronan Agency)
NDFBA	USDI Bureau of Indian Affairs (Fort Berthold Agency)
NDFTA	USDI Bureau of Indian Affairs (Fort Totten Agency)
NDTMA	USDI Bureau of Indian Affairs (Turtle Mountain Agency)
IDKOR	USDI Bureau Of Reclaimation (Kootenai)
MTBLR	USDI Bureau Of Reclaimation (Benton Lake)
MTBWR	USDI Bureau Of Reclaimation (Bowdoin)
MTCMR	USDI Bureau Of Reclaimation (Charles M. Russell)
MTLMR	USDI Bureau Of Reclaimation (Lee Metcalf)
MTMLR	USDI Bureau Of Reclaimation (Medicine Lake)
MTNBR	USDI Bureau Of Reclaimation (National Bison Range)
MTRLR	USDI Bureau Of Reclaimation (Red Rock Lakes)
NDADR	USDI Bureau Of Reclaimation (Audubon)
NDAWR	USDI Bureau Of Reclaimation (Arrowwood)
NDCLR	USDI Bureau Of Reclaimation (Chase Lake)
NDCRR	USDI Bureau Of Reclaimation (Crosby)
NDDLR	USDI Bureau Of Reclaimation (Des Lacs)
NDJCR	USDI Bureau Of Reclaimation (J. Clark Salyer)
NDKMR	USDI Bureau Of Reclaimation (Kulm)
NDLIR	USDI Bureau Of Reclaimation (Lake ILO)
NDLLR	USDI Bureau Of Reclaimation (Long Lake)
NDLWR	USDI Bureau Of Reclaimation (Lostwood Lake)
NDSHR	USDI Bureau Of Reclaimation (Sullys Hill National Game Preserve)
NDSLR	USDI Bureau Of Reclaimation (Spirit Lake)
NDTWR	USDI Bureau Of Reclaimation (Tewaukon)
NDUSR	USDI Bureau Of Reclaimation (Upper Souris)
NDVCR	USDI Bureau Of Reclaimation (Valley City)
IDNPP	USDI National Park Service (Nez Perce NHP)
MTBHP	USDI National Park Service (Big Hole National Battlefield)
MTBIP	USDI National Park Service (Big Horn Canyon)
MTGKP	USDI National Park Service (Grant-Kohrs Ranch NHS)
MTGNP	USDI National Park Service (Glacier National Park)
MTLBP	USDI National Park Service (Little Bighorn Battlefield NHD)
NDFUP	USDI National Park Service (Fort Union Trading Post NHS)
NDIPP	USDI National Park Service (International Peace Gardens)
NDKRP	USDI National Park Service (Knife River Indian Villages NHS)
NDTRP	USDI National Park Service (Theodore Roosevelt NP)
WYYNP	USDI National Park Service (Yellowstone National Park)
ORCGF	USDA Forest Service (Columbia River Gorge National Scenic Area)
ORDEF	USDA Forest Service (Deschutes National Forest)
ORFRF	USDA Forest Service (Fremont National Forest)
ORMAF	USDA Forest Service (Malheur National Forest)
ORMHF	USDA Forest Service (Mt. Hood National Forest)
OROCF	USDA Forest Service (Ochoco National Forest)
ORRRF	USDA Forest Service (Rogue River National Forest)
ORSIF	USDA Forest Service (Siskiyou National Forest)
ORSUF	USDA Forest Service (Siuslaw National Forest)

Code	Agency - Wildland
ORUMF	USDA Forest Service (Umatilla National Forest)
ORUPF	USDA Forest Service (Umpqua National Forest)
ORWIF	USDA Forest Service (Willamette National Forest)
ORWNF	USDA Forest Service (Winema National Forest)
ORWWF	USDA Forest Service (Wallowa-Whitman National Forest)
WACOF	USDA Forest Service (Colville National Forest)
WAGPF	USDA Forest Service (Gifford Pinchot National Forest)
WAMSF	USDA Forest Service (Mt. Baker-Snoqualmie National Forest)
WAOLF	USDA Forest Service (Olympic National Forest)
WAOWF	USDA Forest Service (Okanogan/Wenatchee National Forest)
ORSIA	USDI Bureau of Indian Affairs (Siletz Agency)
ORUMA	USDI Bureau of Indian Affairs (Umatilla Agency)
ORWSA	USDI Bureau of Indian Affairs (Warm Springs Agency)
WACOA	USDI Bureau of Indian Affairs (Colville Agency)
WAOPA	USDI Bureau of Indian Affairs (Olympic Peninsula Agency)
WAPSA	USDI Bureau of Indian Affairs (Puget Sound Agency)
WASPA	USDI Bureau of Indian Affairs (Spokane Agency)
WAYAA	USDI Bureau of Indian Affairs (Yakima Agency)
ORAKR	USDI Fish & Wildlife Service (Ankeny)
ORBKR	USDI Fish & Wildlife Service (Baskett Slough)
ORBMR	USDI Fish & Wildlife Service (Bandon Marsh)
ORBVR	USDI Fish & Wildlife Service (Bear Valley)
ORCOR	USDI Fish & Wildlife Service (Cold Springs)
ORCPR	USDI Fish & Wildlife Service (Cape Meares)
ORHAR	USDI Fish & Wildlife Service (The Hart Mountain National Antelope Refuge)
ORKLR	USDI Fish & Wildlife Service (Klamath Forest)
ORLAR	USDI Fish & Wildlife Service (Lewis and Clark)
ORLOR	USDI Fish & Wildlife Service (Lower Klamath)
ORMAR	USDI Fish & Wildlife Service (Malheur)
ORMKR	USDI Fish & Wildlife Service (McKay Creek)
ORNTR	USDI Fish & Wildlife Service (Nestucca Bay)
ORORR	USDI Fish & Wildlife Service (Oregon Islands)
ORSHR	USDI Fish & Wildlife Service (Sheldon-Hart)
ORSIR	USDI Fish & Wildlife Service (Siletz Bay)
ORTAR	USDI Fish & Wildlife Service (Three Arch Rocks)
ORTUR	USDI Fish & Wildlife Service (Tualatin River)
ORUKR	USDI Fish & Wildlife Service (Upper Klamath)
ORUMR	USDI Fish & Wildlife Service (Umatilla)
ORWMR	USDI Fish & Wildlife Service (William L. Finley)
ORWTR	USDI Fish & Wildlife Service (Wapator)
WACBR	USDI Fish & Wildlife Service (Columbia)
WACNR	USDI Fish & Wildlife Service (Conboy Lake)
WACOR	USDI Fish & Wildlife Service (Copalis)
WADNR	USDI Fish & Wildlife Service (Dungeness)
WAFLR	USDI Fish & Wildlife Service (Flattery Rocks)
WAGHR	USDI Fish & Wildlife Service (Gray's Harbor)
WAHFR	USDI Fish & Wildlife Service (Hanford Reach National Monument)
WAJHR	USDI Fish & Wildlife Service (Julia Bulter Hansen for the Columbia)
WALPR	USDI Fish & Wildlife Service (Little Pend Oreille)
WALWH	USDI Fish & Wildlife Service (Leavenworth National Fish Hatchery)
WAMCR	USDI Fish & Wildlife Service (Mid Columbia National Wildlife Refuge Complex)
WAMNR	USDI Fish & Wildlife Service (McNary)
WANQR	USDI Fish & Wildlife Service (Nisqually)
WAPIR	USDI Fish & Wildlife Service (Pierce)
WAPRR	USDI Fish & Wildlife Service (Protection Island)
WAQLR	USDI Fish & Wildlife Service (Quillayute Needles)
WARFR	USDI Fish & Wildlife Service (Ridgefield)
WASAR	USDI Fish & Wildlife Service (Saddle Mountain)
WASGR	USDI Fish & Wildlife Service (Steigerwald Lake)
WASNR	USDI Fish & Wildlife Service (San Juan Islands)
WATBR	USDI Fish & Wildlife Service (Turnbull)
WATPR	USDI Fish & Wildlife Service (Toppenish)
WAWIR	USDI Fish & Wildlife Service (Washington Islands)
WAWLR	USDI Fish & Wildlife Service (Willapa)
ORCLP	USDI National Park Service (Crater Lake NP)
ORFCP	USDI National Park Service (Ft. Clatsop NM)
ORJDP	USDI National Park Service (John Day Fossil Beds NM)
OROCP	USDI National Park Service (Oregon Caves NM)
WAELP	USDI National Park Service (Ebey's Landing National Historical Reserve)
WAFVP	USDI National Park Service (Ft. Vancouver NHS)
WAKGP	USDI National Park Service (Klondike Gold Rush NHP - Seattle Unit)
WALCP	USDI National Park Service (Lake Chelan NRA)
WALRP	USDI National Park Service (Lake Roosevelt NRA)
WAMRP	USDI National Park Service (Mt. Rainier NP)
WANCP	USDI National Park Service (North Cascades NP)
WAOLP	USDI National Park Service (Olympic NP)

Code	Agency - Wildland
WARLP	USDI National Park Service (Ross Lake NRA)
WASJP	USDI National Park Service (San Juan Island NHP)
WAWMP	USDI National Park Service (Whitman Mission NHS)
COARF	USDA Forest Service (Arapaho & Roosevelt NFs/Pawnee NG)
COGMF	USDA Forest Service (Grand Mesa/Uncompahgre/ Gunnison NF)
COPSF	USDA Forest Service (Pike and San Isabel NF)
CORGF	USDA Forest Service (Rio Grande NF)
CORTF	USDA Forest Service (Routt National Forest)
COWRF	USDA Forest Service (White River NF)
NENBF	USDA Forest Service (Nebraska NF NE)
SDBKF	USDA Forest Service (Black Hills NF SD)
WYBHF	USDA Forest Service (Bighorn NF WY)
WYMBF	USDA Forest Service (Medicine Bow NF WY)
WYSHF	USDA Forest Service (Shoshone NF WY)
COSUA	USDI Bureau of Indian Affairs (Southern Ute Reservation)
COUMA	USDI Bureau of Indian Affairs (Ute Mountain Reservation)
NDSRA	USDI Bureau of Indian Affairs (Standing Rock Reservation)
WYWRA	USDI Bureau of Indian Affairs (Wind River Reservation)
KSHTA	USDI Bureau of Indian Affairs (Horton Reservation)
NEWBA	USDI Bureau of Indian Affairs (Winnebago Reservation)
SDCCA	USDI Bureau of Indian Affairs (Crow Creek Reservation)
SDCRA	USDI Bureau of Indian Affairs (Cheyenne River Reservation)
SDLBA	USDI Bureau of Indian Affairs (Lower Brule Reservation)
SDPRA	USDI Bureau of Indian Affairs (Pine Ridge Reservation)
SDRBA	USDI Bureau of Indian Affairs (Rosebud Reservation)
SDSWA	USDI Bureau of Indian Affairs (Sisseton-Wahpeton Reservation)
SDYAA	USDI Bureau of Indian Affairs (Yankton Reservation)
COALR	USDI Fish & Wildlife Service (Alamosa)
COARR	USDI Fish & Wildlife Service (Arapaho)
COBAR	USDI Fish & Wildlife Service (Baca)
COBPR	USDI Fish & Wildlife Service (Brown's Park)
COMVR	USDI Fish & Wildlife Service (Monte Vista)

Code	Agency - Wildland
CORMR	USDI Fish & Wildlife Service (Rocky Mountain Arsenal)
KSFLR	USDI Fish & Wildlife Service (Flint Hills)
KSKIR	USDI Fish & Wildlife Service (Kirwin)
KSMCR	USDI Fish & Wildlife Service (Maris des Cygnes)
KSQUR	USDI Fish & Wildlife Service (Quivira)
NECLR	USDI Fish & Wildlife Service (Crescent Lake)
NEFNR	USDI Fish & Wildlife Service (Ft. Niobrara FNR)
NENPR	USDI Fish & Wildlife Service (North Platte)
NERBR	USDI Fish & Wildlife Service (Rainwater Basin WMD)
NESLR	USDI Fish & Wildlife Service (Sand Lake)
NEVAR	USDI Fish & Wildlife Service (Valentine)
SDHUR	USDI Fish & Wildlife Service (Huron WMD)
SDLAR	USDI Fish & Wildlife Service (Lake Andes)
SDLCR	USDI Fish & Wildlife Service (Lacreek)
SDMDR	USDI Fish & Wildlife Service (Madison WMD)
SDWAR	USDI Fish & Wildlife Service (Waubay)
WYSER	USDI Fish & Wildlife Service (Seedskadee)
COBCP	USDI National Park Service (Black Cyn. Of the Gunnison NP)
COBFP	USDI National Park Service (Bents Old Fort NHS)
COCCP	USDI National Park Service (Curecanti NRA)
COCNP	USDI National Park Service (Colorado NM)
CODSP	USDI National Park Service (Dinosaur NP)
COFFP	USDI National Park Service (Florissant Fossil Beds NP)
COGSP	USDI National Park Service (Great Sand Dunes NM)
COMVP	USDI National Park Service (Mesa Verde NP)
CORMP	USDI National Park Service (Rocky Mountain NP)
COYHP	USDI National Park Service (Yucca House NM)
KSFLP	USDI National Park Service (Fort Larned NHS)
KSFSP	USDI National Park Service (Fort Scott NHS)
KSTGP	USDI National Park Service (Tall Grass Prairie NP)
WYBHP	USDI National Park Service (Bighorn Canyon NRA)
WYDTP	USDI National Park Service (Devils Tower NM)
WYFBP	USDI National Park Service (Fossil Butte NM)
WYFLP	USDI National Park Service (Ft. Laramie NHS)
NEAFP	USDI National Park Service (Agate Fossil Beds NM)
NEHOP	USDI National Park Service (Homestead NM)
NESBP	USDI National Park Service (Scotts Bluff NM)
SDBDP	USDI National Park Service (Badlands NP)
SDJCP	USDI National Park Service (Jewel Cave NM)
SDMRP	USDI National Park Service (Mount Rushmore NM)
SDWCP	USDI National Park Service (Wind Cave NP)

Code	Agency - Wildland
ALALF	USDA Forest Service (National Forests in Alabama)
AROUF	USDA Forest Service (Ouachita National Forest AR)
AROZF	USDA Forest Service (Ozark & St. Francis National Forests)
FLFNF	USDA Forest Service (National Forests in Florida)
FLCHF	USDA Forest Service (Chattahoochee-Oconee National Forest)
KYDBF	USDA Forest Service (Daniel Boone National Forest)
KYLBF	USDA Forest Service (Land Between the Lakes NRA)
LAKIF	USDA Forest Service (Kisatchie National Forest)
MSMNF	USDA Forest Service (National Forests in Mississippi)
NCLBJ	USDA Forest Service (Lyndon B. Johnson Job Corp Center)
NCNCF	USDA Forest Service (National Forests in North Carolina)
NCSCK	USDA Forest Service (Schenck Job Corp Center)
PRCAF	USDA Forest Service (Caribbean National Forest)
SCFMF	USDA Forest Service (Francis Marion & Sumter National Forests SC)
SCSRF	USDA Forest Service (Savannah River Forest)
TNCNF	USDA Forest Service (Cherokee National Forest)
TNJCJ	USDA Forest Service (Jacobs Creek Job Corp Center)
TXTXF	USDA Forest Service (National Forests And Grasslands In Texas TX)
VAVAF	USDA Forest Service (George Washington & Jefferson National)
FLSEA	USDI Bureau of Indian Affairs (Seminole Agency)
MSCHA	USDI Bureau of Indian Affairs (Choctaw Agency)
NCECA	USDI Bureau of Indian Affairs (Eastern Cherokee Agency)
SCAAA	USDI Bureau of Indian Affairs (Southern Plains Agency)
SCACA	USDI Bureau of Indian Affairs (Alabama-Coushatta Agency)
OKCHA	USDI Bureau of Indian Affairs (Chickasaw Agency)
OKCNA	USDI Bureau of Indian Affairs (Cherokee Nation Tribe)
OKMIA	USDI Bureau of Indian Affairs (Miami Agency)
OKOSA	USDI Bureau of Indian Affairs (Osage Agency)
OKWEA	USDI Bureau of Indian Affairs (Wewoka Agency)
ALBOR	USDI Fish & Wildlife Service (Bon Secour)
ALBWR	USDI Fish & Wildlife Service (Blowing Wind Cave)
ALCHR	USDI Fish & Wildlife Service (Choctaw)
ALEFR	USDI Fish & Wildlife Service (Eufaula)
ALFER	USDI Fish & Wildlife Service (Fern Cave)
ALWAR	USDI Fish & Wildlife Service (Watercress Darter)
ALWLR	USDI Fish & Wildlife Service (Wheeler)
ARBGR	USDI Fish & Wildlife Service (Big Lake)
ARCRR	USDI Fish & Wildlife Service (Cache River)
ARFSR	USDI Fish & Wildlife Service (Felsenthal)
ARHLR	USDI Fish & Wildlife Service (Holla Bend)
ARLOR	USDI Fish & Wildlife Service (Logan Cave)
ARNAR	USDI Fish & Wildlife Service (Northeast Arkansas Refuges)
AROVR	USDI Fish & Wildlife Service (Overflow)
ARPCR	USDI Fish & Wildlife Service (Pond Creek)
ARWHR	USDI Fish & Wildlife Service (White River)
ARWPR	USDI Fish & Wildlife Service (Wapanocca)
FLACR	USDI Fish & Wildlife Service (Archie Carr)
FLCAR	USDI Fish & Wildlife Service (Caloosahatchee)
FLCHR	USDI Fish & Wildlife Service (Chassahowitzka)
FLCKR	USDI Fish & Wildlife Service (Cedar Keys)
FLCLR	USDI Fish & Wildlife Service (Crocodile Lake)
FLCRR	USDI Fish & Wildlife Service (Crystal River)
FLEGR	USDI Fish & Wildlife Service (Egmont Key)
FLFPR	USDI Fish & Wildlife Service (Florida Panther)
FLGWR	USDI Fish & Wildlife Service (Great White Heron)
FLHBR	USDI Fish & Wildlife Service (Hobe Sound)
FLISR	USDI Fish & Wildlife Service (Island Bay)
FLJNR	USDI Fish & Wildlife Service (J.N. "Ding" Darling)
FLKER	USDI Fish & Wildlife Service (Key West)
FLLRR	USDI Fish & Wildlife Service (Lake Wales Ridge)
FLLSR	USDI Fish & Wildlife Service (Lower Suwannee)
FLLWR	USDI Fish & Wildlife Service (Lake Woodruff)
FLLXR	USDI Fish & Wildlife Service (Arthur R. Marshall/Loxahatchee)
FLMAR	USDI Fish & Wildlife Service (Matlacha Pass)
FLMIR	USDI Fish & Wildlife Service (Merritt Island)
FLNKR	USDI Fish & Wildlife Service (National Key Deer Refuge)
FLPAR	USDI Fish & Wildlife Service (Passage Key)
FLPIR	USDI Fish & Wildlife Service (Pine Island)
FLPLR	USDI Fish & Wildlife Service (Pelican Island)
FLPNR	USDI Fish & Wildlife Service (Pinellas)
FLSJR	USDI Fish & Wildlife Service (St. Johns)
FLSMR	USDI Fish & Wildlife Service (St. Marks)
FLSVR	USDI Fish & Wildlife Service (St. Vincent)
FLSWR	USDI Fish & Wildlife Service (Southwest Florida Gulf Coast Refuges)

Code	Agency - Wildland
FLTBR	USDI Fish & Wildlife Service (Tampa Bay Refuges)
FLTTR	USDI Fish & Wildlife Service (Ten Thousand Islands)
GABLR	USDI Fish & Wildlife Service (Blackbeard Island)
GABNR	USDI Fish & Wildlife Service (Banks Lake)
GABSR	USDI Fish & Wildlife Service (Bond Swamp)
GAHSR	USDI Fish & Wildlife Service (Harris Neck)
GAOKR	USDI Fish & Wildlife Service (Okefenokee)
GAPDR	USDI Fish & Wildlife Service (Piedmont)
GASAR	USDI Fish & Wildlife Service (Savannah Coastal Refuges)
GATYR	USDI Fish & Wildlife Service (Tybee)
GAWLR	USDI Fish & Wildlife Service (Wolf Island)
GAWSR	USDI Fish & Wildlife Service (Wassaw)
KYCLR	USDI Fish & Wildlife Service (Clark's River KY)
LAATR	USDI Fish & Wildlife Service (Atchafalaya)
LABAR	USDI Fish & Wildlife Service (Bayou Cocodrie)
LABBR	USDI Fish & Wildlife Service (Big Branch Marsh)
LABCR	USDI Fish & Wildlife Service (Bouge Chitto)
LABSR	USDI Fish & Wildlife Service (Bayouuvage)
LABTR	USDI Fish & Wildlife Service (Breton)
LACPR	USDI Fish & Wildlife Service (Cameron Prairie)
LACTR	USDI Fish & Wildlife Service (Catahoula)
LADLR	USDI Fish & Wildlife Service (Delta)
LADRR	USDI Fish & Wildlife Service (D'Arbonne)
LAGCR	USDI Fish & Wildlife Service (Grand Cote)
LAHAR	USDI Fish & Wildlife Service (Handy Brake)
LALCR	USDI Fish & Wildlife Service (Lacassine)
LALOR	USDI Fish & Wildlife Service (Lake Ophelia)
LALWR	USDI Fish & Wildlife Service (Louisiana Wetlands)
LAMYR	USDI Fish & Wildlife Service (Mandalay)
LARRR	USDI Fish & Wildlife Service (Red River)
LASBR	USDI Fish & Wildlife Service (Sabine)
LASHR	USDI Fish & Wildlife Service (Shell Keys)
LATNR	USDI Fish & Wildlife Service (Tensas River)
LAUOR	USDI Fish & Wildlife Service (Upper Ouachita)
MSDAR	USDI Fish & Wildlife Service (Dahomey)
MSGBR	USDI Fish & Wildlife Service (Grand Bay)
MSHLR	USDI Fish & Wildlife Service (Hillside)
MSMBR	USDI Fish & Wildlife Service (Mathews Brake)
MSMKR	USDI Fish & Wildlife Service (Morgan Brake)
MSMSR	USDI Fish & Wildlife Service (Mississippi Sandhill Crane)
MSMWR	USDI Fish & Wildlife Service (Mississippi Wetlands Authority)
MSNXR	USDI Fish & Wildlife Service (Noxubee)
MSPNR	USDI Fish & Wildlife Service (Panther Swamp)
MSSCR	USDI Fish & Wildlife Service (St. Catherine Creek)
MSTAR	USDI Fish & Wildlife Service (Tallehatchie)
MSYZR	USDI Fish & Wildlife Service (Yazoo)
NCALR	USDI Fish & Wildlife Service (Alligator River)
NCCDR	USDI Fish & Wildlife Service (Cedar Island)
NCCRR	USDI Fish & Wildlife Service (Currituck)
NCFWC	USDI Fish & Wildlife Service (Alligator River Dispatch)
NCMCR	USDI Fish & Wildlife Service (Mackay Island)
NCMTR	USDI Fish & Wildlife Service (Mattamuskeet)
NCMUR	USDI Fish & Wildlife Service (Pungo)
NCPER	USDI Fish & Wildlife Service (Pee Dee)
NCPLR	USDI Fish & Wildlife Service (Pea Island)
NCPOR	USDI Fish & Wildlife Service (Pocosin Lakes)
NCRRR	USDI Fish & Wildlife Service (Roanoke River)
NCSWR	USDI Fish & Wildlife Service (Swanquarter)
OKDXR	USDI Fish & Wildlife Service (Dexter NFH)
OKLRR	USDI Fish & Wildlife Service (Little River)
OKLSR	USDI Fish & Wildlife Service (Little Sandy)
OKOBR	USDI Fish & Wildlife Service (Oklahoma Bat Caves)
OKSLR	USDI Fish & Wildlife Service (Salt Plains)
OKSQR	USDI Fish & Wildlife Service (Sequoyah)
OKTSR	USDI Fish & Wildlife Service (Tishomingo)
OKWMR	USDI Fish & Wildlife Service (Wichita Mountains)
OKWSR	USDI Fish & Wildlife Service (Washita)
PRCBR	USDI Fish & Wildlife Service (Cabo Rojo)
PRCUR	USDI Fish & Wildlife Service (Culebra)
PRDER	USDI Fish & Wildlife Service (Desecheo)
PRLCR	USDI Fish & Wildlife Service (Laguna Cartagena PR)
SCACR	USDI Fish & Wildlife Service (Ace Basin)
SCCMR	USDI Fish & Wildlife Service (Cape Romain)
SCCRR	USDI Fish & Wildlife Service (Carolina Sandhills)
SCPKR	USDI Fish & Wildlife Service (Pinckney Island)
SCSNR	USDI Fish & Wildlife Service (Santee)
SCWAR	USDI Fish & Wildlife Service (Waccamaw)
TNCHR	USDI Fish & Wildlife Service (Chicksaw)
TNCRR	USDI Fish & Wildlife Service (Cross Creeks)
TNHTR	USDI Fish & Wildlife Service (Hatchie)
TNLHR	USDI Fish & Wildlife Service (Lower Hatchie)
TNLIR	USDI Fish & Wildlife Service (Lake Isom)
TNRLR	USDI Fish & Wildlife Service (Reelfoot)
TNTNR	USDI Fish & Wildlife Service (Tennessee)
TXARR	USDI Fish & Wildlife Service (Arans)

Code	Agency - Wildland
TXATR	USDI Fish & Wildlife Service (Attwater Prarie Chicken)
TXBAR	USDI Fish & Wildlife Service (Balcones Canyon)
TXBBR	USDI Fish & Wildlife Service (Big Boggy)
TXBRR	USDI Fish & Wildlife Service (Brazoria)
TXCLR	USDI Fish & Wildlife Service (Caddo Lake)
TXCOR	USDI Fish & Wildlife Service (Columbia Lakes)
TXHGR	USDI Fish & Wildlife Service (Hagerman)
TXLGR	USDI Fish & Wildlife Service (Laguna Atasco)
TXMAR	USDI Fish & Wildlife Service (Matagorda)
TXMCR	USDI Fish & Wildlife Service (McFaddin)
TXMDR	USDI Fish & Wildlife Service (Moody)
TXRGR	USDI Fish & Wildlife Service (Lower Rio Grande Valley)
TXSNR	USDI Fish & Wildlife Service (San Bernard)
TXSRR	USDI Fish & Wildlife Service (South Texas Refuge Complex)
TXSTR	USDI Fish & Wildlife Service (Santa Ana)
TXTCR	USDI Fish & Wildlife Service (Texas Chenier Plain Complex)
TXTMR	USDI Fish & Wildlife Service (Texas Mid Coast Refuge Complex)
TXTPR	USDI Fish & Wildlife Service (Texas Point)
TXTRR	USDI Fish & Wildlife Service (Trinity River)
TXAHR	USDI Fish & Wildlife Service (Anahuac)
VABBR	USDI Fish & Wildlife Service (Back Bay)
VACHR	USDI Fish & Wildlife Service (Chincoteague)
VAESR	USDI Fish & Wildlife Service (Eastern Shore of Virginia)
VAEVR	USDI Fish & Wildlife Service (Eastern Virginia Rivers Refuges)
VAGDR	USDI Fish & Wildlife Service (Great Dismal Swamp)
VAJRR	USDI Fish & Wildlife Service (James River)
VAMNR	USDI Fish & Wildlife Service (Mason Neck)
VAOQR	USDI Fish & Wildlife Service (Occoquan Bay)
VAPBX	USDI Fish & Wildlife Service (Paint Bank NFH)
VAPQR	USDI Fish & Wildlife Service (Presquile)
VAPRR	USDI Fish & Wildlife Service (Potomac River Refuges)
VARVR	USDI Fish & Wildlife Service (Rappahannock River Valley)
VIBIR	USDI Fish & Wildlife Service (Buck Island)
VIGCR	USDI Fish & Wildlife Service (Green Cay)
VISPR	USDI Fish & Wildlife Service (Sandy Point)
DCNEP	USDI National Park Service (National Capitol Parks - East)
DCNPP	USDI National Park Service (National Capitol Parks - Central)
DCPIP	USDI National Park Service (Piscataway Park)
DCRCP	USDI National Park Service (Rock Creek Park)
DCWHP	USDI National Park Service (White House)
ALLRP	USDI National Park Service (Little River Canyon)
ALHBP	USDI National Park Service (Horseshoe Bend NM)
ALRUP	USDI National Park Service (Russell Cave NM)
ARARP	USDI National Park Service (Arkansas Post NM)
ARBUP	USDI National Park Service (Buffalo National River)
ARFSP	USDI National Park Service (Ft. Smith NHS)
ARHOP	USDI National Park Service (Hot Springs NP)
ARPEP	USDI National Park Service (Pea Ridge NMP)
DCANP	USDI National Park Service (Antietam National Battlefield)
DCAPP	USDI National Park Service (Appalachian NST)
DCCAP	USDI National Park Service (Catoctin Mountain Park)
DCCDP	USDI National Park Service (Clara Barton Park)
DCCOP	USDI National Park Service (Chesapeake & Ohio Canal NHP)
DCFWP	USDI National Park Service (Fort Washington Park)
DCGRP	USDI National Park Service (Greenbelt Park)
DCHFP	USDI National Park Service (Harpers Ferry NHP)
DCMOP	USDI National Park Service (Monocacy NB)
FLBCP	USDI National Park Service (Big Cypress NP)
FLBIP	USDI National Park Service (Biscayne NP)
FLCAP	USDI National Park Service (Canaveral NS)
FLCDP	USDI National Park Service (Castillo De San Marcos NM)
FLDNP	USDI National Park Service (DeSoto NM)
FLDTP	USDI National Park Service (Dry Tortugas NP)
FLEVP	USDI National Park Service (Everglades NP)
FLFCP	USDI National Park Service (Ft. Caroline NM)
FLFJP	USDI National Park Service (Ft. Jefferson NM)
FLFMP	USDI National Park Service (Ft. Matanzas NM)
FLGIP	USDI National Park Service (Gulf Island NS)
FLTIP	USDI National Park Service (Timucuan Ecological & Historic Preserve)
GAANP	USDI National Park Service (Andersonville NHS)
GACHP	USDI National Park Service (Chickamauga & Chattanooga NMP)
GACIP	USDI National Park Service (Cumberland Island NS)
GACRP	USDI National Park Service (Chattahoochee River NRA)
GAFFP	USDI National Park Service (Ft. Frederica NM)

Code	Agency - Wildland
GAFPP	USDI National Park Service (Ft. Pulaski NM)
GAJCP	USDI National Park Service (Jimmy Carter NHS)
GAKEP	USDI National Park Service (Kennesaw Mountain NBP)
GAMLP	USDI National Park Service (Martin Luther King JR. NHS)
GAOCP	USDI National Park Service (Ocmulgee NM)
KYALP	USDI National Park Service (Abraham Lincoln Birthplace NHS)
KYCGP	USDI National Park Service (Cumberland Gap NHP)
KYMCP	USDI National Park Service (Mammoth Cave NP)
LACAP	USDI National Park Service (Cane River Creole NHP)
LAJEP	USDI National Park Service (Jean Lafitte NHP & Preserve)
LANOP	USDI National Park Service (New Orleans Jazz NHP)
LAPOP	USDI National Park Service (Poverty Point NM)
MSBCP	USDI National Park Service (Brices Cross Roads NBS)
MSNAP	USDI National Park Service (Natchez Trace Parkway)
MSNHP	USDI National Park Service (Natchez National Historical Park)
MSNSP	USDI National Park Service (Natchez Trace National Scenic Trail)
MSTBP	USDI National Park Service (Tupelo NB)
MSVIP	USDI National Park Service (Vicksburg NMP)
NCBRP	USDI National Park Service (Blueridge Parkway)
NCCLP	USDI National Park Service (Cape Lookout NS)
NCCSP	USDI National Park Service (Carl Sandburg Home NHS)
NCFRP	USDI National Park Service (Ft. Raleigh NHS)
NCGIP	USDI National Park Service (Guilford Courthouse NMP)
NCMOP	USDI National Park Service (Moores Creek NBP)
NCWRP	USDI National Park Service (Wright Brothers NM)
NCCHP	USDI National Park Service (Cape Hatteras NS)
OKCHP	USDI National Park Service (Chickasaw NRA OK)
OKWBP	USDI National Park Service (Washita Battlefield NHS)
PRSAP	USDI National Park Service (San Juan NHS)
SCCPP	USDI National Park Service (Charles Pinckney NHS)
SCCSP	USDI National Park Service (Congaree Swamp NM)
SCCWP	USDI National Park Service (Cowpens NM)
SCKMP	USDI National Park Service (Kings Mountain NMP)
SCNIP	USDI National Park Service (Ninety Six NHS)
TNASP	USDI National Park Service (Andrew Johnson NHS)
TNBSP	USDI National Park Service (Big South Fork NRA)
TNFDP	USDI National Park Service (Ft. Donelson NMP)
TNGSP	USDI National Park Service (Great Smoky Mountains NP)
TNOWP	USDI National Park Service (Obed Wild & Scenic River)
TNSHP	USDI National Park Service (Shiloh NMP)
TNSTP	USDI National Park Service (Stones River NB)
TXAFP	USDI National Park Service (Alibates Flint Quarries NM)
TXAMP	USDI National Park Service (Amistad NRA)
TXBTP	USDI National Park Service (Big Thicket NP)
TXLYP	USDI National Park Service (Lyndon B. Johnson NHP)
TXPAP	USDI National Park Service (Padre Island NS)
TXPBP	USDI National Park Service (Palo Alto Battlefield NHS)
TXSAP	USDI National Park Service (San Antonio Missions NHP)
VABWP	USDI National Park Service (Booker T. Washington NM)
VACOP	USDI National Park Service (Colonial NHP)
VAFSP	USDI National Park Service (Fredricksburg/ Spotsylvania NMP)
VAGMP	USDI National Park Service (George Washington Memorial Parkway)
VAGWP	USDI National Park Service (George Washington Birthplace NM)
VAMAP	USDI National Park Service (Manassas NBP)
VAPEP	USDI National Park Service (Petersburg NB)
VAPWP	USDI National Park Service (Prince William Forest Park)
VARIP	USDI National Park Service (Richmond NBP)
VASHP	USDI National Park Service (Shenandoah NP)
VAWTP	USDI National Park Service (Wolf Trap Farm Park)
VIBIP	USDI National Park Service (Buck Island Reef NM)
VICHP	USDI National Park Service (Christiansted NHS)
VISRP	USDI National Park Service (Salt River NHP & Ecological Preserve)
VIVIP	USDI National Park Service (Virgin Islands NP)

NFDRS Fuel Model at Origin - Section K

01 A: Annual Grasses.
02 B: Mature brush [6 ft.+]
03 C: Open pine with grass
04 D: Southern rough
05 E: Hardwood litter
06 F: Intermountain west brush
07 G: West Coast conifers; close, heavy down materials
08 H: Short needle conifers; normal down woody materials
09 I: Heavy slash, clear-cut conifers greater than 25 tons per area
10 J: Medium slash, heavily thinned conifers (less than 25 tons per acre)
11 K: Light slash (less than 15 tons per acre)
12 L: Perennial grasses
14 N: Saw grass, marsh needle-like grass
15 O: High pocosin
16 P: Southern long-needle pine
17 Q: Alaska black spruce
18 R: Hardwood litter (summer)
19 S: Tundra
20 T: Sagebrush with grass
21 U: Western long-leaf pine
UU Undetermined

Person Responsible for Fire - Section L1

1 Identified person caused fire
2 Unknown person caused fire
3 Fire not caused by person

Gender - Wildland Module, Section L2

Please Note:
The code set table used for this data element is the same set that is used for ***Gender***, section B in the Civilian Fire Casualty Module. Please refer to page 191 for the codes listed for that data element.

Activity of Person - Section L4

01 Logging/timber harvest
02 Management activities
03 Construction/maintenance
04 Social gathering
05 Hunting
06 Fishing
07 Other recreation
08 Camping
09 Other permitted harvest
10 Picnicking
11 Non-permitted harvest
12 Harvest of Illegal material
13 Religious or ceremonial activity
14 Oil/gas production
15 Military operations
16 Subsistence
17 Mining
18 Livestock grazing
19 Target practice
20 Blasting
21 Fireworks use
00 Human activity, other

Type of Right of Way - Section M

919 Dump, sanitary landfill
921 Bridge, trestle
922 Tunnel
926 Outbuilding, excluding garage
931 Open land, field
935 Campsite with utilities
936 Vacant lot
938 Graded and cared for plots of land
940 Water area
951 Railroad right-of-way
952 Railroad yard
960 Street, other
961 Highway or divided highway
962 Residential street, road or residential driveway
963 Street or road in commercial area
965 Vehicle parking area
972 Aircraft runway
973 Aircraft taxiway
974 Aircraft loading area
981 Construction site
982 Oil, gas field
983 Pipeline, power line or other utility right-a-way
984 Industrial plant yard, area
000 Type of right away, other
UUU Undetermined
NNN None

Relative Position on Slope - Section N

0 Valley Bottom
1 Lower Slope

Relative Position on Slope - Section N (continued)

2 Mid Slope
3 Upper Slope
4 Ridge Top

Aspect - Section N

0 Flat/None
1 Northeast
2 East
3 Southeast
4 South
5 Southwest
6 West
7 Northwest
8 North

Apparatus or Resource Module Data Dictionary

Apparatus or Resources - Section B

1 ***Ground Fire Suppression***
10 Ground fire suppression, other.
11 Engine.
12 Truck or aerial.
13 Quint.
14 Tanker & pumper combination.
16 Brush truck.
17 ARFF (aircraft rescue & firefighting).
2 ***Heavy Ground Equipment***
20 Heavy ground equipment, other.
21 Dozer or plow.
22 Tractor.
24 Tanker or tender.
4 ***Aircraft***
40 Aircraft, other.
41 Aircraft, fixed-wing tanker.
42 Helitanker.
43 Helicopter.
5 ***Marine Equipment***
50 Marine equipment, other.
51 Fire boat with pump.
52 Boat, no pump.
6 ***Support Equipment***
60 Support apparatus, other.
61 Breathing apparatus support.
62 Light and air unit.
7 ***Medical & Rescue Unit***
70 Medical & rescue unit, other.
71 Rescue unit.
72 Urban search & rescue unit.
73 High-angle rescue unit.
75 BLS unit.
76 ALS unit.
9 ***Other***
91 Mobile command post.
92 Chief officer car.
93 HazMat unit.
94 Type I hand crew.
95 Type II hand crew.
99 Privately owned vehicle.
00 Other apparatus/resource.
NN None.
UU Undetermined.

Apparatus Use - Section B

1 Suppression.
2 EMS.
0 Other.

Personnel Module Data Dictionary

Apparatus or Resource Type - Section B

Please Note:
The code set table used for this data element is the same set that is used for ***Apparatus or Resource Type***, section B in the Apparatus/Resources Module. Please refer to page 258 for the codes listed for that data element.

Apparatus Use - Section B

Please Note:
The code set table used for this data element is the same set that is used for ***Apparatus or Resource Type***, section B in the Apparatus/Resources Module. Please refer to page 258 for the codes listed for that data element.

Actions Taken - Section B

Please Note:
The code set table used for this data element is the same set that is used for ***Actions Taken***, section F in the Basic Module. Please refer to page 169 for the codes listed for that data element.

Arson Module Data Dictionary

Case Status - Section C

1 Investigation open.
2 Investigation closed.
3 Investigation inactive.
4 Investigation closed with arrest.
5 Closed with exceptional clearance.

Availability of Material First Ignited - Section D

1 Transported to scene.
2 Available at scene.
U Unknown.

Suspected Motivation Factors - Section E

11 Extortion.
12 Labor unrest.
13 Insurance fraud.
14 Intimidation.
15 Void contract/lease.
16 Foreclosed property.
21 Personal.
22 Hate crime.
23 Institutional.
24 Societal.
31 Protest.
32 Civil unrest.
41 Fireplay/curiosity.
42 Vanity/recognition.
43 Thrills.
44 Attention/sympathy.
45 Sexual excitement.
51 Homicide.
52 Suicide.
53 Domestic violence.
54 Burglary.
61 Homicide concealment.
62 Burglary concealment.
63 Auto theft concealment.
64 Destroy records/evidence.
00 Other suspected motivation.
UU Unknown.

Apparent Group Involvement - Section F

1 Terrorist group.
2 Gang.
3 Anti-government group.
4 Outlaw motorcycle organization.
5 Organized crime.
6 Racial/ethnic hate group.
7 Religious hate group.
8 Sexual preference hate group.
N No group involvement, acted alone.
0 Other group.
U Unknown.

Entry Method - Section G1

11 Door – open or unlocked.
12 Door – forced or broken.
13 Window – open or unlocked.
14 Window – forced or broken.
15 Gate – open or unlocked.
16 Gate – forced or broken.
17 Locks – pried.
18 Locks – cut.
19 Floor entry.
21 Vent.
22 Attic/roof.
23 Key.
24 Help from inside.
25 Wall.
26 Crawl space.
27 Hid in/on premises.
00 Other entry method.
UU Unknown.

Extent of Fire Involvement on Arrival - Section G2

1 No flame or smoke showing.
2 Smoke only showing.
3 Flame and smoke showing.
4 Fire through roof.
5 Fully involved.

Incendiary Devices - Container - Section H

11 Bottle, glass.
12 Bottle, plastic.
13 Jug.
14 Pressurized container.
15 Can (not gasoline or fuel can).
16 Gasoline or fuel can.
17 Box.
00 Other container.
NN No container.
UU Unknown.

Incendiary Devices - Ignition/Delay Device - Section H

11 Wick or fuse.
12 Candle.
13 Cigarette and matchbook.
14 Electronic component.
15 Mechanical device.
16 Remote control.
17 Road flare/fuse.
18 Chemical component.
19 Trailer/streamer.
20 Open flame source.
00 Other delay device.
NN No device.
UU Unknown.

Incendiary Devices - Fuel - Section H

11 Ordinary combustibles.
12 Flammable gas.
14 Ignitable liquid.
15 Ignitable solid.
16 Pyrotechnic material.
17 Explosive material.
00 Other material.
NN None.
UU Unknown.

Other Investigative Information - Section I

1 Code violations.
2 Structure for sale.
3 Structure vacant.
4 Other crimes involved.
5 Illicit drug activity.
6 Change in insurance.
7 Financial problem.
8 Criminal/civil actions pending.

Property Ownership - Section J

1 Private.
2 City, town, village, local.
3 County or parish.
4 State or province.
5 Federal.
6 Foreign.
7 Military.
0 Other.

Initial Observations - Section K

1 Windows ajar.
2 Doors ajar.
3 Doors locked.
4 Doors unlocked.
5 Fire department forced entry.
6 Entry forced prior to FD arrival.
7 Security system was activated.
8 Security system was present but not activated.

Laboratory Used - Section L

1 Local.
2 State.
3 ATF.
4 FBI.
5 Other federal laboratory.
6 Private.
N None.

Gender - Section M3

1 Male
2 Female.

Race - Section M4

1 White.
2 Black or African American.
3 American Indian or Alaska native.
4 Asian.
5 Native Hawaiian or other Pacific Islander.
0 Other, includes multi-racial.
U Undetermined.

Ethnicity - Section M5

1 Hispanic.
0 Other.

Family Type - Section M6

1 Single-parent family.
2 Foster parent(s).
3 Two-parent family.
4 Extended family, including multigenerational.
N No family unit.
0 Other family type.
U Unknown.

Motivation/Risk Factors - Section M7

1 Mild curiosity about fire.
2 Moderate curiosity about fire.

Motivation/Risk Factors - Section M7 (continued)

3 Extreme curiosity about fire.
4 Diagnosed (or suspected) ADD/ADHD.
5 History of trouble outside school.
6 History of stealing or shoplifting.
7 History of physically assaulting others.
8 History of fireplay or firesetting.
9 Transiency.
0 Other.
U Unknown.

Disposition of Person Under 18 - Section M8

1 Handled within department.
2 Released to parent or guardian.
3 Referred to other authority.
4 Referred to treatment/counseling program.
5 Arrested, charged as adult.
6 Referred to firesetter intervention program.
0 Other.
U Unknown.

Conversion Tables for NFIRS 4.1 to 5.0

This section is provided to assist in the transition from NFIRS 4.1 to NFIRS 5.0. Users of data that has been converted are cautioned to review both the old data description and the new data description(s) as there may be some slight variations and some assumptions had to be made.

NFIRS databases from data years 1999 through 2008 contain converted NFIRS incidents using the tables in this section as a basis. On January 1, 2009, NFIRS ceased collection of NFIRS legacy version 4.1 incidents. Data in the 4.1 format collected after the NFIRS 4.1 sunset date are no longer converted and imported into the NFIRS database.

General guidelines

All insufficient information "0" have been changed to the appropriate "other" classification.

Any reference to classifications in another data element are to the NFIRS 4.1 classifications if in the NFIRS 4.1 column and to the NFIRS 5.0 if in the 5.0 column

Abbreviations used in conversion tables are as follows:

MPT = Mobile Property Type.

FPU = Fixed Property Use.

AFO = Area of Origin.

EII = Equipment Involved in Ignition.

TMI = Type of Material Ignited.

SS = Structure Status.

NFIRS 4.1 Carryover Elements

Note that the following elements will be carried in the NFIRS 5.0 system as part of the converted 4.1 records. These elements are not collected in NFIRS 5.0 and are carried in the converted 4.1 records for legacy purposes only:

Method of Alarm from Public.

Method of Extinguishment.

Construction Type.

Extent of Smoke Damage.

Type of Material Generating Most Smoke.

Form of Material Generating Most Smoke.

Avenue of Smoke Travel.

Basic, Fire, and Structure Modules

TABLE 3-40. Type of Situation Found Conversion (Sheet 1 of 2)

NFIRS 4.1 Type of Situation Found	NFIRS 5.0 Incident Type
Titled as "Incident Type" in NFIRS 5.0	
10	100
11 and MPT = blank, 00 or 08	110
11 and MPT not blank, 00 or 08	120
11 and MPT = 17 and FPU = 410-419	121 and Structure Fire Module Block I1 Structure Type = 2
11 and MPT = 17 and FPU not 410-419	123
12 and FPU = 655 or FPU = 660-669	170
12 and Complex = 41 or 42	171
12 and (Complex not 41 or 42) and (FPU not 655 or not 660-669 series)	172
13	130
14	140
15	150
16 and AFO 91 - 95	163
16 and AFO = 80 - 89	130
16 and MPT = 17	120
16 and not one of above conditions	110
17	160
19	100
20	200
21	210
22	220
29	200
30	300
31	321
32	320
33	331
34	340
35	350
39	300
40	400
41	410
42	471
43	251
44	444
45	440
46	462
47	420
49	400
50	500
51	511

TABLE 3-40. Type of Situation Found Conversion (Sheet 2 of 2)

NFIRS 4.1 Type of Situation Found	NFIRS 5.0 Incident Type
Titled as "Incident Type" in NFIRS 5.0	
52	521
53	531
54	542
55	551
56	561
57	571
59	500
60	600
61	651
62	621
63	631
64	641
65	652
69	600
70	700
71	710
72	721
73	730
74	740
79	700
99	900
00	UUU

TABLE 3-41. Type of Action Taken Conversion

NFIRS 4.1	NFIRS 5.0		
Action Taken	Action 1	Action 2	Action 3
1	11		
2	22	31	
3	86		
4	41		
5	92		
6	12		
7	34		
8	91		
9	00		
0	UU		

TABLE 3-42. Mutual Aid Conversion

NFIRS 4.1 Mutual Aid	NFIRS 5.0 Aid Given or Received
1	1
2	3
Blank	N

TABLE 3-43. Fixed Property Use Conversion (Sheet 1 of 3)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0 Property Use
110	110
111	111
112	112
113	113
114	114
115	115
116	116
119	110
120	120
121	121
122	122
123	123
124	124
129	129
130	130
131	131
132	131
133	131
134	134
139	130
140	140
141	141
142	142
143	143
149	140
150	150
151	151
152	152
153	150
154	154
155	155
156	150
159	150
160	160
161	161
162	162

TABLE 3-43. Fixed Property Use Conversion (Sheet 2 of 3)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0 Property Use
163	162
164	161
169	160
170	170
171	171
172	171
173	173
174	174
175	174
176	174
177	170
179	170
180	180
181	181
182	182
183	183
184	183
185	185
186	186
189	180
109	100
100	100
200	200
209	200
210	210
211	211
212	213
213	213
214	215
215	215
219	210
220	210
221	210
229	210
230	241
231	241
232	241
233	241
234	241
239	241
240	241
241	241

TABLE 3-43. Fixed Property Use Conversion (Sheet 3 of 3)

NFIRS 4.1 Fixed Property Use	NFIRS 5.0 Property Use
241	241
249	241
300	300
309	300
310	311
311	311
312	459
319	311
320	250
321	250
322	459
323	419
329	250
330	331
331	331
332	331
334	340
339	331
340	361
341	361
342	361
343	363
344	361
345	365
346	241
349	361
350	331
351	331
352	331
359	331
360	323
361	323
362	321
369	323

TABLE 3-44. Fixed Property Use Residential Conversion (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0	
Fixed Property Use	Property Use	Number of Units
400	400	
409	400	
410	419	
411	419	1
412	419	1
414	419	2
415	419	2
419	419	
420	429	
421	429	1
422	429	4*
423	429	12*
424	429	21*
429	429	
430	439	
431	439	5**
432	439	10**
439	439	
440	449	
441	449	10***
442	449	10***
443	449	50***
444	449	50***
445	449	101***
446	449	101***
449	449	
460	460	
461	464	
462	462	
463	464	
464	464	
465	464	
466	464	
469	460	
480	449	
481	449	10***
482	449	10***

*3-6 units shown as 4 units
7-20 units shown as 12 units
over 20 units shown as 21 units

**3-8 roomers shown as 5 units
9-15 roomers shown as 10 units

*** less than 20 units shown as 10
20 to 99 units shown as 50 units
100 or more units shown as 101 units

TABLE 3-44. Fixed Property Use Residential Conversion (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0	
Fixed Property Use	Property Use	Number of Units
483	449	50***
484	449	50***
485	449	101***
486	449	101***
489	449	
490	400	
491	400	
492	400	Structure Type = 5
499	400	

*3-6 units shown as 4 units
7-20 units shown as 12 units
over 20 units shown as 21 units

**3-8 roomers shown as 5 units
9-15 roomers shown as 10 units

*** less than 20 units shown as 10
20 to 99 units shown as 50 units
100 or more units shown as 101 units

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 1 of 10)

NFIRS 4.1	NFIRS 5.0				
Fixed Property Use	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
500	500	N/A			—
509	500	N/A			—
510	519	110	120		Sales
511	519	110	112	114	Sales
512	519	110	112	114	Sales
513	519	111			Sales
514	519	121	122		Sales
515	519	113			Sales
516	519	116			Sales
519	519	110	120		Sales
520	529	210	220		Sales
521	529	221			Sales
522	529	222	230		Sales
523	529	222			Service/repair
524	529	221			Manufacturing
525	529	332			Sales
526	529	214			Sales
529	529	210	220		Sales
530	539	240			Sales
531	539	241			Sales
532	539	711			Sales
533	539	610	620		Sales
534	539	941			Sales

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 2 of 10)

NFIRS 4.1	NFIRS 5.0				
Fixed Property Use	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
535	539	634	635		Sales
536	539	631	632	633	Sales
537	539	241			Service/repair
538	539	711			Service/repair
539	539	240			Sales
540	549	N/A			—
541	549	411	412	413	Sales
542	549	411	134		Sales
543	549	544			Sales
544	549	231			Sales
545	549	245	246		Sales
546	549	331			Sales
547	549	131			Sales
548	549	223			Sales
549	549	N/A			—
550	559	N/A			—
551	559	942			Sales
552	559	944			Sales
553	559	714			Sales
554	559	131	137	138	Sales
555	559	311			Sales
556	559	136	724		Sales
557	557	N/A			—
558	559	934			Sales
559	559	N/A			—
560	569	N/A			—
561	569	720			Sales
562	569	613			Sales
563	569	943			Sales
564	564	543	221		Sales
565	569	212			Sales
566	564	221			Sales
567	569	543			Sales
568	569	952	110		Sales
569	569	N/A			—
570	579	810	820		Sales
571	571	511	514		Sales
572	571	511	514		Sales
573	579	635	813		Service/repair
574	579	811			Sales
575	579	813	814		Sales
576	579	821			Sales

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 3 of 10)

NFIRS 4.1	NFIRS 5.0				
Fixed Property Use	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
577	571	511	514		Sales
578	579	543			Sales
579	579	810	820		Sales
580	580	950			Sales
581	581	950			Sales
582	580	950			Sales
583	581	950			Sales
584	580	950			Sales
585	580	950			Sales
589	580	950			Sales
590	599	N/A			—
591	599	N/A			—
592	592	N/A			—
593	593	N/A			—
594	593	N/A			—
595	596	N/A			—
596	596	N/A			—
599	599	N/A			—
600	600	N/A			—
609	600	N/A			—
610	600	N/A			—
611	700	551			Manufacturing
612	700	551	932		Manufacturing
613	615	N/A			—
614	614	N/A			—
615	615	N/A			—
616	700	520			Manufacturing
619	610	N/A			—
620	629	N/A			—
621	629	720	540		Service/repair
622	629				
623	629				
624	629	550			Service/repair
625	629	712			Service/repair
626	629	130			
627	629	N/A			—
629	629	N/A			—
If complex 63 and FPU 630	631	N/A			—
If complex not 63 and FPU 630	600	N/A			—
631	631	N/A			—

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 4 of 10)

NFIRS 4.1	NFIRS 5.0				
Fixed Property Use	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
If complex 63 and FPU 632	631	N/A			—
If complex not 63 and FPU 632	639	N/A			—
633	639	N/A			—
634	639	N/A			—
635	635	N/A			—
636	891	410	713		Storage
639	600	N/A			—
640	640	N/A			—
642	642	N/A			—
644	644	N/A			—
645	645	N/A			—
646	640	N/A			—
647	647	N/A			—
648	648	N/A			—
649	640	N/A			—
650	659	N/A			—
651	659	112			Manufacturing
652	659	135			Manufacturing
653	659	135			Manufacturing
654	659	135			Manufacturing
655	655	130			Manufacturing
656	655	134			Manufacturing
657	655	114			Manufacturing
659	659	N/A			—
660	669	N/A			—
661	669	N/A			—
662	669	N/A			—
663	669	N/A			—
664	669	N/A			—
665	659	112			Manufacturing
666	807	315			Manufacturing
669	669	N/A			—
670	679	N/A			—
671	679	532			Manufacturing
672	679	341			Manufacturing
673	679	341			Manufacturing
674	679	510	520		Manufacturing
675	679	624			Manufacturing
676	679	345			Manufacturing
677	679	138	542		Manufacturing
678	679	300			Manufacturing

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 5 of 10)

NFIRS 4.1	NFIRS 5.0				
Fixed Property Use	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
679	679	N/A			—
680	700	300			Manufacturing
681	700	622	624		Manufacturing
682	700	245			Manufacturing
683	700	245			Manufacturing
684	700	245			Manufacturing
685	700	622			Manufacturing
686	700	622			Manufacturing
687	700	628			Manufacturing
688	700	300			Manufacturing
689	700	300			Manufacturing
700	700	N/A			—
708	700	610			Service/repair
709	700	N/A			—
710	700	100			Manufacturing
711	700	112			Manufacturing
712	700	113			Manufacturing
713	700	114			Manufacturing
714	700	112			Manufacturing
715	700	117	132		Manufacturing
716	700	111			Manufacturing
717	700	115			Manufacturing
718	700	110			Manufacturing
719	700	100			Manufacturing
720	700	120			Manufacturing
721	700	121			Manufacturing
722	700	121			Manufacturing
723	700	121			Manufacturing
724	700	122			Manufacturing
725	700	134			Manufacturing
726	700	345			Manufacturing
729	700				Manufacturing
730	700	320			Manufacturing
731	700	321			Manufacturing
732	700	321			Manufacturing
733	700	322			Manufacturing
734	700	320			Manufacturing
735	700	214			Manufacturing
736	700	214			Manufacturing
737	700	420			Manufacturing
738	700	632			Manufacturing
739	700	320			Manufacturing

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 6 of 10)

NFIRS 4.1	NFIRS 5.0				
Fixed Property Use	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
740	700	200			Manufacturing
741	700	222			Manufacturing
742	700	221			Manufacturing
743	700	210			Manufacturing
744	700	331			Manufacturing
745	700	332			Manufacturing
746	700	331			Manufacturing
747	700	342			Manufacturing
749	700	200			Manufacturing
750	700	240	310	410	Manufacturing
751	700	311			Manufacturing
752	700	311			Manufacturing
753	700	311	313		Manufacturing
754	700	241	242		Manufacturing
755	700	314	410		Manufacturing
756	700	314	410		Manufacturing
757	700	411			Manufacturing
758	700	412	413		Manufacturing
759	700	240	310	410	Manufacturing
760	700	500			Manufacturing
761	700	540			Manufacturing
762	700	541			Manufacturing
763	700	343			Manufacturing
764	700	343			Manufacturing
765	700	635	517		Manufacturing
766	700	544	225		Manufacturing
767	700	510	521		Manufacturing
768	700	516	532		Manufacturing
769	700	500			Manufacturing
770	700	640			Manufacturing
771	700	641			Manufacturing
772	700	642			Manufacturing
773	700	640			Manufacturing
774	700	611	612		Manufacturing
775	700	626			Manufacturing
776	700	711	712		Manufacturing
779	700	640			Manufacturing
780	700	800			Manufacturing
781	700	821			Manufacturing
782	700	821			Manufacturing
783	700	840			Manufacturing
784	700	811	812	813	Manufacturing

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 7 of 10)

NFIRS 4.1	NFIRS 5.0				
Fixed Property Use	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
785	700	851			Manufacturing
786	700	830			Manufacturing
787	700	850	811		Manufacturing
789	700	800			Manufacturing
790	700	N/A			Manufacturing
791	700	721	722	725	Manufacturing
792	700	723	714		Manufacturing
793	700	243			Manufacturing
794	700	231			Manufacturing
795	700	941			Manufacturing
796	700	220	543		Service/repair
797	700	714			Service/repair
798	700	942	944		Manufacturing
799	700	N/A			—
800	800	N/A			—
808	808	N/A			—
809	800	N/A			—
810	819	130			Storage
811	816	132			Storage
812	891	130			Storage
813	891	130			Storage
814	891	134			Storage
815	819	135			Storage
816	816	132			Storage
817	819	135			Storage
818	891	132	137	138	Storage
819	819	130			Storage
820	891	210	220		Storage
821	891	321			Storage
822	891	322			Storage
823	891	323			Storage
824	891	320			Storage
825	891	214			Storage
826	891	221			Storage
827	891	222	331		Storage
828	891	330			Storage
829	891	210	220		Storage
830	891	100			Storage
831	891	110			Storage
832	891	122	110		Storage
833	891	115	117		Storage
834	839	112	113		Storage

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 8 of 10)

NFIRS 4.1	NFIRS 5.0				
Fixed Property Use	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
835	839	112	113	114	Storage
836	891	115			Storage
837	891	117			Storage
838	891	134			Storage
839	891	100			Storage
840	800	510	520		Storage
841	849	510			Storage
842	849	520			Storage
843	849	522			Storage
844	849	935			Storage
845	891	514	515		Storage
846	891	121			Storage
849	800	510	520		Storage
850	891	310	410		Storage
851	891	622	311		Storage
852	891	241			Storage
853	891	314	420		Storage
854	891	414			Storage
855	891	415	416		Storage
856	807	311	312		Storage
859	891	310	410		Storage
860	891	343	540		Storage
861	891	542			Storage
862	891	541			Storage
863	891	343			Storage
864	891	138			Storage
865	891	635			Storage
866	891	544	225		Storage
867	891	342			Storage
886	891	714			Storage
869	891	343	540		Storage
870	891	640			Storage
871	891	640			Storage
872	891	640			Storage
873	891	621			Storage
874	891	611	612		Storage
875	891	711			Storage
876	891	640			Storage
877	807	961	962		Storage
879	891	640			Storage
880	880	810			Storage
881	881	811			Storage

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 9 of 10)

NFIRS 4.1	NFIRS 5.0				
Fixed Property Use	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
882	882	811			Storage
883	965	811			Storage
884	965	812			Storage
885	898	821			Storage
886	880	831	832		Storage
887	880	841			Storage
888	888	811			Storage
889	880	810			Storage
890	891	N/A			—
891	891	N/A			—
892	891	622			Storage
893	891	245			Storage
894	891	N/A			—
895	891	531	532	534	Storage
896	891	N/A			—
897	839	N/A			—
898	898	N/A			—
899	891	N/A			—
900	900				
909	900				
910	UUU				
911	UUU and ss = 1				
912	UUU and ss = 7				
913	UUU and ss = 1				
914	UUU and ss = 7				
915	UUU and ss = 6				
916	808				
917	UUU and ss = 3				
918	UUU and ss = 4				
919	UUU				
920	900				
921	921				
922	922				
924	926				
925	926				
926	926				
927	926				
928	170 and MPT = 76				
929	900				
930	900				
931	931				
932	919				

Note: ss= Structure Status

TABLE 3-45. Fixed Property Use Conversion On-Site Materials (Sheet 10 of 10)

NFIRS 4.1	NFIRS 5.0				
Fixed Property Use	Property Use	On-Site Material 1	On-Site Material 2	On-Site Material 3	Product Status
933	900				Incident type = 164
934	938				
935	935				
936	936				
939	900				
940	940				
941	941				
942	941				
943	940				
944	940				
945	940				
946	946				
949	940				
950	952				
951	951				
952	952				
953	951				
954	951				
959	952				
960	960				
961	961				
962	962				
963	962				
964	962				
965	965				
969	960				
970	900				
971	900				
972	972				
973	973				
974	974				
979	900				
980	900				
981	981				
982	982				
983	983				
989	900				
008	UUU				
009	UUU				
000	UUU				

TABLE 3-46. Ignition Factor Conversion (Sheet 1 of 2)

NFIRS 4.1 Ignition Factor	NFIRS 5.0		
	Cause	Factors Contributing to Ignition	Human Factors Contributing to Ignition
11	1		
12	1		
21	1		
22	1		
30	2		
31	2	11	
32	2	12	
33	2		1
34	2	73	
35	2	13	
36	2	19	7 (Age=9)
37	2		2
39	2		
40	2	10	
41	2	14	
42	2	15	
43	2	16	
44	2	17	
45	2	18	
46	2	12	
47	2	18	
48	2	19	7 (Age=9)
49	2	10	
50	3	20	
51	3	23	
52	3	21	
53	3	22	
54	3	34	
55	3	30	
56	3	25	
57	3	26	
59	3	20	
60	3	40	
61	3	41	
62	3	42	
63	3	43	
64	3	43	
65	3	71	
69	3	40	
70	2	50	
71	2	51	

TABLE 3-46. Ignition Factor Conversion (Sheet 2 of 2)

NFIRS 4.1 Ignition Factor	NFIRS 5.0		
	Cause	Factors Contributing to Ignition	Human Factors Contributing to Ignition
72	2	52	
73	2	53	
74	2	54	
75	2	60	
76	2	56	
79	2	50	
80	4	60	
81	4	61	
82	4	64	
83	4	63	
84	4	62	
89	4	60	
91	4	66	
92	2	72	
99	0	00	
00	U	UU	

TABLE 3-47. Complex Conversion (Sheet 1 of 2)

COMPLEX	
NFIRS 4.1	NFIRS 5.0
11	10
12	10
14	10
20	10
33	33
34	No Conversion
40	58
41	40
42	40
44	40
47	40
58	51 or 53
59	59
61	No Conversion
63	63
65	65
66	No Conversion
70	60
80	No Conversion
91	No Conversion
93	No Conversion

TABLE 3-47. Complex Conversion (Sheet 2 of 2)

COMPLEX	
NFIRS 4.1	NFIRS 5.0
94	No Conversion
95	No Conversion
96	No Conversion
97	No Conversion
98	No Conversion

TABLE 3-48. Mobile Property Type Conversion

MOBILE PROPERTY TYPE	
NFIRS 4.1	NFIRS 5.0
All Classifications convert directly except as noted below	
00	UU
08	blank
13	18
19	10
29	20
39	30
49	49 but may include some boats that are not sailboats
58	57
59	50
62	61
67	74
68	75
69	60
70	00
79	00
99	00

Note: This same table can be used for converting Hazardous materials transportation type. 73, 74, and 75 are valid classifications in the hazmat table and will directly convert to the same number.

TABLE 3-49. Area of Origin Conversion

AREA OF ORIGIN	
NFIRS 4.1	NFIRS 5.0
All Classifications convert directly except as noted below	
19	10
39	30
49	40
59	50
69	60
79	70
89	80
98	blank
99	00
00	UU

TABLE 3-50. Equipment Involved in Ignition Conversion (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0		
Equipment Involved in Ignition	Equipment Involved in Ignition	Portable/Stationary	Power Source
00	UUU		
10	100		
11	132	S	
12	151	S	
13	131	S	
14	120	S	
15	141	P	
16	120	S	
17	125	S	
18	152	S	
19	100		
20	600		
21	646	S	
22	645	S	
23	647	S	
24	642	S	
25	632	P	
26	643	P	
27	654	S	
29	600		
30	100		
31	111	S	
32	117	S	
33	656	S	
34	111	S	
35	100	P	
39	100		
40	200		
41	210	S	
42	221	S	
43	213	S	
44	215	S	
45	210	S	
46	230	S	
47	260	P	
48	230	P	
49	200		
50	UUU		
51	700	P	
52	811	S	
53	814	S	
54	830	P	

TABLE 3-50. Equipment Involved in Ignition Conversion (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0		
Equipment Involved in Ignition	Equipment Involved in Ignition	Portable/Stationary	Power Source
55	374	S	
56	300	P	
57	850	P	
58	if area of origin = 24 then 600 else 800	P	
59	UUU		
60	UUU		
61	UUU		
62	443	S	
63	720	P	
64	410	S	
65	340	S	
66	375	S	
67	361	S	
68	376	S	
69	UUU		
70	300		
71	353	S	
72	355	S	
73	351	S	
74	300	S	
75	325	S	
76	320	S	
77	300	S	
78	358	S	
79	300		
80	UUU		
81	352	S	
82	365	S	
83	228	P	
84	354	S	
85	230	P	
86	433	S	
87	333	P	
89	UUU		
90	000		
96	Blank		T for the box "mobile property involved and did not burn itself"
98	NNN		
99	000		
00	UUU		

TABLE 3-51. Form of Heat of Ignition Conversion (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0		
Form of Heat	**Heat Source**	**Power Source**	**Factor Contributing to Ignition**
Titled as "Heat Source" in NFIRS 5.0			
10	10	UU	
11	11	20	
12	12	20	
13	11	30	
14	12	30	
15	11	40	
16	12	40	
17	11	UU	
18	12	UU	
19	10	UU	
20	10	10	UU
21	13	10	31
22	13	10	32
23	13	10	33
24	13	10	34
25	13	10	35
26	13	10	36
27	12	10	54
28	12	10	37
29	10	10	UU
30	63		
31	61		
32	62		
33	62		
39	63		
40	60		
41	11 EII s/b 332		
42	11 EII s/b 331		
43	11 EII s/b 333		
44	66		
45	64		
46	65		
47	80		
48	68		
49	60		
50	40		
51	41		
52	42		
53	43		
54	12	10	
55	40		72

TABLE 4-2. Hardware and Software Platform Guidelines - System Type: Small LAN

Hardware	Workstations on the LAN should be a 486 based PCs and above is the recommended platform. 32MB of RAM is recommended as a minimum for Windows 95 and 64MB for Windows NT. Servers should be Pentium class machines with a minimum of 64MB of RAM. If possible SCSI hard drives should be used in the server. These recommendations are based on the current technology and industry standards.
Operating Systems/ Network OS	• Windows 95 • Windows NT • OS/2 • Mac
Development Tools	For small LANs with no remote access requirements PC development tools that produce Windows based applications that utilize PC-based file systems. Examples of such tools include but are not limited to: • FoxPro • Visual FoxPro • Paradox • dBase • Visual dBase • Clipper • Visual BASIC For larger single sites, LANs including those that require some remote access PC tools to develop Windows-based applications that can utilize RDBMS engines may be more appropriate. This will depend on the individual needs of the purchaser with regard to volume of data, number of remote users, and required response times. Examples of such tools include, but are not limited to: • Visual FoxPro • Visual dBASE • Visual BASIC • Power Builder • SQL Windows
File System	For small LANs with no remote access requirements PC file systems that support relational or hierarchical data base structures. Examples of these file systems include, but are not limited to: • xBase files • Access files • Btrieve files For larger single site LANs, LANs that require some remote access, or sites that will be capturing and processing very large amounts of data, a RDBMS is a better choice. Examples of these file systems include but are not limited to: • SyBase • SQL Server • DB2/2
Record Volume/Number of Users	Small LAN installations that are running applications that rely on xBase file structures must be aware that data bases with large amounts of data can greatly affect application performance. This degradation of performance can be particularly noticeable on remote access work stations. This is due to the inherent nature of the way these types of files are processed by the applications that use them. In order to perform certain tasks, the entire database must sometimes be transported over the LAN wire or, in a worst case scenario, over a slow telephone line. Depending on what level of performance you require, this type of installation can be expected to handle from several thousand to 10 or 20 thousand records. A small LAN running an application that is using RDBMS can handle very large amounts of data and still maintain an acceptable level of performance. However, for applications that will only be dealing with small amounts of data, this data access method will be slower than a simple flat file data base.
DBA **System Administration** **Hardware Maintenance**	Required for RDBMS Required Required

TABLE 3-52. Type of Material Ignited Conversion (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0
All classifications convert directly except as noted below	
43	41
44	41
45	41
46	41
49	41
59	50
61	Type Material First Ignited = blank and On-Site Materials Field #1 = 312
62	Type Material First Ignited = blank and On-Site Materials Field #1 = 310
64	61
65	64 but includes hardboard which is classified in 65
66	65
69	60
71	71
72	71
73	71
79	70
83	67
84	71
85	71 + Item First Ignited = 97*
89	80
97	99
98	Blank
99	00
00	UU

* Need to be cautious that we do not overwrite this with a conversion from Form of Material that is inconsistent

TABLE 3-53. Form of Material Ignited Conversion (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0
All classifications convert directly except as noted below	
Titled as "Item First Ignited" in NFIRS 5.0	
19	10
29	20
39	30
43	91
44	92
49	40
52	51
58	26
59	50
60	00
61	81

TABLE 3-53. Form of Material Ignited Conversion (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0
All classifications convert directly except as noted below	
Titled as "Item First Ignited" in NFIRS 5.0	
62	82
63	83
64	84
65 if TMI in 20 series	63
65 and not TMI in 20 series	UU
69	00
72	86
73	87
74	72
75	96
77	43
81	94
82	88
83	61
84	44
85	58
86	64
87	59
88	93
97	99
98	Blank
99	00
00	UU

TABLE 3-54. Detector Performance Conversion

NFIRS 4.1	NFIRS 5.0					
Detector Performance	L_1 Block	L_2 Block	L_3 Block	L_4 Block	L_5 Block	L_6 Block
1	Y			2	U	
2	Y			2	U	
3	Y			3		U
4	N					
5	Y			1		
8	N					
9	Y	U	U	U	U	U
0	N					

L_1 Presence of Detectors
L_2 Detector Type
L_3 Detector Power Supply
L_4 Detector Operation
L_5 Detector Effectiveness
L_6 Detector Failure Reason

TABLE 3-55. Extinguishing Systems Conversion

NFIRS 4.1	NFIRS 5.0				
Sprinkler Performance	M_1 Block	M_2 Block	M_3 Block	M_4 Block	M_5 Block
1	Y	U	U		
2	Y	U	4		U
3	Y	U	3	0	
8	N				
9	Y	U	U		
0	N				

M_1 Presence of Automatic Extinguishing System
M_2 Type of Automatic Extinguishing System
M_3 Operation of Automatic Extinguishing System
M_4 Number of Sprinkler Heads opened
M_5 Reason system not effective

TABLE 3-56. Number of Stories Conversion

NFIRS 4.1	NFIRS 5.0
Titled as "Building Height" in NFIRS 5.0	
1	1
2	2
3	3*
4	5*
5	10*
6	18*
7	35*
8	50*
0	-

* Average for conversion

TABLE 3-57. Extent of Fire Damage Conversion

NFIRS 4.1	NFIRS 5.0
Titled as "Fire Spread" in NFIRS 5.0	
1	1
2	2
3	2
4	3
5	3
6	4
7	5
0	-

Civilian Casualty Module

TABLE 3-58. Affiliation Conversion

NFIRS 4.1	NFIRS 5.0
2	U
3	1

TABLE 3-59. Severity Conversion

NFIRS 4.1	NFIRS 5.0
1	2 group into moderate category
2	5

Sex

Converts directly from NFIRS 4.1 to NFIRS 5.0.

Familiarity with Structure

Does not convert - Not used in NFIRS 5.0.

TABLE 3-60. Location at Ignition Conversion

NFIRS 4.1	NFIRS 5.0				
	M1	M2	M3	M4	M5
1	4	1	*	*	Same as area of origin
2	1	1	*	-	-
3	3	2	*	-	-
4	3	2	-	-	-
5	3	3	-	-	-
6	3	3	-	-	-
8	-	-	-	-	-
9	0	-	-	-	-
0	U	-	-	-	-

*** The Level of Fire Origin conversion table is used to determine the Story at Start and Story Where Injury Occurred. When the 4.1 Location at Ignition is 1 the Level of Fire Origin conversion table is used to determine the Story at Start and Story Where Injury Occurred. When the Location At Ignition is 2 or 3, the Level of Fire Origin table is used to determine only the Story at Start.**
M1 Location at Time of Incident
M2 General Location at Time of Injury
M3 Story at Start of Incident
M4 Story Where Injury Occurred
M5 Specific Location at Time of Injury

TABLE 3-61. Level of Fire Origin Conversion

NFIRS 4.1 Level of Fire Origin	NFIRS 5.0 Story
1	001
2	002
3	003
4	004
5	006
6	008
7	N/A
8	001 and below grade box checked
9	-
0	-

TABLE 3-62. Condition Before Injury Conversion

NFIRS 4.1 Condition Before Injury	NFIRS 5.0 Human Factors
Data converts to "Human Factors" in NFIRS 5.0	
1	Asleep = True
2	Physical Disability = True
3	Impaired by alcohol = True
	Impaired by chemical = True
4	Physically restrained = True
5	Unattended = True
6	Unattended = True
7	Mentally disabled = True
8	N/A
9	N/A
0	N/A

TABLE 3-63. Condition Preventing Escape Conversion

NFIRS 4.1 Condition Preventing Escape	NFIRS 5.0 Contributing Factors
Data converts to "Contributing Factors" in NFIRS 5.0	
1	20
2	21
3	13
4	15
5	35
6	30
7	does not convert
8	NN
9	00
0	UU

TABLE 3-64. Activity at Time of Injury Conversion

NFIRS 4.1	NFIRS 5.0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	0
0	U

TABLE 3-65. Cause of Injury Conversion

NFIRS 4.1	NFIRS 5.0
1	5
2	1
3	2
4	4
5	8
6	7
7	7
8	N
9	0
0	U

TABLE 3-66. Nature of Injury Conversion

NFIRS 4.1 Nature of Injury	NFIRS 5.0 Primary Apparent Symptom
Data converts to "Primary Apparent Symptom" in NFIRS 5.0	
1	11
2	12
3	01
4	21
5	32
6	UU
7	96
8	33
9	00
0	UU

TABLE 3-67. Part of Body Conversion

NFIRS 4.1	NFIRS 5.0
1	1
2	3
3	6
4	7
5	6
6	7
7	8
8	9
9	0
0	U

TABLE 3-68. Disposition Conversion

NFIRS 4.1	NFIRS 5.0
1	
2	
3	check box = true
4	check box = true
5	
6	
9	
0	

FireFighter Casualty Module

Type of Casualty

Does not convert - Not used in NFIRS 5.0.

TABLE 3-69. Gender Conversion

NFIRS 4.1	NFIRS 5.0
Converts directly from NFIRS 4.1 to NFIRS 5.0	
1	1
2	2
Blank	Blank

TABLE 3-70. Case Severity Conversion

NFIRS 4.1 Severity	NFIRS 5.0 Severity
1	1, 2, 3
2	4
3	5
4	6
5	7
6	7
8	Blank
0	U
Blank	Blank

TABLE 3-71. Primary Apparent Symptom Conversion (Sheet 1 of 3)

NFIRS 4.1 Primary Apparent Symptom	NFIRS 5.0 Primary Apparent Symptom
01	25
02	36
03	IT 10-19 = 01 IT 40-49 = 02 else 03
04	63
05	14
06	15
07	12

TABLE 3-71. Primary Apparent Symptom Conversion (Sheet 2 of 3)

NFIRS 4.1 Primary Apparent Symptom	NFIRS 5.0 Primary Apparent Symptom
08	13
09	00
10	42
11	41
12	51
13	24
14	71
15	71
16	35
17	85
18	97
19	96
20	03
21	31
22	81
23	82
24	64
25	92
26	52
27	65
28	32
29	32
30	57
31	73
32	91
33	93
34	72
35	21
36	95
37	53
38	00
39	61
40	98
41	56
42	55
43	03
44	22
45	67
46	23
47	44
48	91
49	66

TABLE 3-71. Primary Apparent Symptom Conversion (Sheet 3 of 3)

NFIRS 4.1 Primary Apparent Symptom	NFIRS 5.0 Primary Apparent Symptom
50	50
51	33
52	43
53	34
54	97
55	54
59	00
98	NN
99	00
00	UU

TABLE 3-72. Primary Part of Body Conversion (Sheet 1 of 2)

NFIRS 4.1 Primary Part of Body	NFIRS 5.0 Primary Part of Body
This data element is being called "Primary Area of Body Injured" in NFIRS 5.0	
10	10
11	11
12	12
13	10
14	14
15	14
16	13
17	13
18	14
19	10
20	30
21	21
22	23
23	31
24	31
25	32
26	41
27	43
28	42
29	30
30	60
31	61
32	62
33	63
34	64
35	65
36	65

TABLE 3-72. Primary Part of Body Conversion (Sheet 2 of 2)

NFIRS 4.1 Primary Part of Body	NFIRS 5.0 Primary Part of Body
This data element is being called "Primary Area of Body Injured" in NFIRS 5.0	
37	65
39	60
40	70
41	71
42	72
43	73
44	74
45	75
46	75
49	70
50	80
51	22
52	81
53	81
54	82
55	83
56	84
57	85
58	80
59	80
61	51
62	42
63	43
71	91
72	91
73	91
74	92
75	93
76	91
77	92
78	93
98	NN
99	00
00	UU

TABLE 3-73. Patient Taken To

NFIRS 4.1	NFIRS 5.0
This data element is called "Taken To" in NFIRS 5.0	
1	1
2	4
3	0
4	5
5	5
6	6
7	N
9	0
0	U

TABLE 3-74. Assignment Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Usual Assignment" in NFIRS 5.0	
1	1
2	2
3	3
4	4
5	5
6	6
7	7
9	0
0	U

TABLE 3-75. Number of Responses Conversion

NFIRS 4.1	NFIRS 5.0
This data element is being converted from a classified field to a numeric entry.	
1	1
2	2
3	3
4	4
5	5
6	7*
7	10*
8	13*
9	0
0	Blank

* Average for conversion only

TABLE 3-76. Physical Condition at Time of Injury Conversion

NFIRS 4.1	NFIRS 5.0
1	1
2	2
3	0
4	4
9	0
0	U

Status of Injured Prior to Alarm

Does not convert.

TABLE 3-77. Firefighter Activity Conversion (Sheet 1 of 3)

NFIRS 4.1 Fire Fighter Activity	NFIRS 5.0 Activity at Time of Injury
This data element is called "Activity at Time of Injury" in NFIRS 5.0	
10	10
11	11
12	14 + Contributing Factor = 65
13	14
14	14
15	14
16	14
17	15
18	15
19	10
20	20
21	12
22	13
23	12
24	12
25	21
26	22
27	20
29	20
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
39	30
40	40

TABLE 3-77. Firefighter Activity Conversion (Sheet 2 of 3)

NFIRS 4.1 Fire Fighter Activity	NFIRS 5.0 Activity at Time of Injury
This data element is called "Activity at Time of Injury" in NFIRS 5.0	
41	41
42	42
43	43
44	44
45	45
49	40
50	50
51	51
52	52
53	53
54	54
55	55
56	56
59	50
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	60
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
79	70
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88

TABLE 3-77. Firefighter Activity Conversion (Sheet 3 of 3)

NFIRS 4.1 Fire Fighter Activity	NFIRS 5.0 Activity at Time of Injury
This data element is called "Activity at Time of Injury" in NFIRS 5.0	
89	80
91	91
92	92
93	93
94	94
95	95
99	00
00	UU

TABLE 3-78. Where Injury/Accident Occurred (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0			
Where Injury Occurred	J_1 = Where Injury Occurred	J_2 = Stories from Grade	J_3 = Specific Location	J_4 = Vehicle Type
10	0			
11	3			
12	8			
13	3			
14	8			
15	1			
16	8			
19	0			
20	6		22	
21	6		22	
22	6	2	00	
23	6		23	
24	6		24	
25	6		25	
26	6		26	
27	6		27	
28	6		28	
29	6		22	
30	6	-3**	UU	
31	6	-3**	31	
32	6	-3**	32	
33	6	-3**	33	
34	6	-3**	34	
35	6	-3**	35	
36	6	-3**	36	
39	6	-3**	00	

* Stories 2-4 converted to 3
Stories 5-7 converted to 6
Stories or above converted to 8

** -3 is used to indicate below grade for conversion only

TABLE 3-78. Where Injury/Accident Occurred (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0			
Where Injury Occurred	J_1 = Where Injury Occurred	J_2 = Stories from Grade	J_3 = Specific Location	J_4 = Vehicle Type
40	5		49	
41	5	1	49	
42	5	3*	49	
43	5	6*	49	
44	5	8*	49	
45	5		45	
49	5		49	
50	5	-3**	49	
51	5	-1	49	
52	5	-2	49	
53	5	-3**	53	
54	5	-3**	54	
59	5	-3**	49	
60	6		61	U
61	6		61	U
62	6		61	U
63	6		63	U
64	6		64	U
65	6		65	U
69	6		61	U
70	2		UU	
71	2		UU	
72	2		UU	
73	2		UU	
74	2		UU	
75	2		UU	
76	2		UU	
77	2		UU	
79	2		UU	
80	U		UU	
81	5		49	
82	5		49	
83	6		27	
84	6		22	
89	U		UU	
99	0		UU	
00	U		UU	

* Stories 2-4 converted to 3
Stories 5-7 converted to 6
Stories or above converted to 8

** -3 is used to indicate below grade for conversion only

TABLE 3-79. Cause of Firefighter Injury Conversion (Sheet 1 of 4)

NFIRS 4.1 Cause of Fire Fighter Injury	NFIRS 5.0		
	I_1 = Cause of Fire Fighter Injury	I_2 = Factors Contributing to Injury	I_3 = Object Involved in Injury
100	1	-	-
101	1	41	-
102	1	43	-
103	1	42	-
104	1	43	-
105	1	42	-
106	3	-	-
107	3	52	-
108	3	51	-
109	3	50	-
110	1	-	35
111	1	-	22
112	1	-	30
113	1	65	26
114	1	65	26
115	3	-	26
116	1	-	28
117	1	-	31
199	1	-	
200	U	30	-
201	U	11	30
202	U	12	30
203	U	13	30
204	U	14	30
205	U	21	30
206	U	22	30
207	U	23	30
208	U	24	30
209	U	16	30
210	U	30	-
211	U	32	-
212	U	30	26
213	U	17	42
214	U	34	-
299	U	30	-
300	5	-	-
301	5	11	-
302	5	12	-
303	5	14	-
304	5	12	-
305	5	16	39

TABLE 3-79. Cause of Firefighter Injury Conversion (Sheet 2 of 4)

NFIRS 4.1 Cause of Fire Fighter Injury	NFIRS 5.0		
	I_1 = Cause of Fire Fighter Injury	I_2 = Factors Contributing to Injury	I_3 = Object Involved in Injury
306	5	16	39
307	5	16	42
308	5	16	43
309	5	16	43
310	5	16	43
311	5	-	15
312	5	-	14
313	5	-	18
314	5	16	22
315	5	-	23
316	5	-	13
317	5	-	11
318	5	60	26
319	5	60	94
320	5	16	-
321	5	-	-
322	5	-	27
323	5	-	32
324	5	-	23
325	5	-	90
399	5	-	-
400	6	-	-
401	6	-	64
402	6	-	47
403	6	-	49
404	6	-	48
405	6	-	64
406	6	-	46
407	6	-	45
408	6	-	43
409	6	-	16
410	6	-	17
411	4	-	53
412	4	-	53
413	4	-	53
414	4	-	56
415	6	-	61
416	6	-	63
417	6	16	-
418	6	-	55
419	6	-	54

TABLE 3-79. Cause of Firefighter Injury Conversion (Sheet 3 of 4)

NFIRS 4.1 Cause of Fire Fighter Injury	NFIRS 5.0		
	I_1 = Cause of Fire Fighter Injury	I_2 = Factors Contributing to Injury	I_3 = Object Involved in Injury
420	4	-	51
421	4	-	62
499	6	-	-
500	7	-	-
501	7	-	12
502	7	-	22
503	7	-	23
504	7	-	91
505	7	-	92
506	7	-	-
507	7	-	-
508	7	-	12
509	7	-	22
510	7	-	23
511	7	-	91
512	7	-	92
513	7	-	-
514	7	-	-
515	7	-	13
516	7	-	22
517	7	-	23
518	7	-	91
519	7	-	92
520	7	-	-
521	7	-	-
522	7	-	-
523	7	-	22
524	7	-	35
525	7	-	36
526	7	-	-
599	7	-	-
600	2	-	-
601	2	-	22
602	2	-	37
603	2	-	38
604	2	-	30
605	2	-	26
699	2	-	-
700	6	62	26
701	6	62	26
702	6	63	91

TABLE 3-79. Cause of Firefighter Injury Conversion (Sheet 4 of 4)

NFIRS 4.1 Cause of Fire Fighter Injury	NFIRS 5.0		
	I_1 = Cause of Fire Fighter Injury	I_2 = Factors Contributing to Injury	I_3 = Object Involved in Injury
703	6	63	-
704	6	-	26
705	6	-	26
706	6	61	26
707	6	61	26
799	6	62	26
800	5	-	-
801	5	92	91
802	5	91	91
803	5	92	-
804	5	92	-
805	5	92	95
806	5	-	93
899	5	-	-
999	0	-	-
000	U	-	-

Medical Care Provided

Data element not used in NFIRS 5.0.

TABLE 3-80. Protective Coat Worn Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Item" in NFIRS 5.0	
1	21
2	21
3	21
4	21
5	21
6	21
7	21
8	21
9	NN
0	21

Status Of Protective Coat

Does not convert - Not used in NFIRS 5.0.

TABLE 3-81. Problem with Protective Coat

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Problem" in NFIRS 5.0	
1	11
2	25
3	12
4	25
5	31
7	NN
8	-
9	00
0	UU

TABLE 3-82. Protective Trousers Worn Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Item" in NFIRS 5.0	
1	22
2	22
3	22
4	22
5	22
6	22
7	22
8	22
9	NN
0	22

Status Of Protective Trousers

Does not convert - Not used in NFIRS 5.0.

TABLE 3-83. Problem with Protective Trousers Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Problem" in NFIRS 5.0	
1	11
2	25
3	12
4	25
5	31
7	NN
8	
9	00
0	UU

TABLE 3-84. Boots/Shoes being Worn Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Item" in NFIRS 5.0	
1	31
2	32
3	33
4	34
5	36
6	37
7	35
8	38
9	30
0	UU

Status of Boots/Shoes

Does not convert - Not used in NFIRS 5.0.

TABLE 3-85. Problems with Boots/Shoes Conversion

NFIRS 4.1	NFIRS 5.0
This data element is being called "Equipment Problem" in NFIRS 5.0	
1	11
2	25
3	25
4	22
5	33
6	41
8	
9	00
0	UU

TABLE 3-86. Helmet being Worn Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Item" in NFIRS 5.0	
1	11
2	11
3	11
4	11
8	NN
9	11
0	UU

Status of Helmet

Does not convert - Not used in NFIRS 5.0.

TABLE 3-87. Problem with Helmet Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Problem" in NFIRS 5.0	
1	11
2	12
3	21
4	22
5	24
7	
8	
9	00
0	UU

TABLE 3-88. Face Protection being Worn Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Item" in NFIRS 5.0	
1	12
2	13
3	14
8	NN
9	00
0	UU

TABLE 3-89. Problem with Face Protection Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Problem" in NFIRS 5.0	
1	11
2	12
3	21
4	23
7	-
8	-
9	00
0	UU

TABLE 3-90. Breathing Apparatus Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Item" in NFIRS 5.0	
1	41
2	42
3	43
4	44
8	NN
9	40
0	UU

Status of Breathing Apparatus

Does not convert - Not used in NFIRS 5.0.

TABLE 3-91. Problem with Breathing Apparatus Conversion

NFIRS 4.1 Problem with Breathing Apparatus	NFIRS 5.0 Equipment Problem
This data element is called "Equipment Problem" in NFIRS 5.0	
11	11
12	25
13	12
14	21
15	42
16	43
19	00
10	UU
21	11
22	25
23	12
24	44
29	00
20	UU
31	45
32	46
33	47
39	00
30	UU
41	48
42	49
49	00
40	UU
51	51
52	52
53	53
59	00
50	UU
97	-
98	-
99	00
00	UU

TABLE 3-92. Gloves being Worn Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Item" in NFIRS 5.0	
1	50
2	50
3	50
4	50
5	50
6	50
7	50
8	NN
9	50
0	UU

TABLE 3-93. Problem with Gloves Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Problem" in NFIRS 5.0	
1	11
2	25
3	12
4	22
5	33
6	32
7	-
8	-
9	00
0	UU

TABLE 3-94. Special Equipment Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Item" in NFIRS 5.0	
1	61
2	65
3	72
4	71
5	73
6	74
7	77
8	NN
9	70
0	UU

Special Equipment Status

Does not convert - Not used in NFIRS 5.0.

TABLE 3-95. Special Equipment Problems Conversion

NFIRS 4.1	NFIRS 5.0
This data element is called "Equipment Problem" in NFIRS 5.0	
1	11
2	25
3	12
4	95
5	96
6	97
7	-
8	-
9	00
0	UU

Hazardous Materials Module

TABLE 3-96. Special HazMat Response Action (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0
16	51
31	22
32	23
33	30
34	73
35	21
36	34
37	52
41	41
42	42
43	53
44	55
45	45
46	46
47	47
51	71
53	92
54	66
55	62
56	63
57	72
61	77
62	78
63	82
64	83
71	86
72	93

Note: Up to 2 Actions Taken are reported on the basic module in the Actions Taken fields 2 and 3. No conversion is made to Special HazMat Actions Taken on the HazMat module.

TABLE 3-96. Special HazMat Response Action (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0
73	64
81	61
82	65
91	85
92	84
97	54
98	NN
99	00
00	UU

Note: Up to 2 Actions Taken are reported on the basic module in the Actions Taken fields 2 and 3. No conversion is made to Special HazMat Actions Taken on the HazMat module.

TABLE 3-97. General Property Use (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0
Convert only if not a fire and put result in "Mixed Property" field on basic form.	
11	10
12	10
13	10
14	10
15	10
16	10
18	10
21	20
22	20
31	33
32	33
33	33
34	33
36	00
40	58
41	40
42	40
43	40
44	40
45	40
47	40
51	00
52	00
59	59
61	60
62	60
63	63
64	00
65	65

TABLE 3-97. General Property Use (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0
Convert only if not a fire and put result in "Mixed Property" field on basic form.	
66	-
67	60
70	60
80	-
91	-
92	-
93	-
94	-
95	-
96	-
97	-
98	-
99	00
00	UU

TABLE 3-98. Level of Release Conversion (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0
10	Released From = 1 and Story = 2
11	Released From = 1 and Story = 1
12	Released From = 1 and Story = 2
13	Released From = 1 and Story = 3
14	Released From = 1 and Story = 4
15	Released From = 1 and Story = 7
16	Released From = 1 and Story = 13
17	Released From = 1 and Story = 18
18	Released From = 1 and Story = 21
20	Released From = 1 and Story = -1
21	Released From = 1 and Story = -1
22	Released From = 1 and Story = -2
23	Released From = 1 and Story = -3
24	Released From = 1 and Story = -4
25	Released From = 1 and Story = -7
26	Released From = 1 and Story = -13
27	Released From = 1 and Story = -18
28	Released From = 1 and Story = -21
30	Released From = 2 and Story = 2
31	Released From = 2 and Story = 1
32	Released From = 2 and Story = 2
33	Released From = 2 and Story = 3
34	Released From = 2 and Story = 4
35	Released From = 2 and Story = 7
36	Released From = 2 and Story = 13

TABLE 3-98. Level of Release Conversion (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0
37	Released From = 2 and Story = 18
38	Released From = 2 and Story = 21
40	Released From = 2 and Story = -1
41	Released From = 2 and Story = -1
42	Released From = 2 and Story = -2
43	Released From = 2 and Story = -3
44	Released From = 2 and Story = -4
45	Released From = 2 and Story = -7
46	Released From = 2 and Story = -13
47	Released From = 2 and Story = -18
48	Released From = 2 and Story = -21
00	UU

TABLE 3-99. Release Factor Conversion (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0	
Release Factor	Cause of Release	Factor contributing to release
11	1	
21	2	
30	2	30
31	2	31
32	2	32
33	2	33
34	2	34
37	2	37
38	2	38
39	2	30
40	2	40
42	2	42
43	2	43
45	2	45
46	2	46
47	2	47
48	2	48
49	2	40
50	3	50
51	3	51
52	3	52
53	3	53
54	3	54
55	3	55
56	3	56
59	3	50
60	3	60
61	3	61

TABLE 3-99. Release Factor Conversion (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0	
Release Factor	Cause of Release	Factor contributing to release
62	3	62
64	3	64
69	3	60
70	2	70
71	2	71
72	2	72
73	2	73
74	2	74
75	2	75
76	2	76
77	2	77
78	2	78
79	2	70
80	4	80
81	4	81
82	4	82
83	4	83
84	4	84
85	4	85
86	4	86
87	4	87
88	4	88
89	4	80
90	U	-
91	4	91
92	2	92
93	2	93
94	2	- I = U
95	2	- I = U
96	2	- I = U
97	2	97
98	-	-
99	U	-
00	U	-

I is the question "If fire or explosion is involved with a release, which occurred first?"

Type of Weather

Does not convert - Not used in NFIRS 5.0.

Air Temperature

Does not convert - Not used in NFIRS 5.0.

Estimated Number of Chemicals

Does not convert - Not used in NFIRS 5.0.

TABLE 3-100. Disposition Conversion

NFIRS 4.1	NFIRS 5.0
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	-
0	-

Personnel Identifying HazMat

Does not convert - Not used in NFIRS 5.0.

Reference Material

Does not convert - Not used in NFIRS 5.0.

Number of Injuries

Direct convert of numeric field.

Number of Fatalities

Direct convert of numeric field.

TABLE 3-101. DOT Hazard Class Conversion

NFIRS 4.1	NFIRS 5.0
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90
0	UU

CAS Number

Direct conversion.

Physical State Stored

Does not convert - Not used in NFIRS 5.0.

Extent Of Release

Does not convert - Not used in NFIRS 5.0.

TABLE 3-102. Physical State Released Conversion

NFIRS 4.1	NFIRS 5.0
All classifications convert directly except as noted below	
0	U

Quantity Released Units

All classifications convert directly.

TABLE 3-103. Suspected Environmental Damage Conversion

NFIRS 4.1	NFIRS 5.0
All classifications convert directly except as noted below	
This data element is called "Released Into" in NFIRS 5.0.	
9	0
0	U

Container Use

Does not convert - Not used in NFIRS 5.0.

Special Container Feature

Does not convert - Not used in NFIRS 5.0.

TABLE 3-104. Container Type Conversion

NFIRS 4.1	NFIRS 5.0
All classifications convert directly except as noted below	
98	NN
99	00
00	UU

Container Material

Does not convert - Not used in NFIRS 5.0.

Container Capacity

All classifications convert directly.

Unit of Measure

All classifications convert directly.

TABLE 3-105. Mobile Property Type/Transport Type Conversion (Sheet 1 of 2)

NFIRS 4.1	NFIRS 5.0
All classifications convert directly except as noted below	
00	UU
08	blank
13	18
19	10
29	20
39	30
49	49, but may include some boats that are not sailboats
58	50
59	50

TABLE 3-105. Mobile Property Type/Transport Type Conversion (Sheet 2 of 2)

NFIRS 4.1	NFIRS 5.0
All classifications convert directly except as noted below	
67	74
68	75
69	60
79	70
99	90

*73, 74, and 75 are valid classifications in the hazmat table and will directly convert to the same number.

Vehicle Id

Does not convert - Not used in NFIRS 5.0.

ICC/DOT Number

All numbers convert directly.

TABLE 3-106. Equipment Involved in Release Conversion

NFIRS 4.1	NFIRS 5.0
Except for the codes listed below, all codes convert the same as for the Equipment Involved in Ignition (Table 3-48)	
01	Blank
02	Blank
03	Blank
04	Blank
05	Blank
06	Blank
07	Blank
08	Blank
09	Blank
91	311
92	500
93	200
94	251
95	300
96	300
97	300

NFIRS 5.0 Vendor Software Development Procedures

The United States Fire Administration (USFA) will no longer certify vendor transaction files for the NFIRS 5.0. The USFA will instead maintain a list of fire software vendors that have registered with USFA to obtain NFIRS 5.0 development materials and the vendor validation tool. We will also maintain vendors' readiness status' on the list based on their reports to us on their status.

The new procedure has 5 steps:

1. Vendors will register their company/organization and their software to receive a vendor ID and a software ID. This step is the same as in the previous certification procedure. All transaction files processed at the national level are required to have these two IDs embedded in the transaction file as specified in the design documentation. News, Design Documentation, and Tools for Vendors may be found at the vendor section of the USFA website. https://www.nfirs.fema.gov/vendors/
2. Vendors will be requested to develop software using the NFIRS 5.0 design documentation and then test their output transaction files using the validation tools USFA provides for those purposes. NFIRS design documentation and other information may be downloaded from the registration website at: http://www.nfirs.fema.gov/documentation/design/
3. Vendors are requested to notify USFA when their product development is completed and tested to be compatible with the national NFIRS 5.0 database standard.
4. Vendors who have notified USFA in step 3 above will be marked as "active" vendors on the registered list. This new status will supersede the previous two status categories of "conditionally certified" and "fully certified".
5. Fire Departments and states may use the USFA maintained list of vendors as a resource when shopping for a software product.

Because the USFA will no longer nationally certify vendor's NFIRS 5.0 transaction files formats, it will be extremely important for state agencies, fire departments and vendors to continue monitoring data quality issues.

State agencies are the authority for state reporting compliance. Issues with NFIRS vendor files should be addressed by the fire department, the vendor and the state involved. The USFA will continue to act as a resource for states to identify data problems at the national level.

Vendors should retest their software after software revisions or version changes.

In order to maintain a uniform National reporting standard:

Fire departments should make sure they have the most current version of the vendor software installed.

States and fire departments need to ensure that their vendor's data files remain compatible with the national system.

Query and Reporting Requirements

Reporting Requirements

All database inputs to the standard reports defined below will have definable database filters which can be set by the report user prior to report generation. The filter will consist of predefined field parameters that will allow generation of data subsets based on the values entered before report generation. Field parameters will consist of a range of values or values greater, less than or equal to a designated value. Those parameters that require ranges of values are designated by "(range of)" after the parameter field name. Text field parameters require the ability to do partial searches and the use of wildcard characters. More complex queries involving the use of the Boolean logical "or" statement or combinations of Boolean "and/or" logic will require use of ad hoc query capabilities described at the end of these reporting requirements. Note that not all field parameters may be available for each report depending on the report type. The following is a total list of all NFIRS 5.0 field parameters (subdivided by module):

All Incidents

State.
FDID.
Incident Number (range of).
Exposure Number (range of).
Station (range of).
Incident Location text fields (Wildcard/Partial String).
Location Type.
Location State.
ZIP Code (range of).
Census Tract (range of).
Incident Date Month (range of).
Incident Date Day (range of).
Incident Date Year (range of).
Incident Date Hour/Minute (range of).
Day of Week (calculated, range of).
Incident Type (range of).
Aid Given or Received.
Their FDID.
Their State.
Their Incident Number.
Action Taken #1 (range of).
Action Taken #2 (range of).
Action Taken #3 (range of).
Suppression Resources (range of).
EMS Resources (range of).
Other Resources (range of).
Counts Mutual Aid Resources.
Property $Loss (range of).
Contents $Loss (range of).
Total $Loss (range of).
Fire Service Injuries (range of).
Fire Service Deaths (range of).
Civilian injuries (range of).
Civilian Deaths (range of).
Detector Alerted Occupants.
Hazardous Materials Release.
Mixed Property Use (range of).
Property Use (range of).
Business Entity Involved Name.
Business Entity Involved Phone Number.
Person Involved Name Prefix.
Person Involved First Name.
Person Involved Middle Initial.
Person Involved Last Name.
Person Involved Name Suffix.
Person Involved Address Number.
Person Involved Street Prefix.
Person Involved Address Street Name.
Person Involved Address Street Type.
Person Involved Address Street Suffix.
Person Involved Post Office Box.
Person Involved Apartment/Suite/Room.
Person Involved City.
Person Involved State.

All Incidents (continued)

Person Involved ZIP Code (range of).
Business Owner Name.
Business Owner Phone Number.
Owner Name Prefix.
Owner First Name.
Owner Middle Initial.
Owner Last Name.
Owner Name Suffix.
Owner Address Number.
Owner Street Prefix.
Owner Address Street Name.
Owner Address Street Type.
Owner Address Street Suffix.
Owner Post Office Box.
Owner Apartment/Suite/Room.
Owner City.
Owner State.
Owner ZIP Code (range of).

Fire Incidents

Fire Cause (range of).
Factors Contributing to Ignition #1-#2 (range of).
Human Factors Contributing to Ignition (any combination of).
Estimated Age of Person Involved (range of).
Area of Origin (range of).
Heat Source (range of).
Item First Ignited (range of).
Type Material First ignited (range of).
On-Site Material #1-#3 (range of).
On-Site Material Storage Use #1-#3 .
Number of Residential Living Units (range of).
Number of Buildings Involved (range of).
Acres Burned (range of).
Equipment Involved in Ignition (range of).
Equipment Power Source (range of).
Equipment Portability.
Brand.
Model.
Year.
Fire Suppression Factors #1-#3 (range of).
Mobile Property Type (range of).
Mobile Property Make.
Mobile Property Model (wildcard/partial).
Mobile Property Year.
Mobile Property State.
Fire Spread (range of).

Structure Fire Incidents Only

Structure Type (range of).
Building Status (range of).
Total Stories Above Grade (range of).
Total Stories Below Grade (range of).
Total Square Feet (range of).
Building Length (range of).
Building Width (range of).
Story of Fire Origin (range of).
Number of Stories Damaged by Flame, 1%-24% (range of).
Number of Stories Damaged by Flame, 25%-49% (range of).
Number of Stories Damaged by Flame, 50%-74% (range of).
Number of Stories Damaged by Flame, 75%-100% (range of).
Item Contributing Most to Flame Spread (range of).
Type Material Contributing Most to Flame Spread (range of).
Presence of Detectors.
Detector Type.
Detector Power Supply (range of).
Detector Operation.
Detector Effectiveness.
Reason for Detector Failure.
Presence of Automatic Extinguishment System.
Automatic Extinguishment System Type (range of).
Automatic Extinguishment System Operation (range of).
Number of operating Sprinkler Heads (range of).
Reason for Automatic Extinguishment System Failure.

Civilian Fire Casualty Incidents Only

Injured Person First Name(Wildcard/Partial String).
Injured Person Last Name(Wildcard/Partial String).
Sex.
Casualty Number (range of).
Age (range of).
Race.
Ethnicity.
Affiliation (range of).
Injury Date Month (range of).
Injury Date Day (range of).
Injury Date Year (range of).
Injury Date Hour/Minute (range of).
Severity (range of).
Cause of Injury (range of).
Human Factors Contributing to Injury (Any Combination of).
Factors Contributing to Injury #1-#3 (range of).
Activity When Injured (range of).
Location at Time of Injury (range of).
General Location At Time of Injury (range of).
Story Location at Start of Incident (range of).

Civilian Fire Casualty Incidents Only (continued)

Story Where Injury Occurred (range of).
Specific Location at Time of Injury (range of).
Primary Apparent Symptom (range of).
Primary Area of Body Injured (range of).
Disposition.

Fire Service Casualty Incidents Only

Injured Firefighter First Name(Wildcard/Partial String).
Injured Firefighter Last Name(Wildcard/Partial String).
Sex.
Career Status.
Casualty Number (range of).
Age (range of).
Injury Date Month (range of).
Injury Date Day (range of).
Injury Date Year (range of).
Injury Date Hour/Minute (range of).
Number of Prior Responses (range of).
Usual Assignment (range of).
Physical Condition Just Prior to Injury.
Severity (range of).
Taken To (range of).
Activity at time of Injury (range of).
Primary Apparent Symptom (range of).
Primary Area of Body Injured (range of).
Cause of fire Fighter Injury (range of).
Factor Contributing to Injury (range of).
Object involved in Injury (range of).
Where Injury Occurred (range of).
Story Where Injury Occurred (range of).
Specific Location Where Injury Occurred (range of).
Vehicle Type Where Injury Occurred (range of).
Did Protective Equipment Fail?.
Equipment Sequence Number (range of).
Protective Equipment Item (range of).
Protective Equipment Problem (range of).
Manufacturer.
Model.

EMS Incidents Only

Number of Patients (range of).
Patient Number (range of).
Time arrived at Patient Month (range of).
Time arrived at Patient Day (range of).
Time arrived at Patient Year (range of).
Time arrived at Patient Hour/Minute (range of).
Time of Patient Transfer Month (range of).
Time of Patient Transfer Day (range of).
Time of Patient Transfer Year (range of).
Time of Patient Transfer Hour/Minute (range of).
Provider Impression Assessment.
Age (range of).
Race.
Ethnicity.
Human Factors Contributing to Injury (Any Combination of).
Other Factors (range of).
Body Site of Injury.
Injury Type.
Cause of Injury or Illness (range of).
Procedures Used (any combination of).
Safety Equipment (range of).
Pre-Arrival Cardiac Arrest?
Witnessed?
Bystander CPR?
Post Arrival Arrest?
Initial Arrest Rhythm.
Initial Level of Provider (range of).
Highest Level of Provider at Scene (range of).
Patient Status.
Pulse on Transfer?
Disposition (range of).

HAZMAT Incidents Only

Chemical Name (Wildcard/Partial String).
UN Number.
Dot Hazard Class (range of).
CAS Registration Number.
Container Type (range of).
Container Capacity (range of).
Units: Capacity.
Estimated Amount Released (range of).
Units: Released.
Physical State when Released (range of).
Released Into (range of).
Story of Release (range of).
Released From.
Population Density (range of).
Area Affected (range of).
Area Affected: Units.
Area Evacuated (range of).
Area Evacuated: Units.
People Evacuated (range of).
Buildings Evacuated (range of).
HazMat Action Taken #1 (range of).

HAZMAT Incidents Only (continued)

HazMat Action Taken #2 (range of).
HazMat Action Taken #3 (range of).
Release Sequence.
Cause of Release.
Factor Contributing to Release #1 (range of).
Factor Contributing to Release #2 (range of).
Factor Contributing to Release #3 (range of).
Factor Affecting Mitigation #1 (range of).
Factor Affecting Mitigation #2 (range of).
Factor Affecting Mitigation #3 (range of).
Equipment Involved in Release (range of).
Equipment Involved in Release Brand.
Equipment Involved in Release Model.
Equipment Involved in Release Year.
Mobile Property Involved in Release Type (range of).
Mobile Property Involved in Release Make.
Mobile Property Involved in Release Model (wildcard/partial).
Mobile Property Involved in Release Year.
Mobile Property Involved in Release State.
License Plate Number.
DOT/ICC Number.
HazMat Disposition (range of).

Wildland Fire Incidents Only

Latitude (range of).
Longitude (range of).
Township.
Township North/South.
Range.
Range East/West.
Section.
Subsection.
Meridian (range of).
Area Type (range of).
Wildland Fire Cause (range of).
Human Factors Contributing to Ignition (any combination of).
Factors Contributing to Ignition #1 (range of).
Factors Contributing to Ignition #2 (range of).
Fire Suppression Factors #1 (range of).
Fire Suppression Factors #2 (range of).
Fire Suppression Factors #3 (range of).
Heat Source (range of).
Mobile Property Type (range of).
Equipment Involved in Ignition (range of).
NFDRS Weather Station ID.
Weather Type (range of).
Wind Direction (range of).
Wind Speed (range of).
Air Temperature (range of).
Relative Humidity (range of).
Fuel Moisture% (range of).
Fire Danger Rating (range of).
Number of Buildings Ignited (range of).
Number of Buildings threatened (range of).
Total Acres Burned (range of).
Primary Crop Burned #1 (Wildcard/Partial).
Primary Crop Burned #2 (Wildcard/Partial).
Primary Crop Burned #3 (Wildcard/Partial).
Property Owner.
Federal Agency Code.
% Total Acres Burned Owned by Undetermined (range of).
% Total Acres Burned Owned by Tax Paying (range of).
% Total Acres Burned Owned by Non Tax Paying (range of).
% Total Acres Burned Owned by City/Town/Village (range of).
% Total Acres Burned Owned by County/Parish (range of).
% Total Acres Burned Owned by State or Province (range of).
% Total Acres Burned Owned by Federal (range of).
% Total Acres Burned Owned by Foreign (range of).
% Total Acres Burned Owned by Military (range of).
% Total Acres Burned Owned by Other (range of).
NFDRS Fuel Model at Origin (range of).
Person Responsible for Fire.
Gender of Person Involved.
Age of Person Involved (range of).
Activity of Person Involved (range of).
Feet From Right of Way (range of).
Type of Right of Way (range of).
Elevation (range of).
Relative Position on Slope.
Aspect.
Flame Length (range of).
Rate of Spread (range of).

Arson Fire Incidents Only

Agency Name Referred To.
Street Address.
City.
State.
ZIP Code.
Their Case Number.
Their ORI.
Their FID.
Their FDID.
Case Status.
Offender Status.

Arson Fire Incidents Only

Suspected Motivation Factor #1.
Suspected Motivation Factor #2.
Suspected Motivation Factor #3.
Apparent involvement (range of).
Entry Method (range of).
Extent of Fire Involvement on Arrival.
Methods/Devices (range of).
Other Investigative Information.
Property Ownership (range of).
Initial Observations.
Assisting Agencies (range of).
Laboratory Used (range of).
Subject Number (range of).
Age (range of).
Gender.
Race.
Ethnicity.
Family Type (range of).
Motivation/Risk Factors (range of).
Disposition (range of).

Apparatus or Resources Local Reporting Only

Apparatus ID.
Type Apparatus/Resource (range of).
Dispatch Month (range of).
Dispatch Day (range of).
Dispatch Year (range of).
Dispatch Hour (range of).
Arrival Month (range of).
Arrival Day (range of).
Arrival Year (range of).
Arrival Hour (range of).
Clear Month (range of).
Clear Day (range of).
Clear Year (range of).
Clear Hour (range of).
Number of People (range of).
Use.
Action Taken #1 (range of).
Action Taken #2 (range of).
Action Taken #3 (range of).
Action Taken #4 (range of).

Personnel Local Reporting Only

Apparatus ID.
Type Apparatus/Resource (range of).
Dispatch Month (range of).
Dispatch Day (range of).
Dispatch Year (range of).
Dispatch Hour (range of).
Arrival Month (range of).
Arrival Day (range of).
Arrival Year (range of).
Arrival Hour (range of).
Clear Month (range of).
Clear Day (range of).
Clear Year (range of).
Clear Hour (range of).
Number of People (range of).
Use.
Action Taken #1 (range of).
Action Taken #2 (range of).
Action Taken #3 (range of).
Action Taken #4 (range of).
Personnel ID.
Name.
Rank or Grade (range of).

All report outputs may be in a variety of user definable formats including printed output, ascii delimited text files and Adobe Acrobat files. As needed, the reports below can be produced with output (detail fields only) in ASCII delimited file format so that the report output can be loaded into a separate database table.

Tally Report

Frequency count of codes by element that includes summary information of loss measures for each code within the element and the percentage of the total for each code. This query/report will be similar to the existing Tally report.

- Must allow selection of report filter criteria using the field parameter list defined above.
- Must allow selection of a subset of coded fields that the Tally Report will be run against. (The NFIRS 4.1 Tally Report automatically runs against all coded fields in the system). Example: A Tally report that generates detail line information for two selected fields, Property Use and Area of fire origin. The report filter was set to generate the report for Incident type range 110-118 (all structure fires).
- Generates standard outputs as defined above.

The following fields will be included on the report:

Page header information including:
Name of the Report.
Run Date.
NFIRS Data Year.
The Database Filter in Effect.
Name of the Coded Element.
Report Field Descriptions.

Detail line information including:

Field Code (also to include blank or invalid codes).
Field Code Descriptor.
Frequency Count (number of incidents).
Percent of Total (for frequency).
Number of Non Fire Service Deaths.
Percent of Total Non Fire Service Deaths.
Number of Non Fire Service Injuries.
Percent of Total Non Fire Service Injuries.
Number of Fire Service Deaths.
Percent of Total Fire Service Deaths.
Number of Fire Service Injuries.
Percent of Total Fire Service Injuries.
Property Dollar Loss.
Percent of Total Property Dollar Loss.
Contents Dollar Loss.
Percent of Total Contents Dollar Loss.
Total Estimated Dollar Loss (This will be property loss + contents loss).
Percent of Total Estimated Dollar Loss.

The detail portion of the report will repeat for each coded field that was selected to be included in the report.

Summary line information (for each selected coded field) including:

Field Code (also to include blank or invalid codes).
Field Code Descriptor.
Frequency Count (total number of incidents).
Percent of Total (for frequency).
Number of Non Fire Service Deaths.
Percent of Total Non Fire Service Deaths.
Number of Non Fire Service Injuries.
Percent of Total Non Fire Service Injuries.
Number of Fire Service Deaths.
Percent of Total Fire Service Deaths.
Number of Fire Service Injuries.
Percent of Total Fire Service Injuries.
Property Dollar Loss.
Percent of Total Property Dollar Loss.
Contents Dollar Loss.
Percent of Total Contents Dollar Loss.
Total Estimated Dollar Loss (This will be property loss + contents loss).
Percent of Total Estimated Dollar Loss.

Cause Categories Report

The USFA fire cause methodology consists of using a set of hierarchical sorting rules based primarily on the Ignition Cause and Factors, Equipment Involved in Ignition, and Heat Source (plus Exposure Number) to create a hierarchical sorting of all fires into 35 priority (hierarchical) cause codes. These priority cause codes are then regrouped into 12 major cause categories plus a residual unknown-cause group. This framework has proved enormously useful to analysts over the years and is continued under NFIRS version 5.0.

Fires are assigned to a cause category based on a set of rules. Fires that do not meet the criteria are then available for cause assignment from the next rule. Anything left at the end is declared "Unknown". These hierarchical groups are then grouped together to form the 13 major cause groups that fire analysts currently use.

The Cause Category Methodology Matrix table containing the new hierarchical grouping rules is available by clicking the following url:

http://www.nfirs.fema.gov/documentation/design/

Note: As was the cause in previous versions, these cause category groupings are intended for use with structure fires only. They will not accurately portray causes for Outside or Vehicle fires and they were not designed for that purpose.

Residential Fire Causes, 2000 NFIRS Data

08/08/03

State = AA	Number of Fires	Percent	Number Deaths	Percent	Number Injuries	Percent	Dollar Loss	Percent
Incendiary, Suspicious	10,756	8.7	130	13.6	467	8.1	$179,093,066	10.9
Children Playing	3,184	2.6	36	3.7	390	6.8	$47,260,022	2.8
Smoking	5,932	4.8	119	12.5	550	9.6	$67,452,251	4.1
Heating	14,007	11.4	70	7.3	385	6.7	$138,460,775	8.4
Cooking	23,922	19.5	35	3.6	1,136	19.8	$98,436,297	6.0
Electrical Distribution	8,832	7.2	58	6.1	306	5.3	$148,793,312	9.1
Appliances, A/C	7,552	6.1	14	1.4	274	4.7	$68,017,308	4.1
Open Flame, Ember, Torch	8,032	6.5	46	4.8	568	9.9	$106,065,091	6.4
Other Heat, Flame, Spark	2,553	2.0	17	1.7	111	1.9	$37,930,105	2.3
Other Equipment	909	0.7	6	0.6	30	0.5	$16,322,743	0.9
Natural	2,637	2.1	7	0.7	43	0.7	$55,216,212	3.3
Exposure	4,852	3.9	21	2.2	50	0.8	$70,876,570	4.3
Unknown	29,123	23.8	391	41.1	1,411	24.6	$600,760,991	36.7
Totals	122,291	100.0	950	100.0	5,721	100.0	$1,634,684,743	100.0

Fire Department Information Report

The report will produce FDID Header information for each Fire Department. The report will have the following features:

- *The database input to the report will have a filter at the front end.*
- *The report Output will go to a file that can be viewed or printed. It may be an Adobe Acrobat file.*

The following fields will be included on the report:

Page header information including:

Name of the Report.
Run Date.
NFIRS Data Year.
The Database Filter in Effect.
Fire Department Name.

Detail line information including:

Fire Department ID.
Fire Department Address.
Fire Department County.
State.
Population Density.
Square Miles.
Number of Incidents.
Number Fire Service Deaths.
Number Fire Service Injuries.
Number Civilian Deaths.
Number Civilian Injuries.
Dollar Loss.
Number Paid Firefighters.
Number Unpaid Firefighters.

Summary line information including:

State.
Number of Incidents.
Square Miles.
Number Fire Service Deaths.
Number Fire Service Injuries.
Number Civilian Deaths.
Number Civilian Injuries.
Dollar Loss.
Number Paid Firefighters.
Number Unpaid Firefighters.

Cross Tabulation Report

The report will produce a cross-tabulation or matrix with any two coded fields in the database. The report will have the following features:

- The database input to the report will have a filter at the front end.
- The report output will go to a file that can be viewed or printed or to an ASCII delimited file. The print/view file may be an Adobe Acrobat file.

The following fields will be included on the report:

Page header information including:

Name of the Report.
Run Date.
NFIRS Data Year.
The Database Filter in Effect.
The Names of the Two Cross Tabulation Fields.
Report Field Descriptions.
Detail line information including:
Field Code Descriptors for Element 1.
Field Code Descriptors for Element 2.
Number of Occurrences.
Percent of Column Totals.
Column Totals for the Two Statistics Above.

Fires Under Investigation Report

Tracking of fires whose ignition causes have been coded as "Under Investigation" after a designated interval of time has lapsed. The report allows identification of incidents whose causes have not been updated after an investigation is completed

The user will specify a lapse date filter after which "under investigation" incidents will appear on the report.

The following fields will be included on the report:

Page header information including:

Name of the Report.
Run Date.
Incident Lapse Date.
NFIRS Data Year.
The Database Filter in Effect.
Fire Department Name.

Detail line information including:

State.
FDID.
Fire Department Name.
Incident Number.
Incident Date
Incident Type
Property Use

Summary line information including:

State.
FDID.
Total Incidents Under investigation.

Mutual Aid Matching Departments Report (State Level Report only)

Tracking of incidents that have another department FDID and incident number linked for mutual aid resource identification purposes. The report allows identification at the State and Federal level of incidents that have been completed with a mutual aid link to another department and incident number, yet no matching incident appears in the state NFIRS database.

The user will specify a lapse date filter after which "broken link" incidents will appear on the report.

The following fields will be included on the report:

Page header information including:

Name of the Report.
Run Date.
Incident Lapse Date.
NFIRS Data Year.
The Database Filter in Effect.

Detail line information including:

State.
FDID.
Fire Department Name.
Incident Number.
Incident Date.
Aid Given To FDID.
Aid Given To Incident Number.
Aid Given To State.

Summary line information including:

State.
FDID.
Total Incidents With No Matching Records.

Top Five Category Report

Top five coded field rankings summaries for loss categories ranked by frequency, percentages, injuries and deaths for a selected field. This report will produce output sorted several different ways.

The following fields will be included on the report:

Page header information including:

Name of the Report.
Run Date.
NFIRS Data Year.
The Database Filter in Effect.
Fire Department Name.

Summary line information ranked by FREQUENCY including:

Selected Field Name

Rank 1. Code
Code Descriptor.
Frequency.
Percentage of Total.
Total Dollar Loss.
Civilian Deaths.
Civilian Injuries.
Fire Service Deaths.
Fire Service Injuries.

Rank 2. Code
Code Descriptor.
Frequency.
Percentage of Total.
Total Dollar Loss
Civilian Deaths.
Civilian Injuries.
Fire Service Deaths.
Fire Service Injuries.

Rank 3. Code
Code Descriptor.
Frequency.
Percentage of Total.
Total Dollar Loss.
Civilian Deaths.
Civilian Injuries.
Fire Service Deaths.
Fire Service Injuries.

Rank 4. Code
Code Descriptor.
Frequency.
Percentage of Total.
Total Dollar Loss.
Civilian Deaths.
Civilian Injuries.
Fire Service Deaths.
Fire Service Injuries.

Rank 5. Code
Code Descriptor.
Frequency.
Percentage of Total.
Total Dollar Loss.
Civilian Deaths.
Civilian Injuries.
Fire Service Deaths.
Fire Service Injuries.
All Others.
Frequency.
Percentage of Total.
Total Dollar Loss.
Civilian Deaths.
Civilian Injuries.
Fire Service Deaths.
Fire Service Injuries.
Total Incidents.

Repeat the summary line information above ranked by TOTAL DOLLAR LOSS.

Repeat the summary line information above ranked by CIVILIAN FIRE DEATHS.

Repeat the summary line information above ranked by CIVILIAN FIRE INJURIES.

Repeat the summary line information above ranked by FIRE SERVICE DEATHS.

Repeat the summary line information above ranked by FIRE SERVICE INJURIES.

Selected Statistics/Fire Department Management Activity Report

Summary statistics on frequency of incident occurrence and average manpower required. This query/report will be similar to the existing Selected Statistics and Management Activity reports in the NFIRS 4.1.

The following fields will be included on the report:

Page header information including:

Name of the Report.
Run Date.
NFIRS Data Year.
The Database Filter in Effect.
Fire Department Name.

Summary line information including:

Fire Department ID
Total Incidents
Total Fires
- Total Structure Fires
  - Total Confined Cooking Fires
  - Total Confined Chimney Fires
  - Total Confined Trash/Rubbish Fires
- Total Fixed Mobile Property Fires
  - Total Mobile Home Fires
- Total Vehicle Fires
- Total Vegetation Fires
  - Total Wildland Fires
  - Total Brush Fires
  - Total Grass Fires
- Total Outside Rubbish Fires
  - Total Dumpster Fires
- Total Outside Storage/Equipment Fires
- Total Crops/Orchard Fires
- Total Incidents with Exposure Fires
- Total Exposure Fires

Total Overpressures/Ruptures/Explosions/Overheat
Total EMS and Rescue
- Total Medical Assists
- Total EMS Calls (no vehicle accidents)
- Total Vehicle Accident EMS Calls
- Total Vehicle/Pedestrian EMS Calls
- Total Lock-ins
- Total Searches/Rescues/Extrications

Total Hazardous Condition Calls
- Total Combustible/Flammable Spills and Leaks
- Total Chemical Release, Reaction Calls
- Total Electrical Wiring/Equipment Calls
- Total Explosive, Bomb Removal Calls
- Total Attempt to Burn Calls

Total Service Calls
- Total Person in Distress Calls
- Total Water Problem Calls
- Total Smoke Odor Problem Calls
- Total Animal Rescue/Problem Calls
- Total Public Service Assistance Calls
- Total Unauthorized Burning Calls

Total Good Intent Calls
- Total Dispatched and Canceled Enroute
- Total Authorized Burning Calls
- Total Prescribed Fire Calls
- Total Smoke Scares
- Total EMS Call Where Patient Was Transported
- Total HazMat Investigations Only Calls

Total False Alarms or False Calls
- Total Malicious False Alarms
- Total Bomb Scares
- Total System Malfunction Calls
- Total System Activations/No Malfunction

Total Severe Weather or Natural Disasters
- Total Flood Assessments
- Total lightning strike (with no fire) Calls

Total Citizen Complaints
Total All Other Incident Types
Total All Incident Types

For each of the Totals above the following summary statistics are to be included on the Total Line:

Percent of Total of Incidents.
Average Number of Suppression Personnel Responded.
Average Number of EMS Personnel Responded.
Average Number of Suppression Apparatus Responded.
Average Number of EMS Apparatus Responded.
Total Man Hours.
Average Man Hours.
Average Response Time.

Data Quality Report

Tracks summary statistics on the frequency and percentages of Blank, Undetermined, None and Other category codes for the purpose of tracking and improving overall data quality. The report also generates statistics on the frequency of zero filling of numeric fields. The above codes may be valid entries in the NFIRS but high percentages in these categories may indicate a problem may exist.

The report user will select the module(s) for which the data quality report will be generated.

The following fields will be included on the report:

Page header information including:

Name of the Report.
Run Date.
NFIRS Data Year.
The Database Filter in Effect.
Reporting Level ID (Fire Department ID, State or Overall).
NFIRS Module Name.

Summary line information for each field in the selected modules including:

Field Descriptor.
Number Present.
Percent Present.
Number Blanks.
Percent Blanks.
Number Zeros.
Percent Zeros.
Number Undetermined.
Percent Undetermined.
Number None.
Percent None.
Number Other.
Percent Other.

The above summary line information is separated by page breaks between modules if more than one module is selected by the user for the report.

Forms Based Incident Report

Fire Service incident reporting software will include this report which generates a paper copy of a selected incident or range of incidents that can be used as a document of record for the fire department. The report will be based on the standard paper forms and will follow the layout of the form modules, sections, blocks, fields and codes but is not restricted to duplicating the check boxes and on-form instructions. It is not necessary that this report utilize printer graphics and may generated as a simple text report. The lack of check boxes and form instructions may mean that front and back forms, such as the Basic Module form, may be combined and printed on one page.

Additional Reporting and Query Requirements

Additional reporting requirements include:

- Ad hoc queries supporting free form query structuring ("where" or for clauses).
- Ability to do simple summary functions (count, sum, average and the like).
- SQL query capability.
- Report Writer to allow generation of new and customized reports.

The following is a list of reports which have not been specified but may be added to the NFIRS 5.0 system before the final release.

Incident Location Report.
State Profile Report.
Average Department Response Time Report.
Civilian Casualty Report.
Fire Service Casualty Report.
EMS Casualty Report.
Wildland Fire Report.
HazMat Report.
Arson Report.
Population Protected Report.
USFA Data Quality Report (State/Federal Level Only).

Section 4

SYSTEM IMPLEMENTATION GUIDELINES

System Selection Issues

Implementation of NFIRS 5.0 includes decisions about hardware, software, policy development, training, and planning. NFIRS 5.0 users have several options to consider when choosing their hardware architecture, software application and database for implementation. Decisions regarding these issues are made with consideration for the current demand for information collection and management, anticipated expansion in the number of users, and the expectations for data analysis.

NFIRS Version 5.0 is designed to make extensive use of the technology that is available today, while allowing for future new technologies. NFIRS 5.0 takes advantage of the Internet for transmitting local fire department data to both the state and national database.

The USFA will make standard NFIRS 5.0 software available to states upon request. This software is designed to provide data entry, validation, data conversion, data and system management services. It is designed to run on most 32-bit operating systems. It can interface with other databases through the Open Database Connectivity Standard (ODBC) at the local or state level. States that choose to distribute the Data Entry software to their departments must agree to provide all technical and help-desk support to departments within their jurisdiction.

Platform Architecture Overview

Stand Alone Personal Computers (PC)

Personal computers can be a cost effective approach to incident data collection and analysis. A stand alone PC is appropriate for situations in which there are a limited number of users who need to access the application, and concurrent access is not an issue. A fire department with a single station and a few qualified data users may be able to successfully use a stand-alone application. A PC application may be sufficient even if a large amount of data must be captured, provided the data need not be shared by users at other workstations. A department with several fire stations that sends all incident reports to a central location to be entered into the reporting application may also find that the stand alone application meets its needs.

The advantages of using a PC can include:

- Generally the least costly alternative in terms of initial cost and on-going maintenance
- Can usually run on a moderately configured PC. Windows 95-based applications generally will require a pentium machine with 32 MB of RAM. Windows NT-based applications generally will require a Pentium or above machine with 64 MB of RAM.
- Administration and maintenance of the application is controlled at a single point and can be handled by a single person.
- A large amount of data can be collected and reported provided the PC hardware has the capacity to store and process the data.

However, the application and data can only be accessed from a single location by one person at a time. It may be difficult or impossible to add Local Area Network (LAN) access to the application at a later date and still maintain acceptable performance of the system.

TABLE 4-1. Hardware and Software Platform Guidelines - System Type: Stand Alone

Hardware	Pentium based PC with 32 MB of RAM is the minimum recommendation for Windows 95 or NT.
Operating Systems/ Network OS	Windows 95 Windows NT
Development Tools	PC Development tool that produce Windows based applications that utilize PC based file systems. Examples of such tools include, but are not limited to: • FoxPro Windows • Visual FoxPro • Paradox Windows • dBase Windows • Visual dBase • Clipper • Visual Basic
File System	PC file systems that support relational or hierarchical database structures. Examples of these file system include, but are not limited to: • Base files • Access Files • Btrieve files
Record Volume/Number of Users	Stand alone applications utilizing one of the listed file structures are capable of managing large numbers of records provided the PC running the application is equipped with adequate RAM and hard disk space. A well designed application should be able to handle record numbers in the 10,000 to 20,000 range on a stand alone PC.
DBA	Not applicable
System Administration	Not applicable
Hardware Maintenance	Optional

Local Area Network

Local Area Networks (LAN) expand the capability to include multiple users working concurrently in the system. An incident reporting application that is designed to run on a LAN is appropriate for situations in which there are a number of users who need concurrent access to the application. A LAN-based application running in a fire department that needs several people at the same location to use the application at the same time will provide connectivity and shared access. Depending on the amount of data being captured and the design of application software, a LAN also may be able to supply limited access to workstations outside the physical location of the network through remote access. A small LAN can be configured with one server providing account verification, file sharing, print sharing, and application sharing.

LAN advantages include:

- Access to the application and data concurrently by a set number of users.
- Controlled access to the application by the network administrator. Groups of individuals can be given access to just those applications for which they have a need.
- Controlled administration and maintenance of the application at a single point, with the results available to all workstations connected to the LAN.
- The ability to add workstations as more people need access to applications served by the network. It is also likely that additional software licenses will be required as users are added.

The LAN will require a higher commitment to system maintenance, both hardware and software, than a stand alone PC. A LAN, though, raises issues not encountered in PC platforms.

- The cost of hardware for a LAN can be considerably more than a stand alone PC. A dedicated server machine is needed as well as workstation PCs to access the server. Additional LAN hardware, such as network interface cards and cable, must also be purchased.
- A LAN will require someone to administer its functions: backups, software installation and upgrades, security validations, hardware and software problem determination, etc. This can be someone at the user's site who has been trained in the network operating system (NOS) or a vendor who has been contracted to handle the administration.
- A LAN will require a hardware maintenance contract to cover component failures and routine service.
- A large increase in the number of users on the LAN, or in the number of applications being run, may require additional servers.
- Adding remote access to the LAN may result in unacceptable performance of certain applications at the remote workstations.

The Hardware and Software Platform Guideline Table on the next page describes additional issues to be considered when exploring a LAN system.

TABLE 4-2. Hardware and Software Platform Guidelines - System Type: Small LAN

Hardware	Workstations on the LAN should be a 486 based PCs and above is the recommended platform. 32MB of RAM is recommended as a minimum for Windows 95 and 64MB for Windows NT. Servers should be Pentium class machines with a minimum of 64MB of RAM. If possible SCSI hard drives should be used in the server. These recommendations are based on the current technology and industry standards.
Operating Systems/ Network OS	• Windows 95 • Windows NT • OS/2 • Mac
Development Tools	For small LANs with no remote access requirements PC development tools that produce Windows based applications that utilize PC-based file systems. Examples of such tools include but are not limited to: • FoxPro • Visual FoxPro • Paradox • dBase • Visual dBase • Clipper • Visual BASIC For larger single sites, LANs including those that require some remote access PC tools to develop Windows-based applications that can utilize RDBMS engines may be more appropriate. This will depend on the individual needs of the purchaser with regard to volume of data, number of remote users, and required response times. Examples of such tools include, but are not limited to: • Visual FoxPro • Visual dBASE • Visual BASIC • Power Builder • SQL Windows
File System	For small LANs with no remote access requirements PC file systems that support relational or hierarchical data base structures. Examples of these file systems include, but are not limited to: • xBase files • Access files • Btrieve files For larger single site LANs, LANs that require some remote access, or sites that will be capturing and processing very large amounts of data, a RDBMS is a better choice. Examples of these file systems include but are not limited to: • SyBase • SQL Server • DB2/2
Record Volume/Number of Users	Small LAN installations that are running applications that rely on xBase file structures must be aware that data bases with large amounts of data can greatly affect application performance. This degradation of performance can be particularly noticeable on remote access work stations. This is due to the inherent nature of the way these types of files are processed by the applications that use them. In order to perform certain tasks, the entire database must sometimes be transported over the LAN wire or, in a worst case scenario, over a slow telephone line. Depending on what level of performance you require, this type of installation can be expected to handle from several thousand to 10 or 20 thousand records. A small LAN running an application that is using RDBMS can handle very large amounts of data and still maintain an acceptable level of performance. However, for applications that will only be dealing with small amounts of data, this data access method will be slower than a simple flat file data base.
DBA **System Administration** **Hardware Maintenance**	Required for RDBMS Required Required

Wide Area Network

A Wide Area Network can be effective in large Metro departments and in regional settings in which many departments agree to share a system. A large jurisdiction, city, county, or state with a regional central reporting agency may need an incident reporting application that is designed to run on a large LAN or wide area network (WAN). This platform is appropriate for situations in which there are a large number, or geographically dispersed, group of users who need concurrent access to the application. The heavy volume of data and remote access requirements in this situation require an application that takes advantage of a relational database management system (RDBMS) running on a centralized server. It also is likely that additional servers are required to handle account verification and file sharing requirements.

The advantages users gain with a WAN include:

- Wide access to applications and other services provided by the network to a large and geographically dispersed group of users.
- A centralized data repository for collection and reporting purposes.
- Applications utilizing RDBMS technologies are generally more scalable. This allows for future growth of the system.
- Applications using RDBMS technologies are much more secure than applications using many other data management systems.

The Hardware and Software Platform Guideline Table on the next page describes additional information to be considered when exploring a WAN system.

TABLE 4-3. Hardware and Software Platform Guidelines - System Type: Large LAN or WAN

Hardware	Workstations on the LAN should be Pentium-based PCs as a minimum, although existing 486-based equipment may be used if performance is not an issue. 32MB of RAM is recommended for Windows 95, 64 MB of RAM is recommended for NT. Servers performing account verification file sharing, and print-sharing services should be Pentium II class machines with a minimum of 64MB of RAM. If possible SCSI hard drives should be used in the server. Application servers running the data base engine or other shared applications should be run from Pentium II class machines with 1 - 4 processors or RISC based machines. These recommendations are based on the current technology and industry standards.
Operating Systems/ Network OS	• Windows 95 • Windows NT • OS/2 • MAC The Network Operating Systems (NOS) includes Windows NT Server, Netware 3.x and 4.x, and OS/2 Warp Server. NOS on RISC machines should be UNIX or Windows NT.
Development Tools	For larger LANs and WANs, PC tools that develop Windows-based applications to utilize RDBMS engines are more appropriate. Examples of such tools include but are not limited to: • Visual Foxpro • Visual dBASE • Visual BASIC • Power Builder • SQL Windows • Oracle Developer 2000
File System	For larger LANs and WANs, a RDBMS is a better choice for a file management system. Examples of these files include but are not limited to: • Oracle • SyBase • SQL Server • DB2/2
Record Volume/Number of Users	Record volumes should be large enough, and remote access to data common enough, to make the investment in this type of technology worthwhile. Records numbering in the 10s to 100s of thousands are common in this type of system. Above 20 users and with remote access to data required. More users can be added until performance of the system bogs down. At that time, increasing the power of the hardware can be done to restore the system to an acceptable level of performance.
DBA	Required
System Administration	Required
Hardware Maintenance	Required

Mainframe Computer

Mainframe systems can be cumbersome and complex, but can be appropriate where a municipal system is available. A mainframe-based solution is only possible if an existing hardware, software, and support structure already exists to support a mainframe environment. Even with such an environment, it is often difficult to obtain the programming and analysis support necessary to develop a large application. An organization with a mainframe environment will generally have an Information Systems Department that will work with the business area to determine the feasibility and economics of building a particular application on a mainframe. Anyone considering building an incident reporting application in this manner should consult with their internal data processing support organization.

Network Server Overview

File servers allow sharing of software applications through a central processing unit that downloads applications to workstations. Network servers can be divided into two broad categories: file servers that provide file sharing, print sharing, and authentication services, and application servers that run applications such as database engines or web servers. The two types of servers have different hardware and software requirements because they perform different types of services.

File Server

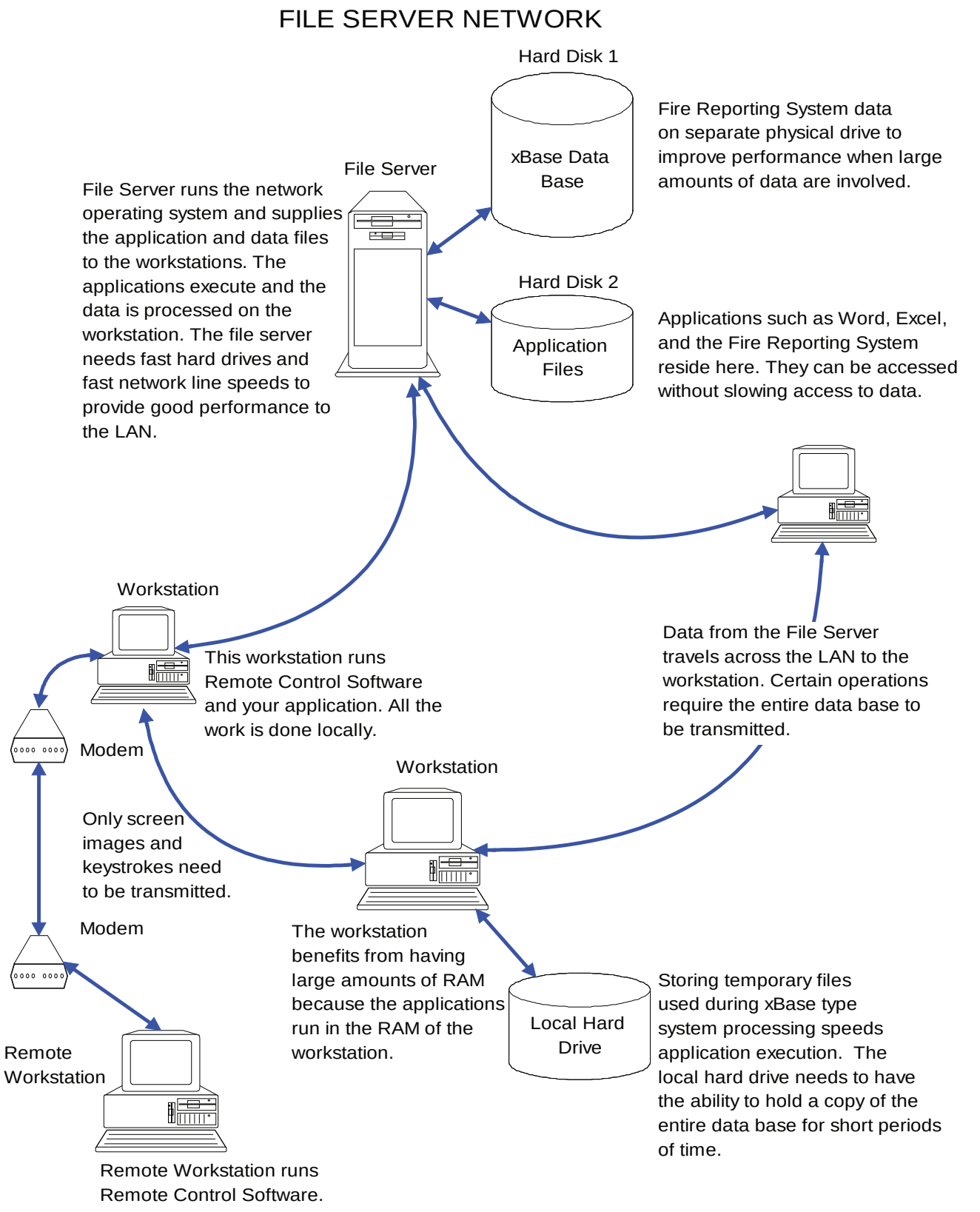
A file server runs a network operating system and supplies the application and data files to the network workstations. The applications execute and the data is processed on the workstation. The server needs fast, large hard drives and fast network adapters to provide optimum performance for the file and print sharing services provided by the server. The amount of RAM and processor speed are important to the user authentication and verification services provided by the server, but are usually not the limiting factor in file server performance.

An application that is being served from a file server loads the executable files into the RAM of the workstation. The workstation performs all of the work required by the application program. Data is transferred from the server to the workstation as it is needed to perform application functions. Applications that use flat file or xBase type databases can be slowed considerably by transmission times when databases become very large. In order to perform certain application functions, a copy of the entire database must be transferred from the server to the workstation for the application to process the data.

The network operating system that runs on the file server needs to have the ability to handle the sharing of disk and print resources among numerous connected workstations and to perform authentication and security functions. The NOS does not necessarily need to be a true pre-emptive multi-tasking operation system as the file server does not generally run any other applications.

The File Server Network Chart on the next page graphically displays a system that uses a file server.

FIGURE 4-1. File Server Network



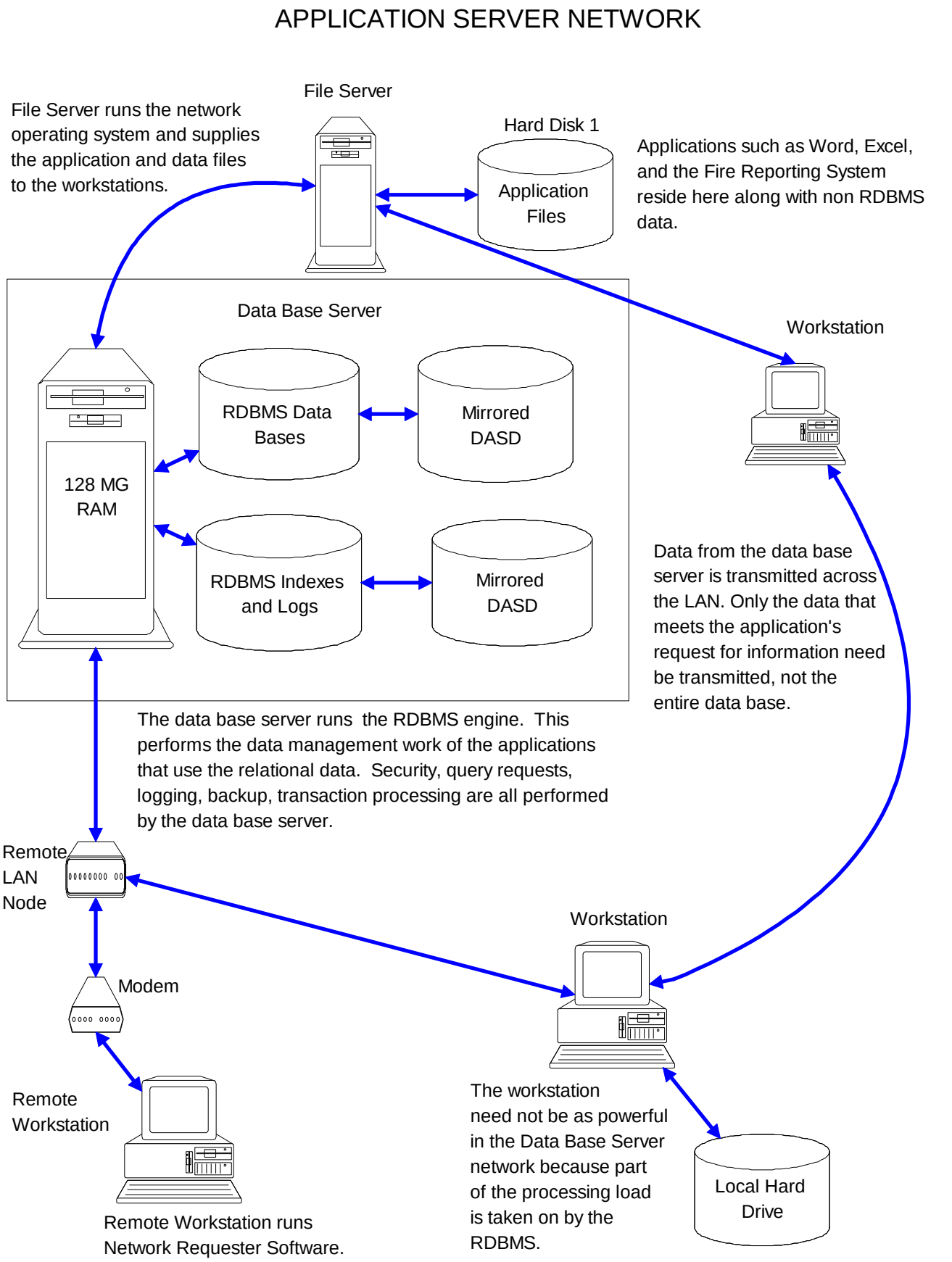
Application Server

Application servers share the workload with the workstations, making the hard disk size and data transmission speed less critical than in a file server system. An application server runs a network operating system and runs shared applications such as a database engine. The application server shares the work to be done with the workstation. A database engine that is running on the server listens for requests from the workstations and processes those requests. Only the request is transmitted from the workstation to the server and only the answer is transmitted from the server back to the workstation. This arrangement puts an emphasis on the amount of RAM and number and speed of processors on the application server. Hard disk size and speed as well as transmission speed is also a factor affecting server performance, but these factors are not as critical for application server performance.

The network operating system that runs on the application server needs to have the ability to process multiple requests for data or other services, such as communication services, simultaneously. A true pre-emptive multi-tasking operation system is best for this type of server.

The Application Server Network Chart on the next page graphically displays a system that uses an application server.

FIGURE 4-2. Application Server Network



Software Selection Issues

Software decisions can be guided by key questions that address the efficacy of the program and vendor support. Software for a fire incident reporting system can be acquired from USFA (state-supported option only) or purchased as a standard package, much the same as word processing and desktop publishing programs. They can also be developed for specific custom application. Several points should be considered with either software approach. Many of the questions listed here could be used to develop a Request for Proposal to solicit bids for the installation and/or to develop NFIRS 5.0 software in a jurisdiction.

Off-the-Shelf Products

These products are developed for distribution to multiple fire agencies. The purchaser buys the product in its current configuration with minimum customization.

- Is the software NFIRS certified?
- How many years has the vendor been in business?
- How much experience does the vendor have in fire service software?
- Does the vendor have any similar products?
- Can you obtain fully functional demonstrations of the program?
- Can the vendor provide a reference list of at least 10 customers?
- How will the vendor handle technical support and what is the cost?
- Can you review documentation and product tutorials?
- Is training available in the use of the software and how much does it cost?
- Is installation of the software available and how much does it cost?
- How does the vendor handle software fixes and what are the costs?
- How does the vendor handle maintenance releases and what are the costs?
- Is the software compatible with other applications, spreadsheets, word processing, third-party report generators, etc.?
- Will the vendor maintain this software with changes in operating systems?
- What are the system requirements?
- What are the system maximums, such as capacity for records (estimate your needs for 3 years)?
- Is the software compatible with your operating system?
- What data analysis is built-in?
- How does the vendor suggest handling data back-up and recovery?
- What is the vendor's primary business?

Custom Application Development

Custom applications demand that the vendor focus on meeting the customers needs and standards. These products are developed and designed to meet the specific needs of a customer. The following questions are additions to those asked for standard software.

- Will access to the source code be available?
- What happens should the company or the product be sold?
- What development language will the vendor use?
- How does the vendor suggest handling platform maintenance?

USFA Supplied Software

The United States Fire Administration has developed client and server software for the use of states and departments. The software is designed to work with most 32-bit operating systems, such as Windows 95, Windows NT, System 7, UNIX, OS/2, etc. It incorporates platform portability through use of the JAVA software development language and can interface with non-ORACLE databases through an Open Database Connectivity interface. When standard system software components are used at the state or metro levels, a custom integration with existing databases may be required. For more detailed information about the USFA software option See "Standard USFA Software Implementation Guidelines" on page 353.

Quality Control Issues

On-scene reporting is the foundation on which a reliable system is built. Quality control is based on devising and using procedures that ensure precise and reliable data. Precision means complete and accurate data collection at the recommended level of detail for each coded field; reliability means the data is collected and coded consistently. NFIRS data flows from the local level to the state level and then to the national level through the transfer file specification. The local fire department is responsible for the quality of data in the transfer file it submits to the state. The state is responsible for the quality of the data in the transfer file it submits to the national level.

Quality control measures ensure consistency and reliability. Quality control issues focus on:

- The software used to collect and analyze data
- The incident documentation process
- Editing the data and correcting errors
- Timeframes and deadlines for data submission throughout the system
- Accurate system participant information

Documenting the Incident

The data collected to describe an incident is the foundation of the system, therefore, the field participants in the system will need:

- Initial training for data collection
- Feedback on completeness and accuracy
- Refresher training on data collection and coding schemes

Those who investigate incidents must be able to determine cause and record the incident for later data entry. They need to do a complete job of assembling the facts of the incident and then consistently record them each time. Therefore, after the initial training of all fire departments for NFIRS 5.0, there should be a provision for annual refresher training.

There also should be a system in place to double check the collection and data entry work. Field edits and relational edits can be built into the system that will reveal unacceptable and unreasonable data. Data management personnel utilize these techniques to improve and validate the data.

Data Edits and Error Corrections

Editing and correcting errors is a system-wide activity, involving local, state, and federal organizations. All errors resulting from the edit/update process need to be reported to fire departments and the submission of corrections from fire departments needs to be encouraged. This is especially critical for fatal errors, which prevent the data from being entered into the NFIRS database.

The corrections for any errors reported to the local fire department by the state should be included in the next month's submission of data to the state. Uniform coding at the national level also necessitates edit checks and quality control monitoring.

Timely Data Submission

Data submission deadlines are required, especially for the annual year-end cutoff to ensure final closure of the year. The state should establish and enforce a final data submission deadline for each year in order to close the processing. Without a final deadline, after which data is no longer accepted at the state level, data submissions will continue indefinitely. The state should encourage timely data submission from every fire department in order to submit the overall state's data to the national level in time.

Meeting data submission deadlines support state and federal efforts to analyze and disseminate the data. A continuous steady effort promoting participation of all fire departments in a state is important for data quality. If the percentage of participating fire departments is highly variable, then problem trends are not as reliable. This is especially true when larger fire departments are involved in varying levels of participation from year to year.

Statewide statistics for both fire and non-fire incidents are less accurate when a smaller percentage of fire departments are reporting and when a smaller percentage of incidents are reported. When the statewide problem statistics are lacking a significant percentage of fire incidents, the scope of the fire problem appears to be smaller than it actually is for that state. This results in less support of the fire service and less attention being paid to fire prevention efforts.

The information provided by a national reporting system loses value as it becomes less timely. The comparison of trends and the analysis of data queries from state to state and from metro department to metro department are not possible until the year is closed. The last state to submit its data to the national level determines when final national statistics and information will become available to all for that year.

Maintaining Fire Department Identification and Participation Information

Documentation of local participation helps states manage data submission and quality throughout the year. Two or more fire departments can merge into one, one fire department can split into more than one, new fire departments are formed, and existing fire departments cease to exist. Fire departments also change chiefs, phone numbers, addresses, and areas covered. It is important for the state to maintain accurate and up to date records on all fire departments.

It is also important to maintain logs of data received, data processed (edit/update), and errors found in data submissions by fire department for each month and year. It is important for a state's credibility to be able to answer questions like, "Did you get the March data I sent 3 weeks ago?" These logs provide a handy reference to keep close watch on participation and timely reporting by fire department. Waiting until sometime after the final year-end deadline to realize that some fire departments have not submitted any data is too late.

Training Issues

Audience

There is a critical need for training at several levels of a primary fire reporting entity. This is critical to ensure accurate collection methods and strong support for the reporting system. Fire department personnel training can focus on cause determination and collection methods.

Fire Department Personnel

Those fire department members with reporting responsibilities, who work at the scene of the incident, are the important first link in the data collection process. Without their support and cooperation, the incident reporting system will break down at a most critical point.

Training needs for these department members include:

- Cause Determination: Accurate reporting demands that the causes of fires and other incidents be found whenever possible. The quality of data can be significantly improved with an organized training program in cause determination.
- Data Definition: Primary data collectors need to first know what items are to become part of the system and understand how to define each item. This will require a working knowledge of the system data dictionary. At this point, great contributions can be made to data quality as the collection is made at the proper precision with consistent interpretation.
- Information Gathering: Primary collectors must know and use the proper mechanics to get the data into the system. This includes utilizing the appropriate forms and techniques to move the data from the scene of the incident to the point of computer input. It may even include computer input if these fire department personnel are responsible for it.
- Reporting Benefits: For the purpose of motivation, firefighters and other primary data collectors need to understand how the collection of data benefits them in their work. They need to feel that the data is being used to increase their effectiveness as firefighters.

Data Management Personnel

Data management personnel training concentrates on information collection and quality control. These are the personnel who are responsible for processing the data into its final form, usually in a computer disk file. They are responsible for the overall management of the data system and handle the dissemination of information developed from the data. In small departments, they may be the same firefighters who collect data at the incident scene. However, in larger departments they will likely be specialists whose primary task is to process incident reports.

- Data Collection System Mechanics: Training is needed in how and when to interface with the other members of the collection team. Scheduling of data submission and specific responsibilities of all those involved is important to those managing the system, including when and how to submit data to other agencies.
- Using the Computer Software: Most collection systems will be computer-based and the data managers will be operators of this equipment. They will need detailed training and instructions on how to utilize the software and hardware needed to process data for the incident system. In addition, training may be needed in operating systems and local area network systems.

- Quality Control Considerations: Data managers have the major responsibility for maintaining high quality data. They need training in the many different techniques of ensuring that data is collected accurately and reliably.

Chiefs, Officers, and Data Users

These are usually senior department personnel who turn the raw data into usable and understandable information for distribution. They will take the computer files and manipulate and refine the data into tables, graphics and other forms appropriate for the intended audience.

- Audience Recognition and Plausible Uses: Managers need training in recognizing the many different audiences for incident information. This information should include appropriate ways to present the information to a particular user.
- Data Analysis Skills: Appropriate training for these managers would include the many different ways to analyze the data and turn it into meaningful information. They should be qualified to utilize statistical programs as well as graphic presentation tools.
- Data Definitions: This group must be able to understanding the exact meaning of every data element and the codes that are used to classify the incidents. Thorough training on the data dictionary will enable these managers to properly interpret the information as they develop presentations for end users.

Training Frequency

Just as operations training is incorporated into a department's routine, data collection and management need to become regular training events. Based on the needs of the department, training will be appropriate many different times. The size of the department, number of training personnel available, and the method of data collection all dictate the frequency of training events.

- Change-over Time: When a new reporting system is adopted there will be an urgent need to provide training for most of the department personnel. There will be many questions about procedures and features of the new system. This is an excellent time to provide those training classes while members are motivated to learn as much as they can about the new system. This training also will ensure that there is no drop in quality during the changeover.
- Regular Drills: Training drills afford an opportunity to provide reporting system training on a regular schedule. By giving an appropriate amount of training on a scheduled basis, personnel can learn the system without being pulled from their duties. This requires coordination from company officers.

- Data Entry Point: Training materials should be present at the data entry points for regular use and reference by those personnel. The frequency of training would be as needed by those entering data.
- Scheduled Training Events: It will be helpful to schedule training events periodically to introduce new procedures and reinforce established ones. There will be times when the only way to accomplish the training goals is to put groups together and present classes.

Training Approaches

A wide variety of training approaches encourages individual and group exploration of the data system and its impact on the department.

- Organized Classes: In these situations, an instructor is placed in a class of an appropriate size and a traditional training event occurs. Many innovative techniques may be used such as audio/visual and computerized procedures, but the training is held in the traditional class format.
- Video Presentations: This approach utilizes a videotaped program as the primary medium for training. It can be a class presentation that has been reduced to video, or it can be actual or simulated action situations used for illustration and training. It may be accompanied by written tests or response documents.
- Computer-aided Instruction: These training events are usually done on an individual basis and utilize a computer to present the information and perhaps receive responses from the learners. Major types of computer aided instruction include tutorials, interactive programs, and game simulations.
- Help Files: These informational documents usually accompany computer programs. They can now be produced as stand-alone documents for use in different learning situations. They can be displayed using standard computer programs.
- Working Manuals: These documents are developed and provided for the purpose of step-by-step guidance in accomplishing the subject matter. They take the form of instruction manuals, documentation manuals, and handbooks.
- On-line Sources: It is now possible to distribute training information and instructions over local area networks and the Internet. This makes it possible to reach large audiences with a common body of knowledge of interest to many users.

Implementation Action Plan

Integrating hardware, software, policy development, and training requires an action plan that will help manage NFIRS 5.0 implementation. An action plan is a powerful tool to assist in clarifying goals, objectives and determining who, what, when and how the objectives will be met. The Goal - implementing NFIRS 5.0 - has several objectives that need to be achieved for the system to be operational. Each objective has specific tasks that may be dependent on the completion of other tasks or objectives.

Following are several benefits gained from using an action plan process for NFIRS 5.0 implementation:

- To provide a management tool for achieving a successful implementation
- To give the project a focus and direction
- To furnish a blueprint for management to monitor project status
- To render a shared view of the project that leads to improved teamwork and cohesiveness

Following this section is a sample action plan for implementing NFIRS 5.0. The objectives are clearly measurable and the tasks for each objective have a clearly defined start/stop date and responsible party. It is best to keep timeframes for each objective under 6 months. Objectives that take longer than 6 months may be jeopardized by changing requirements and budgets.

The sample action plan objectives, tasks and time frames are dependent on the jurisdiction's operating environment. Changes will be required to tailor the plan to your jurisdiction. For example, budget approvals and contract awards may be done outside the organization and can take significantly longer to complete. This plan also assumes that any custom development can be completed in 8 weeks. This may be an underestimate if the work is being done by another governmental agency.

TABLE 4-4. Sample Implementation Action Plan (Sheet 1 of 2)

OBJECTIVES/TASKS	DURATION (WEEKS)	START DATE	END DATE	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1	1/1
PRE-PLAN ANALYSIS														
Determine costs for current system (hardware, software, staff, supplies)	2	3/1	3/15	---										
ID limitations with current system	2	3/1	3/15	---										
Estimate costs for NFIRS 5.0 (hardware, software, staff, materials)	2	3/1	3/15	---										
Contract information providers/partners	4	3/1	4/1	---										
ID marketing requirements	4	3/1	4/1	---										
ID training requirements	4	3/1	4/1	---										
Perform cost/benefit analysis	4	3/15	4/15	---	--									
Prepare recommendations/report	2	4/15	5/1		---									
Obtain approval to implement NFIRS 5.0	M		5/1			M								
REQUEST FOR PROPOSAL														
Select type of system (custom/off-the-shelf)	4	5/1	6/1			---								
Determine hardware architecture	4	5/1	6/1			---								
Prepare statement of work (functional description, hardware, data dictionary, edits, logic flow, file transfer, inputs, outputs, installation issues, maintenance issues and acceptance issues	6	5/1	6/15			---	-							
ID potential vendors	2	6/1	6/15				-							
Release RFP	M		6/15				M							
Bidders conference	M		7/1					M						
Select vendor	M		8/1						M					
IMPLEMENT NFIRS 5.0														
Refine plan	2	8/1	8/15						---					
Establish system policy, procedures	4	8/1	9/1						---					
Implement marketing plan	4	8/1	9/1						---					

TABLE 4-4. Sample Implementation Action Plan (Sheet 2 of 2)

OBJECTIVES/TASKS	DURATION (WEEKS)	START DATE	END DATE	3/1	4/1	5/1	6/1	7/1	8/1	9/1	10/1	11/1	12/1	1/1
Define data conversion plan	4	8/1	9/1						---					
Order, install hardware	6	8/1	9/15						---	---				
Obtain/develop NFIRS 5.0 software	10	8/1	10/1						---	---				
Develop test/acceptance plan	4	9/1	10/1							---				
Implement training plan	4	9/11	10/1							---				
Test/modify system	4	10/1	11/1								---			
Train users	6	10/15	12/1							---	---	---		
System operational	M		1/98										---	
MAINTENANCE/FOLLOW-UP														
Implement QA/QI														---
Increase participation														---
Conduct special studies														---
Generate reports														---
Refine policy and procedures														---

Section 5

STANDARD USFA SOFTWARE IMPLEMENTATION GUIDELINES

State Software

The United States Fire Administration has developed a standard software package which states may use to implement the NFIRS 5.0 standard described in this specification. Entities that choose not to develop their own NFIRS 5.0 compliant software may use the USFA provided standard software. The USFA software package consists of the following software components:

Data Entry Tool

The USFA Data Entry Tool provides the user the ability to enter, validate and maintain NFIRS 5.0 compliant incident information. The software can be used by departments to enter incidents and by the state NFIRS program manager to enter paper incidents and to manage the state database of reported incidents.

The Data Entry tool supports all paper forms associated with the national standard. In addition, the tool includes support for a number of options that provide states and local departments the ability to setup information outside the national standard. This includes the following:

Plus+ One Codes: Every coded field included in the national standard allows for one additional level of specificity, definable by the state. For example, if the national standard for a code is three digits, a fourth digit is provided for the states to provide more specific responses.

State and Local Information: To encourage states and local fire departments to participate, additional state and local fields may be captured using the Data Entry Tool. (Note: This information needs to be setup in the system using the Program Administration Tool, which is discussed below).

Special Studies: Special Studies track specific coded responses for information that is captured only for a specific period of time. These studies may be performed at the national, state and/or local level. This information can be setup and maintained using the Data Entry tool.

Fire departments interested in using the USFA standard data entry software must contact their state NFIRS program manager to see if the standard USFA software will be supported by their state. States choosing to provide the standard USFA data entry software to their departments must provide all technical and help-desk support for the software. If states lack resources to provide software support they may choose to implement other software options.

Data Validation Tool

One of the key objectives of the new NFIRS was to provide validation of incident information against the national standard at the earliest possible point in the reporting process, regardless of the tool used to enter the incident information. If the information is entered via the USFA Data Entry Tool, validation is automatically performed as the information is being entered.

For those choosing to enter incident information via 3rd party or custom systems, the USFA Data Validation Tool can be used to validate a delimited flat file containing the incident information. These delimited flat files will serve as the lowest common denominator between the national NFIRS tools and other NFIRS 5.0 compliant systems.

The process of validating incident information begins by reading all the records in the delimited flat file associated with a particular incident exposure. If all records are read successfully, this information is then validated against all codes and rules defined at the national level, as well as any additional state and local information requirements.

Data Conversion Tool

Many states and local fire departments will continue to report incidents using the NFIRS 4.1 standard. Another key objective for the new system is the ability to store and report on information entered in both 4.1 and 5.0 compliant systems. The new NFIRS 5.0 data structure will support the storage and reporting of NFIRS 4.1 compliant data. This data can be validated after entry and before transmission to the next level of the reporting process, using a process similar to that used in the USFA Data Validation Tool. NFIRS 4.1 data will go through the following conversion/validation processing as part of the NFIRS 5.0 system.

- NFIRS 4.1 data will be mapped to the NFIRS 5.0 format
- NFIRS 4.1 data will be marked as 4.1 data
- NFIRS 4.1 data will be validated against 4.1 rules

Program Manager Administration Tool

The new NFIRS 5.0 system is a dynamic, rules based system, which provides for state and local information needs. NFIRS Program Managers can use the USFA Program Manager Administration Tool for two main purposes.

First, this tool is used to enter and maintain state and local information requirements, including the following:

- Plus+ One Codes
- State Specific Rules and Actions
- State and Local Information
    - Coded Information
    - Numerical Information
    - Textual Information
    - Date/Time Information

Second, this tool is used by states to "Release" their information within the national database for national analysis. All participating states are given ultimate control over when their information can be used for national analysis. In an effort to encourage states to send their information more frequently during the year, and as a safeguard for states who opt to store all their incident information on the national database, each state is responsible for releasing their information for national analysis. Two key points should be noted in reference to releasing incident information.

- Only valid incidents may be released for national analysis.
- Releasing incidents does not include sensitive information (names, addresses, etc.). For details on security levels for sensitive information fields See "System Field Security Levels" on page 112.

System Administration Tool

The system administration tool is used for the day-to-day technical operation of the NFIRS 5.0 system. This tool is used for the following functions:

- Maintain users and user groups.
- Assign NFIRS service permissions to user groups.
- Manage NFIRS services.
- View system performance statistics.

Reporting Environments

The NFIRS 5.0 system offers three different reporting environments, designed to accommodate the various needs of different users within the NFIRS community; the reporting environments are as follows:

- FEMA Intranet Reporting.
- WWW Internet Reporting.
- Direct Data Access (ODBC) Reporting.

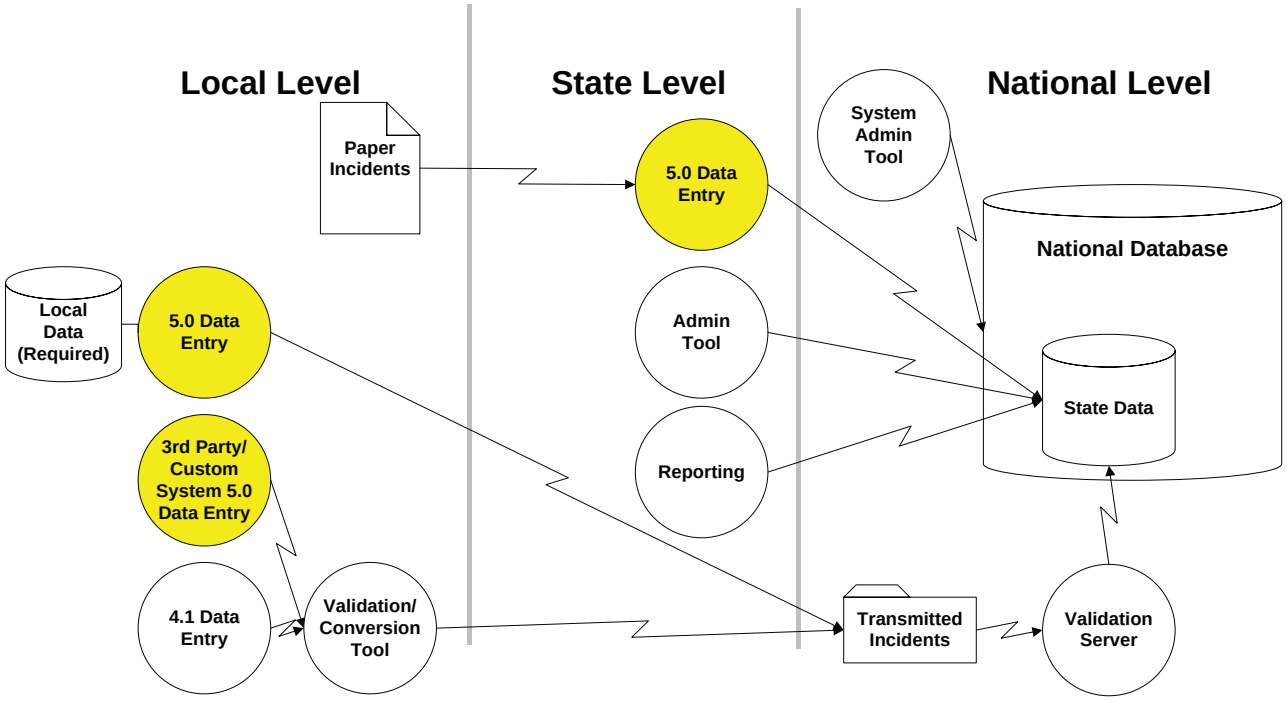
Implementation Options

For states choosing to use the Standard NFIRS 5.0 software there are two implementation options:

Implementation Using National Database

States may choose to use the FEMA National Database Server as their primary storage for incident information. Each state database resides in its own protected area on the FEMA server. Hardware and database maintenance, backups and system performance handling is performed by FEMA and USFA. Database management is done via the FEMA WAN by the state NFIRS program manager using the software components described above. These system software components are part of standard, USFA provided client software which resides on a computer in the state NFIRS program office. If data entry occurs at the state level, incident information may be entered directly into the national database via the NFIC Data Entry Tool. This entry may be accomplished only via the FEMA WAN. Local data entry, for a state which has implemented the NFIRS 5.0 System using the national database requires the use of a local database when entering information via the NFIC Data Entry Tool.

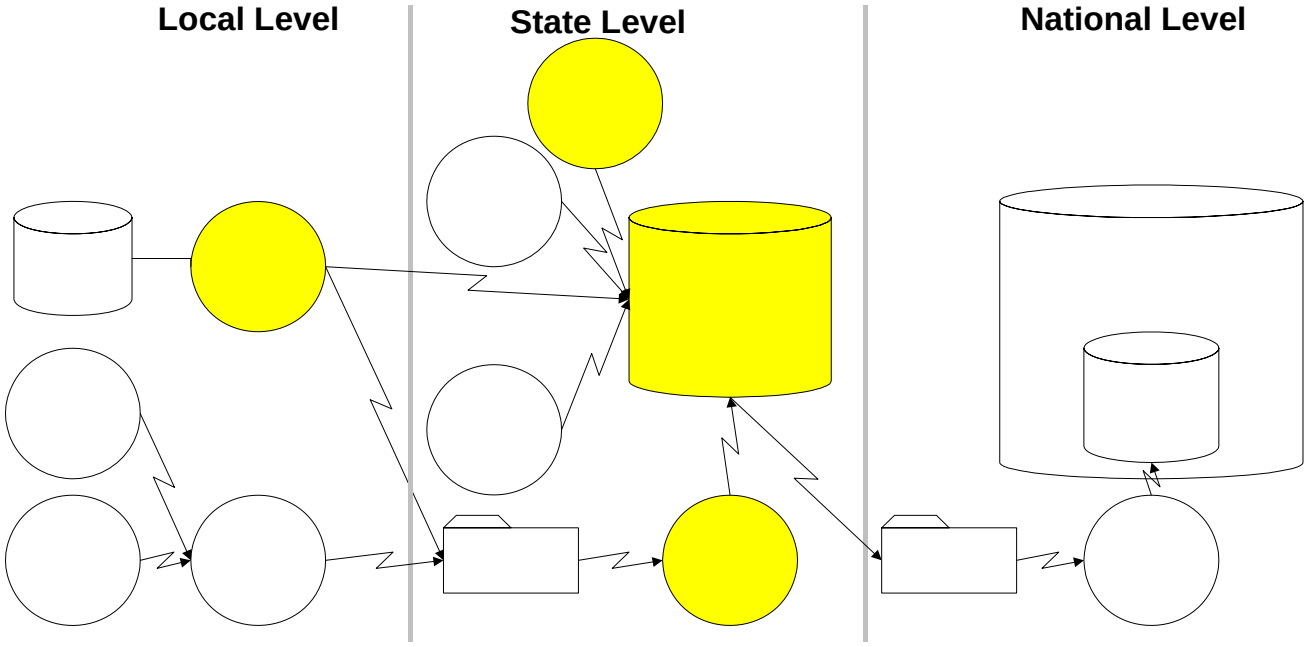
FIGURE 5-1. National Database Implementation Flow



Implementation Using State Database

The second option available to states is to allow states that desire a local version of the NFIRS 5.0 system access to the various system components for local implementation. This will require a local installation of the national Server based components and the use of an ORACLE database. States that choose this option will be required to provide their own hardware, disk storage, hardware maintenance, ORACLE Database Administrator (DBA), ORACLE maintenance and database backups. This step in implementation will occur only after the various components are determined to be stable under option one above. The following diagram illustrates this option:

FIGURE 5-2. State Database Implementation Flow



States that decide to develop their own state level software using this specification as a guide must use the second option described above with the following additional differences:

- The state must develop its own system and client software components.
- The state may choose to use a database other than ORACLE and transmit incidents through the Open Database Connectivity Standard (ODBC) or by using the standard Flat Transaction File format.

Hardware and Software Implementation Requirements

PLEASE NOTE:These requirements are subject to change pending final release of this specification!

National Fire Data Center Hardware and Software

At the national level, database sizing and usage estimates were used to specify the national database and web server. Database estimation factors included the following:

- National database server slated to hold 7-9 million incidents per year for the first three years.
- EMS incidents will total 80% of all incidents nationwide.
- 15,000 Fire Service casualties per 1,000,000 Fires.
- 15,000 Civilian casualties per 1,000,000 Fires.
- Database overhead for indices, views, etc. estimated at 100% raw data size.

From these estimates, the following hardware and common off-the-shelf software (COTS) were chosen for the national database server.

TABLE 5-1. Database Server Requirements

DATABASE SERVER	PROCESSOR	MEMORY	OPERATING SYSTEM	STORAGE	COTS
Sun Microsystems Enterprise Server 4000	2 *250 MHz CPU	512 MB per CPU	Solaris 2.5.1	75.6 GB (RAID-5 configuration) 72-144 GB 4mm Tape Autoloader	Oracle 7.3.4 JDK 1.1.4

In addition to the national database server, a national NFIRS Web Server was specified for reporting and FTP purposes. The following hardware and COTS were chosen for the national NFIRS Web Server.

TABLE 5-2. Web Server Requirements

WEB SERVER	PROCESSOR	MEMORY	OPERATING SYSTEM	STORAGE	COTS
Compaq 2500 Server	2 *200 MHz Pentium CPU's	160 MB	Windows NT Server 4.0 (Service Pack 3)	Primary: 9.1 GB Wide-Ultra SCSI Backup: 4/8 GB DAT Tape	JDK 1.1.6 (or better) Visigenic's Visibroker for Java ORB (v3.2) Visigenic's Secure Socket Layer (SSL) Service Visigenic's Gatekeeper

TABLE 5-3. NFIRS Application Server Requirements

NFIRS APPLICATION SERVER	PROCESSOR	MEMORY	OPERATING SYSTEM	STORAGE	COTS
Three (3) Compaq Deskpros	233 MHz Pentium CPU	64 MB	Windows NT Server 4.0 (Service Pack 3)	Primary: 9.1 GB Wide-Ultra SCSI Backup: 4/8 GB DAT Tape	JDK 1.1.6 (or better) Visigenic's Visibroker for Java ORB (v3.2) Visigenic's Secure Socket Layer (SSL) Service Visigenic's Gatekeeper

State, Metro, and Local Hardware and Software

Depending on which components of the NFIRS 5.0 system are to be implemented at the state level and the volume of incidents processed by that state, different hardware and COTS minimum requirements apply. Please note that these hardware and software requirements are estimates. States should discuss their specific needs with the USFA NFIRS 5.0 Implementation Team.

TABLE 5-4.

NFIRS CLIENT TOOLS - CLIENT OPERATION / NETWORKED MODE					
PROCESSOR	MEMORY	OPERATING SYSTEM	STORAGE	COMMUNICATIONS	REQUIRED COTS
120 MHz Pentium, Minimum 233 MHz Pentium or Better - Recommended	32 MB - Minimum 64 MB - Recommended	Windows 95-B, 98 - Minimum Windows NT 4.0 Workstation - Recommended	30 MB Available Hard Disk	28,800 Kbps Modem - Minimum 56K (V.90) bps - Recommended	TCP/IP Internet Connectivity

TABLE 5-5. Database Requirements (Less than 3,000 Incidents per Year)

NFIRS CLIENT TOOLS AND LOCAL DATABASE - CLIENT OPERATION / STANDALONE MODE (Less than 3,000 incidents per year)					
PROCESSOR	**MEMORY**	**OPERATING SYSTEM**	**STORAGE**	**COMMUNICATIONS**	**REQUIRED COTS**
120 MHz Pentium - Minimum 233 MHz Pentium or Better - Recommended	32 MB - Minimum 64 MB - Recommended	Windows 95-B, 98 - Minimum Windows NT 4.0 Workstation - Recommended	70 MB Available Hard Disk	28,800 Kbps Modem - Minimum 56K (V.90) bps - Recommended	TCP/IP Internet Connectivity Microsoft Access 97 32-bit ODBC (part of Access install)

Table 5-6. Database and Server Requirements (Less than 10,000 Incidents per Year)

NFIRS DATABASE AND SERVER WITH CLIENT OPERATIONS IN NETWORKED MODE (Less than 10,000 incidents per year)					
DATABASE					
PROCESSOR	**MEMORY**	**OPERATING SYSTEM**	**STORAGE**	**COMMUNICATIONS**	**REQUIRED COTS**
166 MHz Pentium - Minimum 300 MHz Pentium or Better - Recommended	64 MB - Minimum 128 MB - Recommended	Windows NT 4.0 Server	4.1 GB Available Hard Disk	Network Connectivity	Oracle 7.3.4 Microsoft Access
APPLICATION SERVER (Minimal 1; Recommended 2)					
PROCESSOR	**MEMORY**	**OPERATING SYSTEM**	**STORAGE**	**COMMUNICATIONS**	**REQUIRED COTS**
166 MHz Pentium - Minimum 300 MHz Pentium or Better - Recommended	64 MB - Minimum 128 MB - Recommended	Windows NT 4.0 Server	30 MB Available Hard Disk	Network Connectivity	Visigenic's Visibroker for Java ORB (v3.2) Visigenic's Secure Socket Layer 3.2 (SSL)* Visigenic's Gatekeeper** Netscape Server 3.5.1 or Microsoft IIS***

* Optional if Internet transmission will be used
** Required for Server Side Firewall Negotiation
*** May use existing web servers

TABLE 5-7. Database and Server Requirements
(Greater than 10,000 incidents, But Less Than 1,000,000 Incidents per Year)

NFIRS DATABASE AND SERVER WITH CLIENT OPERATIONS IN NETWORKED MODE (Greater 10,000 incidents per year but less than 1,000,000 incidents per year)					
DATABASE					
PROCESSOR	**MEMORY**	**OPERATING SYSTEM**	**STORAGE**	**COMMUNICATIONS**	**REQUIRED COTS**
200 MHz Pentium - Minimum 300 MHz Pentium or Better - Recommended	128 MB - Minimum 256 MB - Recommended	Windows NT 4.0 Server	9.1 GB Available Hard Disk - Minimum 3 4.1 GB Hard Drives (Raid 5 configuration) - Recommended	Network Connectivity	Oracle 7.3.4
APPLICATION SERVER (Minimal 1; Recommended 2 or more)					
PROCESSOR	**MEMORY**	**OPERATING SYSTEM**	**STORAGE**	**COMMUNICATIONS**	**REQUIRED COTS**
200 MHz Pentium - Minimum 300 MHz Pentium or Better - Recommended	64 MB - Minimum 128 MB - Recommended	Windows NT 4.0 Server	30 MB Available Hard Disk	Network Connectivity	Visigenic's Visibroker for Java ORB (v3.2) Visigenic's Secure Socket Layer 3.2 (SSL)* Visigenic's Gatekeeper** Netscape Server 3.5.1 or Microsoft IIS***

* Optional if Internet transmission will be used
** Required for Server Side Firewall Negotiation
*** May use existing web servers

TABLE 5-8. Database and Server Requirements (Greater than 1,000,000 Incidents per Year)

NFIRS DATABASE AND SERVER WITH CLIENT OPERATIONS IN NETWORKED MODE (Greater than 1,000,000 incidents per year)					
DATABASE					
PROCESSOR	**MEMORY**	**OPERATING SYSTEM**	**STORAGE**	**COMMUNICATIONS**	**REQUIRED COTS**
2 or more 200 MHz Pentium - Minimum Multiple 300 MHz Pentium or Better - Recommended	128 MB per CPU - Minimum 256 MB per CPU - Recommended	Windows NT 4.0 Server or Solaris	25 GB Available Hard Disk - Minimum 1 9.1 GB Hard Drive (System) 5 9.1 GB Hard Drives (Oracle) - RAIDE 5 configuration	Network Connectivity	Oracle 7.3.4 Oracle Parallel Query Option
APPLICATION SERVER (Minimal 2; Recommended 3 or more)					
PROCESSOR	**MEMORY**	**OPERATING SYSTEM**	**STORAGE**	**COMMUNICATIONS**	**REQUIRED COTS**
2 or more 200 MHz Pentium - Minimum Multiple 300 MHz Pentium or Better - Recommended	64 MB per CPU - Minimum 128 MB - Recommended	Windows NT 4.0 Server or Solaris	30 MB Available Hard Disk	Network Connectivity	Visigenic's Visibroker for Java ORB (v3.2) Visigenic's Secure Socket Layer 3.2 (SSL)* Visigenic's Gatekeeper** Netscape Server 3.5.1 or Microsoft IIS***

* Optional if Internet transmission will be used
** Required for Server Side Firewall Negotiation
*** May use existing web servers

Pre-Implementation Activities Guide

Prior to the implementation of the NFIRS 5.0 system, there are a number of activities that need to take place. The following are pre-requisites in order to install and implement the 5.0 system regardless of software development or configuration choices.

- Assemble implementation team
- Acquire and install appropriate hardware and software
- Inform software vendors of any state/local requirements
- Establish appropriate network connectivity
- Train system and program administrators
- Assemble specific data requirements
- Plus-one codes
- State and local data requirements
- Additional validation rules
- Train end-users on data entry
- Setup end-user support system
- Reproduction and distribution of materials