

INSPECTION PRACTICES AND PROCEDURES

TERMINAL OBJECTIVES

The students will be able to:

1. *Describe the characteristics of an outstanding inspector.*
2. *Identify the steps to follow in conducting a fire prevention inspection.*

ENABLING OBJECTIVES

The students will:

1. *Identify their basic role in the code enforcement process.*
 2. *Describe the traits fundamental to a fire prevention inspector.*
 3. *Explain the systematic process for conducting a fire prevention inspection.*
 4. *Identify basic code deficiencies and methods to correct them.*
 5. *Explain the importance of maintaining high ethical standards as a fire prevention inspector.*
-

YOU'RE PART OF THE SYSTEM

Whether you recognize the fact or not, as a fire prevention inspector you are now a part of a code enforcement system. This system has evolved over the years into a powerful mechanism which, when used in the right way, greatly benefits the communities we serve.

A code enforcement system is the process a city, county, or jurisdictional authority uses to manage or enforce compliance with legally adopted codes and ordinances.

Until the 20th century, buildings in the United States tolerated excessive use of highly combustible materials put together without much regard for protection of life or property from fire. Large individual buildings housing vast combustible stocks under one roof; lack of firewalls and vertical cutoffs; wood shingle roofs; and other unsafe factors that contributed to rapid spread of fires were characteristic. In many parts of the United States, seasonal droughts and high winds aggravate fire conditions and result in area conflagrations that contribute substantially to the overall high national fire losses.

The *Municipal Fire Service Workbook* notes that "almost 95 percent of all jurisdictions with populations over 5,000 are covered by some kind of code (building, electrical, fire safety, housing, boiler, or mobile home)." The report notes that in towns with populations under 5,000, the incidence of fire and fire loss per capita is disproportionately high. It further notes that towns or cities which invest more in prevention activities have a relatively low threat of fire incidence.

A good code enforcement system tries to accomplish a range of objectives. It

- reduces risks of hazards;
- provides improved fire-safe structures;
- reduces fire exposure when a fire does occur;
- minimizes fire deaths and injuries;
- reduces hazards for firefighters when a fire does occur;
- controls inherent hazards that cannot be eliminated;
- promotes a more stable community (jobs, confidence, trust, etc.);
- minimizes fire insurance costs;
- improves image of community;
- maintains or improves community's economic structure;

- increases community awareness of fire safety;
- makes code enforcement easier (previous hazards/ violations); and
- balances the cost of fire protection between the public and the private sector.

It is accurate to say that the knowledge of your community's makeup will enhance effective enforcement. In today's society, the role of the code official is no longer an isolated function. Code officials are becoming more active and involved every day.

For effective code enforcement, not only knowledge of the physical structures in your community and department is necessary. In today's complex society, an inspector needs to be very sensitive to many interrelated and often conflicting values that permeate the community. Here we can only point out a handful of the values or interests that affect some groups. But these will affect the code enforcement system to a great degree.

The Citizens:

- What is their attitude toward the fire department, and specifically, fire prevention?
- What is the education level of the community?
- Are they willing to bear some of the costs of fire prevention?
- What is the ethnic makeup, and how does this affect fire prevention?
- What is the age of the population?

The Politicians:

- Is the prevailing climate progressive or traditional?
- Who has the real power: the elected officials or some other groups in the community?
- Are the politicians more interested in job security than in governing?

The Fire Service:

- Is it progressive or traditional?
- Does it enjoy public support?
- How visible are fire prevention activities?
- Is there an inservice inspection program?
- Does recruit training expose all new members to fire prevention issues?

The Business Community:

- Is the economic climate healthy?
- How much does it influence the governing powers?
- Is the power base united or fractured?
- Which are the more powerful special interest groups?
- Which persons are the real shakers and movers?

These questions are the tip of the sociological iceberg. As an inspector, you cannot possibly find answers to all these questions, much less those below the surface. But they represent some of the issues that will affect your job now that you are part of the code enforcement system.

Numerous other groups have a direct or indirect influence on how effective an inspector is in the community. Some of these include building officials, planners, planning groups, and environmentalists. The goal is not to name them all but to make inspectors aware that efforts to influence their work will come from many directions. It is important to know about these efforts and to be prepared to meet and deal with them.

You are now a member of the code enforcement system. This module is designed to help you understand how you use the system and what procedures to follow to help you carry out your code enforcement duties most effectively. It will help you prepare to enter the system and provide you with some tools to use as you grow in the system as an inspector.

This course will not make you an expert. Only time, study, and experience can make that happen. The goal here is to help you understand how you can start developing into a competent code enforcement inspector.

AN OUTSTANDING FIRE PREVENTION INSPECTOR

The modern fire prevention inspector provides an invaluable service to the community. The most effective inspectors possess a number of traits that set them apart from the rest. These traits include, but are not limited to, the following:

- a strong commitment to good public relations;
- a positive attitude;
- a customer-service orientation;
- professional appearance, image, demeanor;
- a desire to make educating customers an essential part of the code enforcement process;
- salesmanship;
- a thorough knowledge of the codes one is enforcing; and
- a thorough knowledge of how to conduct an inspection.

So far this course has not talked much about the inspection process. It has focused on the elements of the fire protection system. But since the inspector is key to the system, we need to discuss these traits in some detail. The order of discussion is not ranked by importance.

A Strong Commitment to Good Public Relations

How the inspector comes across during an inspection is essential to the success of the inspection. Being tough because you have the law on your side does not work in this day and age. Being courteous, polite, and even friendly will go a long way toward a successful inspection. If an inspector is curt, overly businesslike, and unfriendly it will have a similar effect on the representative of the occupancy being inspected.

From a public relations standpoint it is essential that the inspector explain the legal reasons for the inspection and the value (fire and life safety) of compliance. Assure the company representative that every effort will be made to address only those situations that must be dealt with, and that

compliance now could result in greater savings in the future through the prevention of a fire and possible injury or loss of life.

A Positive Attitude

An inspector who approaches an inspection with a positive attitude is one step closer to success. None of us likes to deal with negative individuals. Likewise someone experiencing a fire safety inspection (who already may view this as a negative experience) doesn't want someone with a negative attitude pointing out all the problems in the occupancy.

An inspector who comes across as positive (not arrogant) and confident and who expresses a sincere desire to help bring the occupancy into fire-safe compliance will most likely end up with both a safer occupancy and a satisfied customer.

A Customer-Service Orientation

Believe it or not, when we conduct an inspection the people we deal with are our customers. We are called the fire service because service is what we provide. Whether we are fighting a fire, providing medical aid, or conducting an inspection, the element for which we are recognized is the service provided.

By treating these people as our customers, and in the manner we would like to be treated, we are establishing this customer-service orientation. Surely, you have been in a restaurant where the servers treated you as if they were doing you a favor serving you the food you ordered: did you like it? Likewise, if an inspector treats an inspection as if it is drudgery, or a favor to the customer rather than a service, the customer will not like it either.

So remember, on the inspections you perform, these are tax-paying customers you are dealing with. Treat them as customers and you probably will get a great deal of cooperation, and end up with a successful inspection with timely compliance.

Professionalism

The inspector's image is one of the most important aspects of the fire inspection. People still "judge a book by its cover." The public, the

property owner, and your peers all will form a first impression, greatly influenced by your "cover." Remember, "**you** are the fire inspector!" Note the emphasis on the word "you." Take it personally. Your image reflects not only on you, but also on your department or agency. Take pride in the image you present.

The image of the fire inspector is conveyed in basic ways through three of the body senses: sight, hearing, and touch. The inspector should begin building an image first by sight. Whether you wear a uniform or plain clothes your appearance leaves a lasting initial impression of who you are and what you are all about.

Whichever form you use, the basic grooming rules are the same. Your clothing should fit properly, be unfrayed, clean, and pressed. Shoes should be clean and shined. Your teeth as well as your breath should be clean. Hair should be clean and neat. Hands and nails should be clean.

The best judge of these features may not be you. Before leaving on an inspection, have a colleague be your mirror. The public will be influenced by your appearance. The inspector should remember that his/her appearance, whether intended or not, reflects upon the agency or department, even when off duty. Remember, "**you** are the fire inspector." Be proud of that fact and display yourself professionally at all times.

The second sense involved is hearing. As you speak, others hear and judge. The fire inspector must be capable of public speaking. The ability to carry on a smooth and easy flowing conversation is vital to inspection success. The inspector is a salesperson trying to sell fire prevention and fire safety. The ability to speak well to convince owners that these recommendations for fire safety are in their best interest is an important skill. Property owners need to be "sold." If they reject these ideas, then obviously they have not been sold. While trying to sell, the inspector does not need to be pushy. You should give the impression of wanting to work with the property owner to establish the **best** fire safety levels **possible**.

As mentioned, the spoken word leaves an impression. Because of this the inspector needs to be well versed in the code. Study and become knowledgeable in the code. But the ability to say, "I do not know, but will get the answer," is also a desirable part of the vocabulary of an inspector. Do not be embarrassed because you do not know. There are many

resources to seek for the answers, and you can find them and report back. No one knows all the answers, especially someone new to this highly technical field.

Also, consider the impression you make during a telephone conversation and in face-to-face interaction. Speak out, be sharp, clear, and firm. Do not slur your speech or mumble. Know what you are going to say and say it with confidence. Your speech has four essential fundamentals: enthusiasm, confidence, preparation, and presentation. Each relies on the others for the favorable impression.

The third sense is that of touch. When you meet the owner, extend a "proper" handshake: the one that grips the other hand firmly, but not hard enough to squeeze rings through fingers. Shake two or three times and release. You want to make an impression with a handshake that touches the person and says, "I'm glad to meet you." The handshake also conveys the image of confidence and competence.

Another factor that affects the image of the inspector is the appearance of the vehicle. Remember, people will be observing you as you arrive. Your vehicle should be neat, clean, and bright in appearance. A sharp-looking inspector getting out of a dirty vehicle can destroy the image. Finally, after you have been observed, heard, and touched, you will be judged by how you conduct the inspection. Your attitude and confidence in yourself will show. You should be doing a job you enjoy and want to do. If not, find another job, because in this occupation your attitude will make the difference between compliance or noncompliance. You need people to comply. That is what saves lives and property.

Education as an Enforcement Tool

Have you ever asked "why" when someone in authority has told you to do something and you do not know the "why?" How do you think your customer feels when you point out a fire safety violation but you do not explain "why" it is a violation?

By taking a little more time to explain the reasons why a violation is a violation, you are educating your customers and, it is hoped, eliminating future similar violations. Time and again inspectors have reported a

customer comment of "I didn't know that," or "now I understand," when the rationale of a violation was clearly explained.

Educated customers will talk to other potential customers who in turn may take corrective action before being told to. The more information we inspectors can communicate, the better job we can do and the more effective we can be. Code enforcement is really code education. Enforcement should come into play only when we cannot get willing compliance through education and cooperation.

Salesmanship

The ability to sell fire prevention and fire safety is a fundamental part of the inspector's job. Essential to the success of selling is believing in what you are selling and communicating this believability. If you don't believe it, neither will your customers.

The ability to sell is directly related to your knowledge of the product or end result you want to achieve. Being prepared by knowing the hazards common to the occupancy you are inspecting, and communicating them to your customer is a major part of this selling effort. Through your preparation and knowledge you can sell the owner on what the violation is, the hazard it presents to the safety of the building and the occupants, why it must be corrected, and how this can be accomplished. This influences the way the inspector is selling the product, a fire-safe occupancy.

Knowledge of the Codes

As a new inspector there is no expectation that you have a thorough knowledge of the codes you will enforce. In fact, if you are really new you may have had little or no exposure to your jurisdiction's codes. Do not be alarmed. This is a highly technical field that requires years of experience and study; you almost can be guaranteed you will never achieve full proficiency. Inspectors must continue to study and do research throughout their careers.

The purpose of this course is not to teach you the codes, but to help you understand the principles of fire prevention, code enforcement, and how to conduct the related inspection.

With this knowledge you can begin the process of learning how to study your codes and properly apply them during an inspection.

Ethics and the Fire Prevention Inspector

A course on the responsibilities of the fire prevention inspector would not be complete without a brief discussion on ethics. Ethics is the code of morals of a particular person. Ethics includes many things that affect how one views and deals with the world. Values like honesty, justice, fairness, courtesy, respect for life, to name just a few, all relate to ethics. Most professions have a code of ethics--a right way to function. Fire prevention is no different.

One of the underlying purposes of codes is to see that general fire safety is observed. These laws have established correct procedures and proper rules of conduct. If an individual's rights are not respected to the fullest extent of the law, then the code can be declared null and void. When we develop the inspection program, we must include the traits of leadership: honest motives, correct attitudes, and practical wisdom. Deep down, we need principles to guide us during the discharge of our duties. We must maintain our integrity and discharge our duties with fairness and impartiality at all times. We must avoid any association with enterprises of questionable character.

Questions and conditions arise from time to time regarding what may or may not be ethical. Many states and local communities have, by law, established ethical standards that government employees must follow during the course of their employment. The following questions may be used when determining if a decision on an action you are about to make or take is an ethical one.

- Do I feel embarrassed, guilty?
- Do I object to my decision being published?
- Am I willing to risk criticism for my decision?
- Could I justify and defend my decision to my greatest critics and enemies?
- Have I considered everyone who will be affected?

- Does it feel right?
- How will my decisions appear to others?
- Is there an appearance of impropriety?

Code of Ethics for Fire Marshals

On May 17, 1966, the Fire Marshals Association of North America adopted a code of ethics. The code established conduct for the fire marshal's professional life, relations with employees, relations with other fire marshals, and relations with the public. The code of ethics for relations with the public, as published by the Fire Marshals Association of North America, reads as follows:

Relations With the Public

The fire marshal will endeavor to extend public knowledge of fire protection and will discourage the spreading of untrue, unfair, and exaggerated statements regarding fire protection. He will avoid any endorsement of any specific product, trade name, or company.

He will have due regard for the safety of life and health of the public and employees who may be affected by the work for which he is responsible.

He will express an opinion only when it is founded on adequate knowledge and honest conviction while he is serving as a witness before a court, commission, or other tribunal.

He will not issue ex parte statements, criticisms, or arguments on matters connected with public policy which are inspired or paid for by private interests, unless he indicates on whose behalf he is making the statement.

He will refrain from expressing publicly an opinion on a fire protection subject unless he is informed as to the facts relating thereto.

He will act with fairness and justice with the public when dealing with fire protection. He will never act officiously or permit personal feeling, prejudices, animosities, or friendship to influence his decisions.

He will disclose no information concerning the business affairs or technical processes to the public without their consent.*

*Reprinted with permission from the Fire Marshals Association of North America 1990-1991 Directory, ©1990. National Fire Protection Association, Quincy, MA 02269.

As this section details, fire prevention inspectors must carry out their duties honestly and fairly and not allow illegal or immoral influences to alter the decisionmaking process. All persons who take on fire inspection duties have, in essence, agreed to carry out their assigned duties within the framework of the codes or laws they are charged with enforcing and to do so to the very best of their ability.

If all inspectors keep this in mind as they perform their tasks the question of unethical conduct cannot be raised.

Liability

Everyone in the field of fire inspections has a concern for the liability assumed when doing the job. As long as you are conscientious and perform your duties to the best of your ability and training, you need not be concerned.

Anyone can be sued--that's a fact of life. But nearly every jurisdiction has protection under the law for its employees who perform inspection duties, as long as they are done within the framework of their responsibility and with an honest effort. Malfeasance and gross negligence generally are considered the only two situations where an inspector could be found individually liable.

If you have questions about how your jurisdiction handles inspector liability, check with your fire marshal or the legal counsel serving your jurisdiction.

As you can see there is more to inspecting and being an inspector than just code knowledge and inclusion in the enforcement system. Who you are, how you present yourself, and your commitment to professionalism, public relations, and education all play a vital role in how effective you will be. As valuable as code knowledge and proper inspection procedures are, without the traits and values we have just discussed an inspector may find the job extremely difficult.

Now it is time to talk about the inspection process itself because this is where all that we have been discussing so far comes together. Conducting the inspection requires a careful preparation, attentive examination of the premises, and a careful followup. We will look at each of these in great detail.

CONDUCTING A SYSTEMATIC INSPECTION

It is extremely important to understand that an inspector, especially a new inspector, can become proficient only through extensive training and experience. Time alone is not a teacher. To become an outstanding inspector it is imperative that you study your profession, use each experience as a learning tool, and build on those experiences.

Preparation for the Inspection

Preparation for an inspection is almost as important as the inspection itself. A well-prepared inspector will be able to conduct a thorough, efficient, and technically correct inspection. Preparation minimizes the time it takes to conduct an inspection and shortens the time the customers must devote to the process--allowing them to get back to other important responsibilities.

The first step in preparation is to identify the occupancy(ies) to be inspected. It is important that you become familiar with your jurisdiction's process for scheduling inspections (i.e., annual, semiannual, every other year). If one does not exist it is strongly recommended that you develop one.

The next step in the process is to schedule the inspection. Plan far enough in advance to make it convenient. Once you know what is to be inspected, review the complete inspection history of the occupancy. A look at previous years' inspections will tell you a great deal about problems encountered in the past, how they have been corrected, and how quickly

the corrections were made. If you see a trend of numerous reinspections or very slow compliance you can develop positive strategies for reversing this trend. It is also helpful to look at building plans, if available, to check the construction type, exiting requirements, and the approved occupancy use of the building.

An invaluable resource to anyone conducting inspections is the history of the building or occupancy. Inspection files provide valuable reference materials that tell you what has been observed by previous inspectors. These files always should be available. If not, then develop accurate files and maintain files on all occupancies inspected.

A review of the applicable codes will help when conducting the inspection. Many inspectors have developed quick reference checklists based on occupancy type to use during an inspection. This ready reference highlights the most important codes that must be enforced in a particular occupancy and serves as a reminder to the inspector of what to look for.

Once the code research is completed it is time to get ready for the inspection. You will need some important equipment to do the job right. This may include some or all of the following:

- clipboard and inspection forms;
- graph and note paper, ruler, measuring tape, and measuring wheel;
- pens, pencils, or colored markers;
- hard hat, coveralls, safety shoes, safety glasses or goggles, earplugs;
- flashlight;
- camera;
- reference books, codes;
- Pitot tube and gauges for water flow tests;
- a list of hazards common to this type of occupancy; and
- personal identification (very important if you do not inspect in uniform).

Conducting the Inspection

It is recommended that you arrive at the inspection site a few minutes ahead of schedule. This will allow you to survey the exterior of the

building and help you become familiar with the overall area to be inspected. A few of the things to look for during this survey include the following:

- emergency equipment access;
- building or business address, location, and visibility;
- potential hazardous situations, including blocked exits, unsafe storage of combustibles near the building or close to exterior openings or exits, and combustible storage under exterior stairways;
- construction type;
- location and position (open or closed) of post indicator valves (PIV); and
- location and condition of sprinkler and standpipe connections.

Take notes of what hazards you observe so you can review them with the customer. Include them in your report.

Entry Interview

Now it is time to meet your customer and begin the inspection. Often this is called the "entry interview" because it allows you and your customer to ask each other questions pertaining to the inspection. You may already have answered some when you called ahead to schedule the inspection. But since that time, as you reviewed the file on the establishment, you may have come up with some unanswered questions. This might be the time to ask them, especially if they deal with previous inspections and followup. It is critical that you approach this part of your work in a positive, proactive way. Introduce yourself and show proper identification so the customer knows who you are. Explain that this is a fire safety inspection and that it will benefit everyone by ensuring that this business or occupancy complies with local codes. State that one of the major goals of the inspection is a safer building for occupants, visitors, or customers and that it will reduce or minimize the risk of a fire.

Explain that you are there to help, to answer any questions, to research the answer if you do not know, to explain each violation clearly, and to offer methods or procedures to correct them. Also explain that you will develop and give them a report on the inspection a few days after it is completed.

Ask if there are any questions. Then begin the inspection.

Systematic Walkthrough

As you begin the inspection the most important thing to remember is to inspect all areas of each floor. Systematically proceed to each floor, working from the bottom up or the top down. Having an established system for inspecting so that you do not miss floor areas is the key to the systematic system. Every room, closet, and concealed area should be checked for fire hazards. Any areas that are locked should be unlocked and checked. The building representative can assist you with these needs.

As you inspect each floor make a simple sketch if one is not available. This will help you in remaining oriented once you return to the office to prepare the final inspection report. These sketches also can be passed on for use as preplanning material and to assist in future inspections. Try to get the facility to provide a sketch or floor plan diagram if available.

While conducting the inspection, record your observations and note anything you need to research later in the code.

Here are some broad categories you will need to attend to as you inspect. This list is not a complete one.

Housekeeping

Good housekeeping is plain common sense. You do not need intense training to recognize, almost intuitively, whether or not the housekeeping on the premises is satisfactory. **Cleanliness and orderliness are basic to good fire safety.** If you feel uneasy about the quality of the housekeeping or the general care and management of the property, then pay more attention to hazards management in the facility. Cleanliness is a good tip-off.

Good housekeeping practices--both indoors and outdoors--are needed to control the presence of unwanted fuels, obstructions, and sources of ignition. Certain aspects of housekeeping are a common denominator to most properties whatever their use; others are peculiar to a particular occupancy. It is neither practical nor possible to describe every feature of housekeeping for all occupancies; the alert inspector will visualize hazardous housekeeping situations peculiar to the occupancy being inspected and be prepared to offer recommendations to eliminate them.

Over a period of time, you will develop a sense of what to look for and what is or is not appropriate.

Exitway Maintenance

An inspector always should note how to exit any area of a building being inspected. If you cannot see a way out or easily find an exit, maybe the occupants of the building will not be able to, either.

In most cases exits are marked by lighted exit signs. It is important to check all (illuminated) exit signs to make sure they are working. Next, check to make sure the exit path is clear and unobstructed. Too often storage, trash, tables, or other obstructions line the exit path or are placed in front of or on the other side of an exit door. Here again, some common sense can be used to determine if a violation exists. If the inspector cannot get out, no one else can.

Check doors and locking devices. Depending on the occupancy, different types of locking devices are allowed or disallowed. Be familiar with the requirements for the occupancy being inspected. If there is panic hardware but it is chained, it is pretty obvious there is a problem. If a door marked as an exit has a knob that can be turned to open but is locked on the other side, this is most likely acceptable. But if there is also a keyed deadbolt or chain lock on the door, there is very likely a problem.

Doors should swing in the direction of exit travel and if they lead to an exit stairwell this path must be clear, unobstructed, and lead to the outside of the building.

As you become more familiar with code requirements for different occupancies you will develop a more indepth understanding of exit requirements. The most important thing to remember as a new inspector is "if you can't get out, neither can anyone else in the building." This should alert you to investigate further and see if exiting violations exist.

Storage--Piled Stock

Problems with storage can go from the very simple to the very complex. For the benefit of the new inspector it is important to note that knowledge of enforcing code provisions in the area comes with experience.

The degree of fire hazard found within storage occupancies is governed primarily by the commodities (products) being stored and the storage arrangements employed. Together with the height and construction of the storage building these considerations or factors determine the level of fire protection required.

An inspector inexperienced in dealing with piled storage should note the product being stored, size of the pile (height, width, depth), and proximity to fire protection system (sprinklers). This information will assist you during research of potential code violations and lead to a proper determination of appropriate corrective measures. This is an example of things you note during the inspection that require some postinspection research.

Detection and Suppression Equipment

While conducting an inspection you must look at all fire detection and suppression equipment. Sprinkler system control valves must be in the open position and chained. If not, the system most likely is not operational. Sprinkler and standpipe connections must be clear and free of obstructions. The threads on these connections must be inspected to make sure they are not damaged. Look to make sure paper, bottles, or other debris have not been pushed into these openings. This would cause an obstruction.

Smoke detectors must be kept clean. A visual inspection will give you a good idea if they are working properly. Most detectors have a permanent or intermittent flashing light that tells you if the detector has power and is working.

Make sure that fire sprinkler heads are clean, not painted, and are free of obstructions. If the water cannot reach the area the sprinkler is designed to serve due to storage (boxes, bookshelves, etc.) being too close to the sprinkler heads, it will not put out a fire once it starts. Plants, decorations, and other hangings should not be placed on or near sprinkler heads.

It is not the inspector's responsibility to conduct tests of fire protection systems. These tests should be conducted by qualified or certified individuals trained to perform them. As an inspector you may observe and validate these tests, or receive documentation that the tests have been conducted and what the results were.

An inspector should never open or close valves, activate alarms, or perform other test functions. These actions usually lead to problems for the inspector.

Janitorial, Electrical, and Elevator Room Storage

Out of sight, out of mind seems to be the theory used by people who store any number of potential fire hazards in janitorial, electrical, or elevator rooms. Trash, flammable liquids, combustibles such as boxes and cardboard, and other hazards commonly end up in these rooms.

If they are neatly stored and in appropriate containers, this storage may not be a problem. But if you find open containers or debris spread about or stored close to electrical panels or water heaters, there is probably a code violation.

Most people do not think of these areas as being hazardous so when they say "it's only a janitorial room" and want to pass it by, do not agree. Insist that you look these areas over closely to ensure that there are no inherent hazards.

General Inspection Concerns

In addition to these broad areas of concern, there are other hazards or potential hazards the inspector must look for. Although not all-inclusive, the following sections will give you some basic ideas on what else to look for during an inspection.

Ashes and Sawdust

Emphasize the safe handling and disposal of ashes. Only approved containers should be used in a facility. Once these containers are emptied into an outside container, it is critical to check the ashes and, if necessary,

water them down. This should give the greatest margin of safety. Remember you are selling fire prevention. Explain how fires can be caused by unthinking acts.

Treat large amounts of sawdust to be discarded with respect. Store sawdust only in approved containers that are properly vented. Special emphasis here should be placed on the inspection of commercial and industrial properties. Sawdust that accumulates around or is produced by machinery should be swept on a regular basis. Sources of ignition in the area should be identified and controlled. Also, some areas may be using sawdust to absorb some type of leakage or waste from a particular process. Carefully observe what could be mixed in the sawdust and properly advise the owner how best to handle the situation.

Packing Materials

The quantity and type of packing materials stored in buildings should be of concern to the fire prevention inspector. Stress prohibiting smoking in areas where combustibles or flammable materials are stored. Observation of ignition sources, such as open flames, temporary wiring, overloaded extension wires, etc., needs to be second nature to the inspector; look hard, think how a fire could start in any given area. Another important point to consider with packing materials is not only the fact that they will burn, but that gases will be given off when they burn. Point this out to the owner and note in the report the types of packing material stored and used.

Old Furniture and Paper

You will often find old furniture and paper in remote storage areas, especially in institutions, educational facilities, and office buildings. Old papers and furniture should be discarded unless they are being kept for future use. If this is the case, they should be stored properly. It is the responsibility of the inspector to assist the owner in identifying a safe method to do so.

Cleaning Products

Cleaning products need to be stored and used properly. Some of these products can ignite spontaneously and will burn easily. Flammable cleaning products should be kept in an approved cabinet away from sources of ignition. In the interest of fire prevention, talk with the owner

to be sure such materials are used properly and that no product is being used in an unsafe or unhealthy manner. The old saying, "When all else fails, read the instructions," can very easily apply here. Read the instructions first to help prevent a possible disaster.

Smoking Materials

Smoking is the most difficult ignition source to control. It is a long-accepted social practice and people have become adept at smoking anywhere and everywhere. The problem is compounded by the fact that at times there is a total disregard for the proper disposal of matches, ashes, and butts. Try to instill a proper attitude in the minds of all who are in the facility. This again is selling fire prevention. It is hoped that fire codes already will have restricted smoking when there is an obvious potential danger. If not, explain the problem and work to control or restrict it.

It is difficult to control smoking in high-risk areas such as department stores, barns, shipping rooms, lumberyards, warehouses, etc. Smoking is always dangerous in places where it is not allowed. Check with your local jurisdiction regarding the specific legislation that may have to be enacted regarding smoking in public as well as specific situations, such as elevators. Explain to the owner that you need to indicate and assign smoking areas and times for employees in some industrial and commercial risk areas. Good, substantial ashtrays need to be provided. Post a sign in the area which prohibits smoking. The sign may explain the reason for prohibiting smoking such as "No Smoking--Flammable Vapors." Remember, sell fire prevention, and assist the owner to the best of your ability to bring about good attitudes regarding smoking and the handling of smoking materials.

Waste Cans and Spontaneous Heating

Certain oily wastes, paints, rags, and wiping and polishing cloths can ignite spontaneously. If the heat cannot escape, the material may ignite. The solution is to store oily rags in U/L listed closed metal (safety) containers and remove the material from the building as soon as possible. Paints and other flammable and combustible liquids are to be stored in

U/L listed cabinets. Oily wastes should be stored outside in a safe place until they are removed from the immediate area.

Interior Finishes

Some of the key points in life safety are smoke generation, fuel contribution, and flame spread of the interior finish. Remember to observe the walls, floors, and ceilings for their finishes, coverings, decorations, curtains, etc., in all occupancies. These are usually controlled during building design by the codes; however, people rearrange or renovate after occupancy. These renovations may or may not create new code problems. The wood paneling, the paint, the wall covering, the carpet, and the ceiling tiles all can contribute to fire and life safety problems. You need to study your fire code for the specifics in your area.

In summary, we have only scratched the surface. This brief discussion will, it is hoped, get you started.

Common Hazards by Occupancy

Another way to attack the problem is to look at typical occupancies and list the most common hazards found in each. This method will help you generate a list of areas or items to inspect.

The following are hazards peculiar to different occupancies, and ones you frequently will find violated.

- Multi-unit residences.
 - Blocked exits.
 - Unserved or missing extinguishers.
 - Excessive storage in basement.
 - Clutter in attic, garage, under stairs, heating room.
 - Exit signs lacking or not visible.
 - Accumulation of dust and lint in laundry room.
 - Combustibles next to water heater.
 - Transoms in old buildings (windows over doors).
 - Faulty fire escapes or escapes blocked at ground level.
 - Faulty, untested standpipes.
 - Penetrations in fire separations.
 - Incomplete or missing evacuation plans.
 - Stairway doors blocked open.

- Assembly occupancies.
 - Blocked exits (constant problem).
 - No exit signs; exit lights out.
 - Doors locked during hours of occupancy.
 - Extinguishers not serviced or nonexistent.
 - Overcrowding, no occupant load sign.
 - Aisles not adequate.
 - Candles on tables in unsafe holders.
 - Extension cords and other electrical problems.
 - Decorations (combustible or flammable type).
 - Non-flame-retardant drapes.
 - Smoking problems.
 - Heating hazards.

- Restaurants.
 - Grease accumulation on filters and in ducts.
 - Hood system not serviced, nonexistent, or improperly installed.
 - Exiting problems the same as assembly.
 - Decoration problems the same as assembly.
 - Smoking problems.
 - Cluttered storeroom.
 - Electrical hazards.
 - Heating hazards.
 - Extension cords.

- Warehouses.
 - Fire protection equipment not in service.
 - Overhead doors obstructed by stock.
 - Exits obstructed.
 - Electrical machinery hazards.
 - Extension cords.
 - Flammable liquid storage.
 - Oily rags, etc.
 - Trash and debris.
 - Poor storage practices.
 - Poor smoking practices.
 - Stock obstructing sprinklers.
 - Fire separations violated.
 - Propane- or gasoline-operated lift trucks.
 - Separation and isolation of hazardous materials.

- Hospitals.
 - Fire protection equipment not in service.
 - Extension cords.
 - Concealed smoking by patients.

- Cafeteria hazards.
- Exits locked and blocked.
- Fire separations and doors blocked open.
- Excessive storage of combustibles.
- Emergency generator not tested.
- Sterilizer room cluttered with combustibles.
- Employees smoking in linen storage room.
- Improper storage of gases.
- Improper storage, handling, and use of anesthetics.
- Combustibles next to heating.
- Lack of proper maintenance of heating equipment.
- Evacuation plan outdated, inadequate, or not posted.

- Office buildings.
 - Exiting problems.
 - Extension cords.
 - Extinguishers not serviced or missing.
 - Poor records storage.
 - Wastepaper handling.
 - Smoking hazards.
 - Heating equipment near combustibles.
 - Fire escape maintenance and obstruction.
 - Lack of proper maintenance and testing of fire protection systems.

- Manufacturing.
 - Electrical machinery.
 - Misuse of extension cords.
 - Improper use and storage of flammable liquids.
 - Faulty use and storage of chemicals.
 - Improper use and storage of gases.
 - Blocked and obstructed exterior doors, fire doors, etc.
 - Improper storage of fire protection equipment.
 - Improper maintenance of fire separations.
 - Cluttered storerooms.
 - Unsafe smoking practices.
 - Inadequate aisles and exits.
 - Cluttered storage of business records.
 - Heating equipment problems.
 - Combustibles too close to heating equipment.
 - Spontaneous ignition.
 - Paint spraying operations.
 - Dip tanks with faulty lids, etc.
 - Paint and chemical storage.
 - Inherently hazardous processes.
 - Sparks from welding.

- Inadequate exhausting of vapors, dust, etc.
- Disposal of trash, sawdust, fires, debris.

- Schools.
 - Blocked exits.
 - Chained exits.
 - Exit lights not functioning.
 - Fire protection equipment not maintained.
 - Unsafe chemistry lab (storage and equipment).
 - Flammable liquids such as solvents, paints, cleaners, and duplicating fluids stored in offices, shops, and classrooms.
 - Shop hazards same as "manufacturing."
 - Excessive storage.
 - Lack of fire drills.
 - Non-flame-retardant drapes in auditorium.
 - Extension cords and octopus connections.
 - Combustibles near heating equipment.
 - Improper, older electrical equipment.
 - Chlorine and acid storage for pool.
 - Hazards caused by lab experiments.
 - Spray painting in shops and illegal/unapproved booths.
 - Dip tanks.
 - Welding hazards.

As the last few pages imply, there is no shortage of things to inspect. With time and practice you will become able to pick out the relevant items.

Summary

Take your time during the inspection and be observant. Ask to see all areas of the occupancy. Be methodical and accurate. You do not want to miss any vital details or facts.

If a situation does not look right, check into it to determine its safety. Common sense and good judgment must be used in inspecting existing occupancies. Use the code as a guide. Remember that the purpose of the inspection is to enforce code compliance and leave the place safer than when you first entered it. Report all violations in writing and keep file copies. When identifying a hazard, also identify ways of correcting it according to code.

Some hazards must be corrected immediately. Others can be corrected within a prescribed timeframe.

Remember that you cannot memorize all the codes but you can make sure that reasonable fire and life safety conditions exist.

Completing the Inspection

After you have completed the inspection and before leaving the premises it is important to conduct an exit interview with the customer. Here you want to review the purpose of the inspection--a fire- and occupant-safe building that meets the requirements of local codes. Reemphasize your desire to work with the owner to gain compliance.

Review with the customer those violations that have been immediately identified and can be corrected in the near future. Let the owner know that you will research and evaluate other potential violations and that you will schedule a meeting in the next few days to review the final inspection report.

At this point you should answer any questions the customer may have. For those you cannot answer right away, make notes; assure the customer that you will research the question and get answers right away.

Thank the customer for cooperating. The onsite inspection is now completed.

AFTER THE INSPECTION

Now that the field inspection is completed it is time to develop the inspection report. This is where you review your notes and floor sketches, research the applicable codes, and determine what corrective measures will bring the occupancy into fire- and life-safety compliance. Base all your recommendations on the code.

You also must determine what potential violations to refer to another agency. If you feel there are major electrical hazards to be corrected it may be appropriate to refer these to your jurisdiction's electrical inspection division. If you observed potential health problems (e.g., grease and dirt in kitchen vent systems, or cockroaches or rats in a restaurant) document and refer this information to the health department. As an inspector you have an obligation to take action on obvious health and safety violations even if they do not come under your authority. Find out what kind of referral system your jurisdiction has and use it to the best of your ability.

Do not overlook or ignore these situations; remember your job is fire and life safety, but even more importantly, it is **service** to the people of your community.

Develop your final inspection report and plan to meet with the customer. Provide the customer a copy of the inspection report and, if necessary, walk through the building and discuss where the violations are, why they are violations, and what corrective measures must be taken. Make sure the customer knows that action must be taken as soon as possible, and that fire safety violations cannot be put off for future correction.

The report can be an informal notation in the file or log book, a completed inspection form, or a formal typed report in letter form. All of these will serve the basic purpose of documenting that you conducted an inspection and that you recorded certain data and violations.

There are times when it is advantageous to the fire prevention bureau, fire department, or code enforcement agency to write a formal inspection report. A formal inspection report might be required under the following circumstances.

- If a life hazard exists: nursing home, day-care center.
- If property value is high: large shopping center.
- If there is a large target hazard: warehouse district with mixed storage.
- If there are multiple-hazard processes: hazardous materials storage and refineries.
- If suspicious conditions exist: addition to the interior of a building without modification to the sprinkler system.
- If conflicting conditions occur: retroactive code requirements.
- If multiple copies are needed for board action.
- If the owner or occupant is uncooperative.
- If you anticipate legal action.
- If you have reached a specific agreement with the owner.

When a formal report is written, send a copy to the occupant. The occupant is informed of property violations and recommendations for corrective action at the completion of the inspection. Some jurisdictions also set a timeframe for corrective action.

Writing a Report

The first step in writing a report is taking good field notes. Do this with an inspection form or a simple note pad. You must take notes as the inspection progresses; otherwise it will later be hard to recall some aspects of the inspection. These notes should be made as the information is obtained. One of the basic rules of note taking is that the information be clear and complete. A good point to remember is "When in doubt, write it down."

File these notes or field inspection forms. Provide a backup if anything should happen to the report. This not only can aid you with the report, but also can assist in refreshing memory of a particular inspection. Ordinarily general fire inspections can be conducted, recorded, and reported by using a prearranged inspection form or checklist.

The report should contain general information, specific information, and recommendations. The recommendations must indicate what needs to be done (code section reference), and they must be specific and clear.

Avoid some common errors in report writing. These include the use of personal pronouns. **I, we, me, and our** should not be used, as they reflect a personal opinion. Terms such as "recommended by" and "according to the code" should be used.

Omit general statements. Use only clear, complete, and precise statements. Once these statements are made they should be addressed with the appropriate code references. Use only correct spelling, grammar, punctuation, and vocabulary. The report needs to project a professional tone. This report should be written on a level that the reader will understand. Remember, the reader is neither an engineer nor an inspector, nor experienced in the language of the code or technical writing. Write so that the customer can understand it.

The following is an outline for writing an inspection report. With careful planning and preparation, the inspector will be able to complete the inspection report accurately and easily.

1. Date of inspection.
2. Location of property relative to other streets and buildings.
3. Name, address, and telephone number of people to be notified in case of fire.

4. Class of the occupancy.
5. Storage of raw or finished stock and steps for processing.
6. Life hazard--day and night, exit facility, etc.
7. Common hazards: power plant, heat plant, and housekeeping conditions.
8. Fire protection equipment by type, size, number, location, and condition.
9. A general summary of other conditions found, such as information for fire department use; for prevention activities in which occupants participate; and information of special interest.
10. Name of the fire inspector.

Appendix B contains samples of reports. A quick examination will show that there is a lot of variety in reporting. One needs to find a reporting method that meets one's needs.

Reports: Filing and Retrieval

There are several methods of filing inspection reports. One of the most simple occurs when a violation is reported by an inspector: the report is filed in the property folder under street address. A similar cross-index system can be set up to reference occupancy, plot number, and owner names, as well as addresses. In other cases, the reports can be filed under a plans review section with corresponding forms so that all inspections, fire calls, and renovations are kept in one central file for each occupancy.

The inspector should know that enforcing any corrections may lead to involving other code enforcement agencies involved in building, plumbing, and electrical codes. Therefore, reports must document all records, reports, and visits, omitting no violations or details, because all facts may have a bearing on the case.

In case the original inspection report is destroyed, a computerized report may serve as a legal replacement for the original. Check with your local, city, or district attorney to see if this is legal.

Resource People and Materials for the Inspector

There are many useful resource persons the inspector can call upon for assistance in fire prevention efforts. Several such persons operate within the interagency realm: the building department and inspectors, the permits and licensing department, the health department, the liquor board, the board of education, and the city attorney. The greatest wealth of such resources exists in the building department with the building inspector, safety inspectors, electrical inspectors, plumbing inspectors, and the plans review engineers.

The fire service may have people to whom an inspector can turn: the local, county, and state fire service agencies and their staffs also can provide fire inspectors, fire investigators, fire protection engineers, and fire safety education specialists who can assist the local inspector.

The inspector also may contact the code writing committees and bodies of the model code organizations, not only the members of the technical committees, but staff members who provide special assistance and services from these organizations. They also may help in code interpretation.

Private sector offices have many resources. Many different trade and industrial associations as well as insurance companies have a vast number of references available. Manufacturers have resources available to the inspector. This is especially important in the use of particular fire suppression systems, and fire-resistance specifications. Many organizations have produced manuals on their interpretation of codes. This makes the technical language easier to comprehend. An inspector should routinely read these publications as well as current articles in fire service and related publications.

In addition, there are many specialized courses the inspector can attend. These will offer the opportunity to learn and become familiar with the occupation in a controlled environment.

The inspector must realize that it is not necessary to memorize the codes. Read the codes, seek help and guidance in their interpretation, and remain current on any changes. Be able to use the codes quickly for immediate reference. All of this will take time. Through education, training, and experience the inspector will become a well-informed authority on fire codes.

Some departments have short, concise inspectors' guides which list the most common hazards and violations that can be anticipated. In addition, they contain the applicable code reference for each type of occupancy.

In summary, the professional inspector needs to keep on top of the current situation so that code enforcement is not haphazard but rather a really positive contribution to the public welfare.

Reinspections

Set a reinspection date (this is not a compliance date) that meets the customer's schedule. Make sure the customer knows how to contact you, if necessary. A day or two before the reinspection, call to verify the date and time. Then arrive as scheduled, ready to complete a timely and efficient reinspection.

If all violations have not been corrected discuss the delay with the customer. If the situation is beyond the customer's control, schedule a second reinspection date, and emphasize that violations must be corrected at that time. If it appears that the owner is being uncooperative or is resisting compliance, state that you may have to refer the inspection to a higher authority for action (fire marshal, fire chief, city attorney). This referral will depend on the procedures established by your jurisdiction.

Be positive and courteous, but firm, in letting a customer know that compliance is beneficial to the business, its customers, employees, and visitors, and that it is the law. Again reinforce the value to fire and life safety that a code-complying building offers, and that you are ready to help in any way possible to make this happen.

Conclude the reinspection and follow the procedures established by your jurisdiction for subsequent inspections or corrective measures.

SUMMARY

We have covered a great deal of information in this course. The goal has been to expose new and potential fire prevention inspectors to the basics of conducting fire safety inspections. A number of topics have been introduced, including why inspections are made, where inspection authority comes from, an overview of the hazards inspectors must look

for, traits of an effective inspector, the systematic inspection process, reports and documentation, and ethics.

You will not become a competent inspector merely by taking this course. That comes with study, research, and experience. But if you use this course as an outline to becoming a competent inspector, working with the knowledge and tools presented herein, you may be well on your way.

Competent, professional inspectors are not born (as such), they are developed over time.

Activity 1

Groups That Influence the Inspector

Purpose

To develop an understanding of some of the groups that have an influence on the inspector's relationship to a community.

Directions

1. The class will be divided into four groups.
2. Each group will be assigned a community group that has influence on an inspector's relationship to the community.
 - a. Citizens.
 - b. Politicians.
 - c. Fire service management staff.
 - d. Business community leaders.
3. Discuss and list on an easel pad the ways your assigned group might influence an inspector's relationship to the community.
4. Influences can be both positive and negative. Develop your ideas based on this fact.
5. You will have 20 minutes to develop your list.
6. Select a spokesperson from your group to present the list to the class. Each group will have 5 minutes for presentation.

Activity 2

Traits of an Outstanding Fire Prevention Inspector

Purpose

To help you develop a feel for the traits/characteristics of a good fire prevention inspector.

Directions

1. The class will be divided into small groups.
2. Within your assigned group, develop a list of traits you feel contribute to being a competent, effective, and professional inspector.
3. Write your responses on an easel pad.
4. You will have 30 minutes to develop your list. Be prepared to report on your group's work.

Activity 3

Ethical or Unethical Situations

Purpose

To help you recognize situations in which ethics become an issue. You must be able to handle these situations in order to maintain your position.

Directions

1. Read the vignettes.
2. Answer the questions following the two vignettes assigned to your group.
3. Select a spokesperson to report your responses to the rest of the class.
4. You have 45 minutes to complete this activity.

Activity 3 (cont'd)

Vignettes and Questions

Vignette 1

You are getting ready to schedule the annual inspection at a small local business. In the past the firm, which makes plastic components for a large hardware distributor in the state, has been very slow to correct its violations. Recently, the owner hired your spouse as his/her executive assistant.

How would you handle this situation?

Vignette 2

The new manager of the local metallurgical plant has decided to join the same civic association to which your chief belongs. This means serving on committees together and socializing with their spouses a few times a year. The plant has been cited repeatedly during the stewardship of the previous manager. A couple of weeks before the scheduled inspection, the new manager invites you and your spouse to dinner to discuss the problem.

How would you handle this situation?

Vignette 3

The owner of the local milling plant is a bowling and golfing friend of the county executive. The plant is lax on fire protection measures. One of your inspectors has just completed an inspection and has given the owner a list of the violations. The county executive calls you in for a meeting to ask you to go easy on his/her friend.

How would you handle this situation?

Vignette 4

You are chief of prevention. Your inspectors recently visited a convalescent home which is part of an area chain and found many violations which will be costly to fix. Your spouse is the chairperson of a local charity. A week after you sent the administrator your report, your spouse received a check for \$1,000 in the mail from the administrator of the chain.

How would you handle this situation?

Vignette 5

A small fire in the plant of the town's largest employer led you to conduct a thorough inspection. You noticed many violations which could result in a heavy life loss if a fire any larger than the recent one were to occur. You report this to your boss who says to file the report away because correcting the violations could mean shutting down the plant for a two- to three-week period. This is unacceptable because the plant is the town's largest employer.

How would you handle this situation?

Vignette 6

You have just completed an inspection course at the National Fire Academy and return to your small suburban community all fired up. You ask your chief for a meeting to discuss some of the exciting ideas you picked up. After a few minutes listening to you, your chief says: "You need to know the Mayor and the Council have made it clear to me that inspections are to be a low priority. I emphasize **low**. Do you understand?"

How would you handle this situation?

Vignette 7

You and your family are dining in a restaurant located in another community in which you have no legal authority. During dinner, you notice that an emergency exit is locked and chained. What do you do?

How would you handle this situation?

Vignette 8

You are about to conduct your inspection. The property owner approaches you and says that he/she would like to buy ten tickets to the upcoming fire department fundraising dinner. What would you do?

How would you handle this situation?

Activity 4

Common Deficiencies by Occupancy

Purpose

To assist you in becoming familiar with various common deficiencies found in different occupancies.

Directions

1. The class will be divided into small groups and assigned an occupancy.
2. List potential violations that might be found in your assigned occupancy.
3. List the deficiencies by area of concern.
 - a. Life safety concerns.
 - b. Property protection concerns.
 - c. Detection systems.
 - d. Suppression systems.
4. Write your responses on an easel pad.
5. You will have 10 minutes to develop your list. Be prepared to report to the class.

Activity 5

Systematic Inspection Process

Purpose

To allow you to demonstrate your knowledge of the Systematic Inspection Process.

Directions

1. Review the Student Manual section on the Systematic Inspection Process.
2. Using the slides of building diagrams, outline the inspection process from scheduling to final inspection report review with the customer. You have 15 minutes to prepare.
3. Select a spokesperson to make the presentation, tracking your inspection route using the slides.
4. The presentation should last 10 minutes.
5. Use the Student Manual text to find answers.
6. Be prepared to answer questions.

APPENDIX A

**FIRE PREVENTION INSPECTION CHECKLIST
(SAMPLE)**

I. Preparation

- _____ A. Identify occupancies to be inspected.
- _____ B. Schedule the inspection.
 - 1. Plan in advance.
 - 2. Customer convenience.
- _____ C. Review occupancy inspection history.
 - 1. Previous inspection reports.
 - 2. Technical plans/drawings or other inspectors' sketches or diagrams.
- _____ D. Review codes that apply to the occupancy.
- _____ E. Have equipment needed for the occupancy.
 - _____ 1. Clipboard or portable desk, inspection forms.
 - _____ 2. Graph and note paper, ruler, measuring tape, and measuring wheel.
 - _____ 3. Pens, pencils, colored markers.
 - _____ 4. Hard hat.
 - _____ 5. Coveralls, safety shoes, safety goggles or glasses, earplugs.
 - _____ 6. Flashlight.
 - _____ 7. Camera.
 - _____ 8. Reference and code books, inspection manual.
 - _____ 9. Pitot tube and gauges for water flow tests.
 - _____ 10. Checklist of hazards common to the occupancy to be inspected.

- _____ 11. Personal identification (very important if you don't inspect in uniform).

II. Conducting the Inspection

- _____ A. Arrive early.
- _____ B. Exterior survey.
1. Emergency access.
 2. Building address.
 3. Potential hazards.
 - a. Blocked exits.
 - b. Unsafe exterior storage--storage under stairways.
 - c. Location and position of post indicator valve.
 - d. Location and condition of sprinkler/standpipe connections.
 - e. Construction type.

III. Meet the Customer

- _____ A. Introduce yourself--show identification.
- _____ B. Explain purpose of the inspection.

IV. Conduct Inspection Systematically

- _____ A. Basement first.
- _____ B. Bottom up or top down.
- _____ C. Check all areas.
1. Offices.
 2. Closets.

3. Storage rooms.
 4. Janitorial rooms.
 5. Electrical/Elevator equipment rooms.
 6. Stairways.
 7. Don't bypass any door; have it opened, check the area.
- _____ D. Make sketch of floor areas.
- _____ E. Be observant of
1. Housekeeping.
 2. Exitway maintenance.
 3. Storage.
 4. Location and condition of fire detection and suppression equipment.
 5. Storage in janitorial, electrical, elevator, or water heater rooms.
- _____ F. Conduct exit interview with customer.
- _____ 1. Review identified violations.
 - _____ 2. Answer questions.
 - _____ 3. Advise that you will contact to review completed inspection report.

V. Postinspection Activities

- _____ A. Develop inspection report.
- _____ 1. Review notes and sketches.
 - _____ 2. Study and research codes.
 - _____ 3. Develop code-based recommended action(s).
- _____ B. Complete referral forms for nonfire hazards noted or those requiring action by another division/department.
- _____ C. Meet with customer to review inspection report.
- _____ D. Set reinspection date.

APPENDIX B

BUILDING INSPECTION REPORT

Address _____

Owner _____

Owner's Address _____ Phone _____

Superintendent _____ Phone _____

TYPE OF OCCUPANCY

Res. Mer. Ind. Other _____

CONSTRUCTION OF BUILDING

Frame Ordinary Fire-Proof

HEIGHT _____ Stories NUMBER OF DWELLING UNITS IN BUILDING _____

BASEMENT

Fire Resistive Ceiling Open or Broken Access to Cellar/Basement Obstructed
Inadequate Illumination No Fire Extinguisher(s) for Furnace Area Provided Utility
Meters Obstructed Defective Dumbwaiter(s) or Doors Broken Windows

Remarks: _____

ELECTRIC WIRING

Loose and Unsupported Wiring-Boxes-Switches-Light Fixtures Defective Light-
Fixtures- Boxes-Appliances-Motors Open Boxes Exposed Wiring Over-
fused Circuits Improper Use of Flexible Cord Wiring

Remarks: _____

HEATING UNIT

Oil Coal Gas Elec. None Heating Unit Enclosed Open
No Suitable Fire Ext. Provided Inadequate Ventilation of Heating Room Unit not
Properly Insulated Defective Flue-Pipe-Chimney-Ducts Inadequate Clearance
Between Unit and Combustibles Unit Dirty, Poorly Maintained

Remarks: _____

FIRE ESCAPE- Check for:

Rust Paint Ladders Treads Balcony Rails Obstructions
Other

Remarks: _____

ROOF

Remarks: _____

HALLWAYS

Remarks: _____

INSPECTION PRACTICES AND PROCEDURES

ORDINANCE NO. 50 OF 1978

AN ORDINANCE TO AMEND AND SUPPLEMENT CHAPTER 11A OF THE CODE AS AMMENDED AND SUPPLEMENTED, RELATING TO ADDITIONAL FIRE PROTECTION MEASURES TO BE REQUIRED IN EXISTING BUILDINGS.

	O.K.	NOT O.K.	N/P	REMARKS
APP.A8 VERTICAL SHAFTS All vertical shafts in all existing buildings, including but not limited to, dumbwaiters, garbage chutes and incinerator chutes, but not including stair towers and elevator shafts shall be either: (a) Sprinkled at top of shaft and one floor above lowest level; or (b) Have permanently sealed every opening into the shaft with masonry including all doors, the top of the shaft and all openings in the basement.				
APP.A9 ATTIC SPACE In every existing building, with a space between the top floor ceiling and the roof beams, this attic space shall be divided into areas not greater than three thousand square feet by partitions with not less than one hour fire rating.				
APP.A10 SMOKE DETECTORS Every building housing three or more families shall be provided with approved automatic smoke detecting equipment providing an audible alarm located in accordance with Section 1216 of BOCA Code.				
APP.A11 STORAGE ROOMS All wood storage bins shall be removed in basement and cellar areas of multi-family dwellings. When storage areas are deemed necessary, they shall be in one hour fire rated compartments, equipped with self-closing, self-locking door, operated by a key under management control.				
APP.A12 BUILDING SECURITY In all buildings except 1 and 2 family dwellings every exterior doorway shall be self-closing and self-locking . Section 2. That this ordinance shall take effect after final passage and upon expiration of 20 days following publication unless otherwise provided by resolution of this City Council.				

Other Remarks: _____

Inspector's Signature _____
 Company _____

Rank _____
 Date _____

INSPECTION FORM EXAMINED & APPROVED
 ZONE # _____

 Officer's Signature

INSPECTION REPORT

Inspector's Name:					Date of Inspection			
1	Actual Address	Number	Prefix	Street	Suffix	Inspection Responsibility 1st Fire Company		Fire District
2	Business name				Emergency Number		Attention:	
3	Occupant Name				Class		Phone No.	
4	Owner/Agent Name						Phone No.	
5	Owner/Agent Address	Number	Prefix	Street	Suffix	Apartment No.	City	State
6	Security	Type	Forcible Entry Do Do Not		Where?			
7	2nd Exit	Yes	No	Explain How to Get in:				
8	Building Physical Aspects	Height	Length & Width		Construction	Type Roof & Condition	Windows	Roof Attachments
		Year Built	No. of Tenants	Est. Occupancy	Location of Basement Entrance			
9	Hydrants	Needs Repairs		Caps		Location of Two Nearest Hydrants:		
10	Fire Box Alarm	Number		Location		Checked	Alarm Office Operator	
11	Fire Alarm System	Yes	No	Control Panel Location		Keys Where?	Reset How	Central Station Yes No Who?
12	Extinguishers	Condition		Tag Dated		Need	Type	
13	Fire Doors	Yes	No	Type		Condition	Location	
14	Heated By:	Type				Condition		
15	Electrical	Fused		Circuit Breakers		Main Switch-Where?	Motors Dirty	Oily
16	Gas Meters	How Many?		Location				
17	Floors	Type	Condition			Floor Drain Locations		
18	Contents	Highly Combustible		Where?		Aisles Blocked	Where?	
19	Housekeeping	Condition		Rubbish		Where?		
20	Special Hazards Radio-Active,etc.	What Kind?		Warning Sign Yes No		Where?		
21	Highly Volatile Liquids	What Kind?				Where?		
22	Kitchen Extinguishers	What Kind?				Condition		

INSPECTION PRACTICES AND PROCEDURES

23	Sprinklers	Yes	No	Wet	Dry	Are All Sections Sprinkled?				If Not, Where?		
		Water Flow Alarm Yes No		Condition of Piping		Condition of Heads			Extra Heads	Where?		
		Gravity Tank Where?			Empty	1/4	1/2	3/4	Full	Supports Rusty	Weak	
		Pressure Tank		Capacity		Air Pressure		Condition of Tank				
		Fire Pump		Capacity G.P.M.		Pressure		Condition	Automatic Yes No			
		Siamese Where?					Condition					
24	Standpipe	Yes	No	Wet	Dry	Siamese Location				Condition		
25	No. of Risers	Location					Hose Condition					

26	Doors	Door Panic Hardware Yes No			Tested Weekly Yes No			Condition		
27	Fire Escapes	Fire Escapes Yes No			Used in Fire Drill Yes No			Condition		
28	Coal & Ashes	Coal Pile (Checked for Heating) Yes No			Ashes in Metal Containers Yes No			Are These Container Used for Other Trash? Yes No Order Given		
29	Heating	Outside Shut Off Valve for Gas Yes No Location			Heating: Date Inspected			Air Condition: Date Inspected		
30	Storage	Stairs: Storage Beneath Yes No		Oily Rags. Paint Rags. etc.-In Self Closing Metal Cans Yes No				Are Flammable Liquids in Safety Cans? Yes No		
31	Misc.	Are Extension Cords Approved Type-Temporary? Yes No				Are Large Woolen Blanket Provided Where Required? Yes No Where Needed				
	Egress	Two Means of Egress From Each Floor Yes No				Are All Windows Free of Heavy Screens or Bars? Yes No				
		Do All Exit Doors Open in Direction of Travel? Yes No				Windows Within 10 Ft. of Fire Escape? Yes No			Wire Glass Yes No	
		Interior Stairs Enclosed? Yes No				Doors to These Stairs Automatic? Yes No			Self Closing? Yes No	
	Temporary Buildings	Yes	No	Type of Construction			Is Temporary Building 50 Ft. From Main Building? Yes No			
	Fire Drills	Date of Last Drill				Average Time of Exit				

Narrative:
Person in Authority: Sign Here

Fire-Safety Survey Report

Fire Prevention----- For Your Safety

BUILDING _____ OWNER/MGR. _____
 ADDRESS _____ PHONE _____
 _____ TYPE OF OCCUPANCY _____
 NEW OCCUPANT

The _____ Fire Department has conducted a fire safety survey of your property. The knowledge gained through this survey will enable the Fire Department to attack and extinguish fire that might occur in the building quickly and efficiently.

During this inspection, conditions affecting fire safety throughout the premises were also noted. It is requested that the items listed below be given your immediate attention in the interest of fire safety.

- FIRE HAZARDS FOUND TO EXIST: NONE OBSERVED THIS INSPECTION
- | | | | |
|---|---|---|-------------------------------------|
| <input type="checkbox"/> FIRE EXTINGUISHERS | <input type="checkbox"/> HOUSEKEEPING | <input type="checkbox"/> FLAMMABLE LIQUIDS | <input type="checkbox"/> ELECTRICAL |
| <input type="checkbox"/> TRASH | <input type="checkbox"/> UTILITIES | <input type="checkbox"/> FIRE PROTECTION EQUIP. | <input type="checkbox"/> FIRE LANES |
| <input type="checkbox"/> EXITS | <input type="checkbox"/> FIRE & SMOKE DOORS | <input type="checkbox"/> NO SMOKING SIGNS | <input type="checkbox"/> OTHER |

If at any time questions regarding fire safety arise, do not hesitate to contact the Fire Department at _____. For an Emergency call _____. In case of fire in your building, call the FIRE EMERGENCY NUMBER.

Property Representative *Reporting Officer* *Date*

Reinspection Due _____ Made By _____ Date _____ Notified FM# _____

WHITE-Owner/Manager FIRE HAZARDS CORRECTED # _____
 YELLOW-Station File FIRE HAZARDS NOT CORRECTED # _____

PINK- Fire Marshal
 10/75

INSPECTION BLANK FOR INDUSTRIAL PLANTS

Prepared by
AMERICAN INSURANCE ASSOCIATION
Engineering and Safety Service
85 John Street, New York, N.Y. 10038

Suggested as a Weekly Report for Plant Owners to have Printed in Quantity for their Individual Use.

Note- The following general rules should be observed by the foreman or other trusted employee selected to make these reports.

Give attention to every question on this blank. If the question does not apply to this plant draw a line through the space left for the answer. In this way you can be sure that you have not overlooked anything.

Some questions are to be answered by "Yes" or

"No" but others must be answered more fully.

When you find some defect, explain its cause and the steps that you are taking to correct it, in the space headed "CORRECTIONS AND REMARKS," on the last page of the blank. In doing this, give the number of the question. Append extra sheets if necessary.

You may wish to use one of these blanks for each building.

If it ever becomes necessary to shut off the water from the sprinkler system, notify the office of the plant at once. (in advance, if possible).

This is important to enable us to take proper security measures.

If there is anything that you do not understand, consult with the manager at once.

Turn in the report blanks promptly to the manager of this plant

Remember that these inspections are very important. The safety of this plant from fire is largely up to you.

GENERAL CONDITIONS

Cleanliness and Order

1. Did your inspection cover all parts of the premises including spaces under benches, in closets, behind radiators, in elevator pits, etc.?
2. Were all clothes lockers clean and in good repair?
3. Where did you find dirt or litter?
4. Where did you find oily waste or any other greasy material outside of approved waste cans?
5. Are any waste cans not emptied daily after closing hours?
6. Are the shipping and packing rooms cleaned up thoroughly at closing time?
7. Is more packing material brought in than is needed for one day's use?
8. What rooms or departments were not as clean and orderly as they should be?
9. Was yard orderly and free from combustible refuse and waste material?
10. Was basement clean and orderly?

Maintenance

11. Is any part of the plant not regularly visited by

- the watchman?
12. Are any watch-clock records unsatisfactory?
13. Where were machinery, motors, belts, or shafting in poor condition?
14. Where were bearings dirty or poorly oiled?
15. Where did you find any portions of the building in need of repair?
16. Were any aisles obstructed in stock room?
17. At what locations do piles of stock or other obstructions interfere with entrance to building?

HAZARDS

Heating

18. At what points are smokestacks, flues, furnaces, boilers, steampipes, etc. too close to woodwork or other combustible materials?
19. Where was anything combustible placed on or against boiler or steam pipes?
20. Was fuel supply safety arranged?

21. Where were open flame lights located near combustible material?

Lighting and Electrical Equipment

- 22. Where were broken fixtures, loose wires or defective insulation in evidence?
- 23. Where were ordinary electric cords looped over nails, hooks or pipes or extended through or over doorways, transoms or partitions?.....
- 24. Where were fuses too large in capacity or bridged with wire or other metal?
- 25. Where were panel boards or switch and fuse cabinets in need of cleaning?
- 26. Where were motors in need of cleaning either outside or inside casing?
- 27. Where was there insufficient oil in motor bearings?
- 28. Where were fan bearings inaccessible?.....
- 29. Where and in what manner were the rules for storing or handling oils, gasoline or other flammable liquids being violated?
- 30. Where and in what manner were the rules for storing and handling hazardous chemicals and materials being violated?
- 31. At what points were screens or dampers in air ducts out of order?
- 32. Where did you find any other than safety matches?
- 33. Where did you find any violation of smoking rules?

PROTECTION

Fire Doors, Traps, Shutters and Escapes

- 34. Where were fire doors wedged open, obstructed or out of order?
- 35. Where were self-closing or automatic-closing devices on fire doors found out of order?
- 36. Where were traps doors on openings through floors out of order?
- 37. Are these ever left open when not in use?
- 38. Are fire doors or shutters ever left open at night, or on Sundays or Holidays?
- 39. Where were fire escapes obstructed, broken or not in good order?

Fire Apparatus

(Note-Each hose house, watchman station room or department should be known by a separate number. If you should find any defect

in any items place the station number opposite the item. This will aid in keeping records. At each of these points there should be a card stating the quantity of the various kinds of apparatus which are required at that point.)

(Inside.)

- 40. At what point are there *less* than the required number of
 - (a) Water casks
 - (b) Fire pails
 - (c) Sand pails
 - (d) Portable fire extinguishers

(Also note above water casks and fire pails not properly filled or extinguishers in need of recharging.)

- (e) Feet of hose
- (f) Nozzles
- (g) Spanners
- (h) Ladders

(Outside.)

- 41. Where did post indicator valves need lubricating?
- 42. Where did indicator valves fail to show "open"?
- 43. Which yard hydrants are hard to operate?
- 44. Which hydrants do not drain properly?
- 45. Which ones have you found covered with snow or ice?
- 46. Which ones are otherwise obstructed or hard to reach?
- 47. At what locations have you found hose, nozzles, or spanners missing or not ready for use?

Fire Pumps

(Note-Pumps must be started at least once a week discharging water through relief valve in order to make certain that they are in working order. They must be given a thorough test with rated number of hose streams once a year.)

- 48. Give make, style and size of all FIRE pumps in the plant.

MAKE	STYLE AND SIZE
A
B
C

INSPECTION PRACTICES AND PROCEDURES

49. Give results of any tests made since last report.

	A	B	C
(a) Time required to obtain water?
(b) What pressure was maintained?
(c) Was action smooth?
(d) Is there an automatic regulator?
(e) Was priming tank full?
(f) Was priming gate valve closed?
(g) Were steam drips open?
(h) Did steam trap operate?
(i) Was there enough oil?
(j) Was suction clear of leaves or other obstruction?
(k) Was pump reservoir full?
(l) Is power supply instantly available?
(m) How many RPM at 100 lbs. water pressure with all outlets closed?

For Electric Pumps, Add-	A	B	C
(n) Has current been interrupted since last report?			
(o) What is condition of contact points on switches, circuit breakers, controllers, etc.?			

Gravity Supply from Tanks and Reservoirs

50. Give location and capacity of each tank or Reservoir.

LOCATION	NUMBER OF GALLONS
A
B
C

	A	B	C
51. What was water level?
52. Was water frozen?
53. Was ladder out of order?
54. Were hoops and supports defective?
55. Was tell-tale out of order?

For Pressure Tanks. Add-	A	B	C
56. What was air pressure and was water level correct?
57. What was tank room temperature?.....

City Water Connection

58. Was valve (on our premises) in connection to city water main wide open?
59. What was pressure on gauge?..... lbs.
60. Has there been any interruption of city supply since last report?
61. Give results of any tests since last report:
 (a) Gallons per minute flowed
- (b) Initial pressure
- (c) Flowing pressure

Sprinkler Supply Valves

(Note- All gate valves must be secured open by an approved method. In inspection, each valve must be given one full turn to make sure that it is wide open and in working order. Drip valves must be secured shut in similar manner. Valves under approved supervisory system, however, need to be secured.)

Mark every sprinkler supply valve, plainly, with a number. This will aid in keeping record.

62. Give the number of any valves found closed.

63. Give the number of any valves found not secured open
64. Give the number of any drip valves found open or leaking
65. Give the number of any valves to which access was obstructed

Dry Valves

(Note- Dry valves should be tested for water column and condition at least once each three months; they should be tripped at least once a year.)

LOCATION	LOCATION
A	C
B	D

	A	B	C	D
66. What was room temperature?
67. What was air pressure?
68. What was water pressure?
69. Was alarm out of order?

INSPECTION PRACTICES AND PROCEDURES

Alarm Valves

A	C.....
B.....	D.....

	A	B	C	D
70. How was valve tested?
71. Did any bells fail to ring?
72. Was valve left in order?

Automatic Sprinklers

73. Where is closely packed combustibles stock piled within 36 inches of sprinkler heads?

- 74. Have any sprinklers operated since last inspection?

- 75. Where are any sprinklers coated or corroded?

- 76. Where are any sprinklers obstructed by partitions, joists, etc.
- 77. Where are any sprinklers bent?
- 78. Where are any sprinklers leaking?
- 79. Where are any sprinklers exposed to freezing?
- 80. Where are any sprinklers missing?
- 81. Where are any sprinklers disconnected?
- 82. How many sprinkler heads are kept in reserve?

CORRECTIONS AND REMARKS

(Note- Wherever defects are found, steps must be taken AT ONCE to have them corrected. If the corrections have been made when this report is turned in, this fact must be stated below. If the correction has not yet been made an explanation must be given below. Always refer to the question by number. For example: "15-The broken windows in the shipping room were caused by boys throwing stones. I have reported the matter to the police and have had the broken panes replaced.")

I have made a careful inspection and to the best of my knowledge and belief the foregoing statements are all correct.
 (SIGNED)

Date

INSPECTION BLANK FOR MERCANTILE ESTABLISHMENTS

(Department Stores, Supermarkets, Paint and Hardware Stores,
Chain and Variety Stores, Etc.)

Prepared by
AMERICAN INSURANCE ASSOCIATION
Engineering and Safety Service
85 John Street, New York, N.Y. 10038

Name of Establishment _____ Date _____
Location _____ Type of Occupancy _____
City _____

QUESTIONS ARE SO WORDED THAT A NEGATIVE ANSWER WILL INDICATE AN UNSATISFACTORY CONDITION.

GENERAL CONDITIONS

Cleanliness and Order

Be sure that your inspection is complete; see that you cover all parts of the premises, including looking under counters, into closets, behind radiators, under stairways, elevator pits, etc.

- | | CHECK | |
|--|--------------------------|--------------------------|
| | YES | NO |
| 1. Are all accumulations of combustible refuse or rubbish regularly removed from the premises? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is the basement clean and orderly? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is the attic space clean and orderly? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are all oily rags and waste or other greasy materials kept in approved metal waste cans? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Are all waste cans emptied daily after closing hours? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Are all shipping and packaging rooms cleaned up thoroughly at closing time? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Is packing material in packing area limited to the amount needed for one day's use? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are all clothes lockers clean and in good repair? | <input type="checkbox"/> | <input type="checkbox"/> |

Maintenance

- | | | |
|--|--------------------------|--------------------------|
| 9. Have all broken windows, plastering, partitions and flooring, and other similar defects been listed for immediate repair? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Are all aisles unobstructed? | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. Are all entrances unobstructed? | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. Are all doorways and doorways to exit discharges on the interior side, kept accessible and in operable condition? | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. Is adequate clearance maintained between combustible stock storage and exterior walls and fire walls? | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Are all self-closing fire doors kept closed and in operable condition? | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. Are all closing devices of automatic closing fire doors in operable condition? | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. Are all exits and exit discharges free from obstructions and properly maintained? | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. Does every story have at least two separate means of egress? | <input type="checkbox"/> | <input type="checkbox"/> |

A single doorway to the street may be acceptable for single story buildings provided the distance of travel does not exceed 50 feet.

INSPECTION PRACTICES AND PROCEDURES

HAZARDS

	CHECK	
	YES	NO
Heating and Air Conditioning Equipment		
18. Is the heating boiler or furnace enclosed in a separate room with walls, partitions, floors, and floor-ceiling assemblies constructed of approved materials?	<input type="checkbox"/>	<input type="checkbox"/>
19. Is a self-closing fire door provided at the opening into the boiler room?	<input type="checkbox"/>	<input type="checkbox"/>
20. If coal is used, are metal containers provided for the storage of ashes?	<input type="checkbox"/>	<input type="checkbox"/>
21. Is a conveniently located manual emergency switch and an automatic device provided for stopping the fan in case of fire?	<input type="checkbox"/>	<input type="checkbox"/>
22. If oil burner, gas-fired, or mechanical stoker is provided, are automatic safety controls installed?	<input type="checkbox"/>	<input type="checkbox"/>
23. If there is a plenum chamber, is it clean and free of stored materials?	<input type="checkbox"/>	<input type="checkbox"/>
24. Is all heating equipment including chimneys, flue connections, hot air ducts and building heating equipment. (a) In good serviceable condition and well maintained?	<input type="checkbox"/>	<input type="checkbox"/>
(b) Properly insulated and separated from all woodwork or other combustible material by a safe distance?	<input type="checkbox"/>	<input type="checkbox"/>
25. Is the fuel supply safely arranged?	<input type="checkbox"/>	<input type="checkbox"/>
26. Is the proper type of fire extinguisher provided in the boiler room?	<input type="checkbox"/>	<input type="checkbox"/>

Kitchen or Cafeteria

27. Is the cooking range safely installed away from combustible material and the nearby floor properly protected?	<input type="checkbox"/>	<input type="checkbox"/>
28. Is there a ventilating hood above the range with a duct vented to the outside?	<input type="checkbox"/>	<input type="checkbox"/>
29. Is the vent duct adequately insulated or separated from combustible materials by a safe distance?	<input type="checkbox"/>	<input type="checkbox"/>
30. Is the hood, grease filter, and duct regularly cleaned of accumulation of grease?	<input type="checkbox"/>	<input type="checkbox"/>
31. Is proper type of fire extinguisher system and portable extinguishers provided and are they in good order?	<input type="checkbox"/>	<input type="checkbox"/>

Refrigerating Equipment

32. Are doors to room containing machinery for refrigerating system kept closed?	<input type="checkbox"/>	<input type="checkbox"/>
33. Is this room ventilated directly to the outside?	<input type="checkbox"/>	<input type="checkbox"/>
34. Is vent clean and unobstructed?	<input type="checkbox"/>	<input type="checkbox"/>
35. Is this room free of stored cartons, crates and other combustible rubbish?	<input type="checkbox"/>	<input type="checkbox"/>
36. Are motors and machinery properly maintained and clean?	<input type="checkbox"/>	<input type="checkbox"/>
37. Are motors provided with overheating protective devices?	<input type="checkbox"/>	<input type="checkbox"/>

Refuse Removal

38. How is combustible refuse handled?	<input type="checkbox"/>	<input type="checkbox"/>
(a) Is it hauled away at regular intervals and not permitted to accumulate on the premises?	<input type="checkbox"/>	<input type="checkbox"/>
(b) Is a separate well-constructed rubbish room or incinerator room provided?	<input type="checkbox"/>	<input type="checkbox"/>
(c) Are refuse and rubbish piles kept well away from the incinerator?	<input type="checkbox"/>	<input type="checkbox"/>
(d) If an outdoor incinerator is used, is it located at a safe distance from surrounding buildings and combustible objects or storages?	<input type="checkbox"/>	<input type="checkbox"/>

INSPECTION PRACTICES AND PROCEDURES

	CHECK	
	YES	NO
Smoking		
39. Are "No Smoking" rules established?	<input type="checkbox"/>	<input type="checkbox"/>
40. Are the "No Smoking" rules strictly enforced?	<input type="checkbox"/>	<input type="checkbox"/>
41. Are "No Smoking" signs properly posted?	<input type="checkbox"/>	<input type="checkbox"/>
42. Are specified rooms or areas set apart and "Smoking Permitted" signs properly posted?.....	<input type="checkbox"/>	<input type="checkbox"/>
Storage and Handling of Flammable Liquids		
43. Is a separate, well-ventilated storage room provided?	<input type="checkbox"/>	<input type="checkbox"/>
44. Are drums, barrels or tanks equipped with approved draw-off pumps or self-closing valves?	<input type="checkbox"/>	<input type="checkbox"/>
45. Is the storage room clean and free of rubbish?	<input type="checkbox"/>	<input type="checkbox"/>
46. Is the floor free of oil drippings?.....	<input type="checkbox"/>	<input type="checkbox"/>
Liquefied Petroleum Gases		
47. Are bottled gas cylinders (outside of buildings) properly supported and protected against physical damage?	<input type="checkbox"/>	<input type="checkbox"/>
48. Are protective caps in place on all stored cylinders?	<input type="checkbox"/>	<input type="checkbox"/>
Lighting and Electrical Equipment		
49. Are premises free from defective electrical wiring, appliances and equipment?	<input type="checkbox"/>	<input type="checkbox"/>
(If answer is <i>No</i> , explain in space provided for "Remarks," see next page.)		
50. Are open flame lights kept well away from combustible materials?.....	<input type="checkbox"/>	<input type="checkbox"/>
51. Are only approved electric extension or portable cords used?.....	<input type="checkbox"/>	<input type="checkbox"/>
52. Are electric extension cords in good condition?	<input type="checkbox"/>	<input type="checkbox"/>
53. Are covers of fuse, breakers and switch boxes kept closed?.....	<input type="checkbox"/>	<input type="checkbox"/>
54. Are fuses of the proper capacity for the circuits served?.....	<input type="checkbox"/>	<input type="checkbox"/>
(If answer is <i>No</i> , explain form of improper overfusing in space provided for "Remarks," see last page.)		
55. Are motors and motor-operated appliances clean and properly lubricated?.....	<input type="checkbox"/>	<input type="checkbox"/>
56. Are main entrance switches and panel boards unobstructed and readily accessible?.....	<input type="checkbox"/>	<input type="checkbox"/>
57. Are television antenna masts properly supported and grounded?	<input type="checkbox"/>	<input type="checkbox"/>
FIRE PROTECTION		
58. Are all fire extinguishers in place and in good condition?	<input type="checkbox"/>	<input type="checkbox"/>
59. Have all extinguishers been inspected or recharged within the year or at prescribed intervals, and is date of inspection or recharge shown on tag attached to each extinguisher?.....	<input type="checkbox"/>	<input type="checkbox"/>
60. Where sprinkler systems are installed:		
(a) Are all sprinklers free and unobstructed?	<input type="checkbox"/>	<input type="checkbox"/>
(b) Are sprinklers free from coats of paint or corrosion?	<input type="checkbox"/>	<input type="checkbox"/>
(c) Are spare sprinklers and sprinkler wrenches kept in reserve?	<input type="checkbox"/>	<input type="checkbox"/>
(d) Is stock or merchandise so piled with proper clearances from sprinklers? (18" to 36" clearance required depending on conditions).....	<input type="checkbox"/>	<input type="checkbox"/>
(e) Are sprinklers free from obstruction by partitions, shelving, mezzanine platforms?.....	<input type="checkbox"/>	<input type="checkbox"/>
(f) Are all sprinklers valves open?	<input type="checkbox"/>	<input type="checkbox"/>

INSPECTION PRACTICES AND PROCEDURES

	CHECK	
	YES	NO
61. Are interior standpipe outlets equipped with fire hose and nozzles?.....	<input type="checkbox"/>	<input type="checkbox"/>
62. Is fire hose on interior standpipes in good condition?.....	<input type="checkbox"/>	<input type="checkbox"/>
63. Do employees know the location of nearest city fire alarm box?.....	<input type="checkbox"/>	<input type="checkbox"/>

Remarks:

Inspection made by _____
Title _____

INSPECTION PRACTICES AND PROCEDURES

FIRE PREVENTION BUREAU

BOROUGH OF HILLSDALE

HILLSDALE FIRE DEPARTMENT

INSPECTOR'S REPORT

License No.

Date

Location.....

Owner..... Emergency Phone.....

Owner' Address.....

Occupants and purpose for which used

1st Floor..... Emergency Lighting

2nd Floor..... Emergency Lighting

3rd Floor..... Emergency Lighting

Basement..... Emergency Lighting

Construction..... Stories..... With/Without basement.....

Exposures: Protected..... Unprotected.....

Roof Construction..... Condition

Attic..... Access to..... Location

Vertical Openings:

Light Wells..... Locations

Dumbwaiter shafts, enclosed or open..... Locations

Stairs, enclosed or open..... Locations

Elevator Shafts, enclosed or open..... Locations

Condition of elevator pits.....

Interior Fire Protection:

Automatic sprinklers..... Condition of valves

Siamese connection..... Condition of sprinklers.....

Material stored at least 18 inches below pipes

Condition of fire extinguishers..... Date of inspection or recharge

Standpipes and hose..... Valves accessible.....

Condition of hose.....

Interior fire alarm..... Date of last test.....

Other fire detecting or extinguishing appliances

Type..... Condition

Fire Doors..... Fusible Links

Operating condition.....

If not automatic, are they kept closed.....

Heating System: Kind..... Fuel used.....

Storage arrangements.....

Condition of stoves, boilers, or furnaces

Storage of ashes

Protection above and around furnace and flue pipe

Furnace room enclosed or open.....

(over)

INSPECTION PRACTICES AND PROCEDURES

Light and Power: Voltage used.....
Location of entrance switch.....
Fuses examined.....
Branch fuses of proper size.....
General condition.....

Trash: Facilities for storage.....
Frequency of removal.....

Flammable Liquids and Gases: Kind.....
Location.....
Amount.....
Storage arrangements.....
Permit provided.....

Egress Facilities:
Exit stairways..... Condition of doors.....
Open stairways..... Unencumbered.....
Fire escapes..... Condition.....
Exit Lights..... Visibility.....

Conditions noted in violation of ordinance provisions.....
.....
.....
.....

Indicate below floor and elevation sketches showing doors, elevators, stairs, partitions, and locations of especially hazardous materials, utility locations (gas meter, electric panel, water meter).

Signed.....

FIRE SAFETY INSPECTION REPORT

Time: In _____ Out _____ Total _____

Dist. _____ Station _____ Shift _____ Date _____

Occupancy Known As _____ Type of Occupancy _____

Location _____ Bus. Phone _____

Occupant _____ Address _____ Phone _____

Owner or Agent _____ Address _____ Phone _____

Emer. Contact: (1) Name _____ Phone _____

(2) Name _____ Phone _____

A fire safety survey has been conducted on your property. During this inspection, conditions affecting fire safety throughout the premises were noted.

In accordance with the Fire Prevention Code, it is necessary that the items listed below be given your immediate attention.

Life Hazards: No. of People _____ Other Hazards or Special Processes _____

Type of Sprinkler System _____

- 1. Exit: a. open in proper direction... b. door(s) locked... c. way blocked... d. door(s) in need of repair... e. sign(s) not illuminated... f. directional signs needed... g. lighting for corridors and stairways leading to... h. other...
2. Fire Extinguishers: a. number... b. mounting... c. obstructed... d. sign(s) indicating location when not readily visible... e. wrong type... f. properly located, spaced... g. other...
3. Fire Protection Installations: a. Maintain access to, and operation of stand pipes, fire hose and/or sprinkler control valves...
b. spare sprinkler heads and/or sprinkler wrench not provided...
c. inspect and service hood duct extinguishing system over cooking equipment annually and after use...
d. identify sprinkler valves and secure in open position...
e. other...
4. Heating: a. defective appliance or system... b. combustible too near heater or heat producing device... c. other...
5. Flammable Liquids: a. improper... b. improper storage... c. improper dispensing... d. improper container... e. other...
b. blocking electrical panel...
c. disorderly...
d. other...
7. Electrical: a. defective wiring, fixture(s) and/or appliances... b. improper fuses or defective breakers in use... c. overloaded circuit... d. protective covering missing on equipment... e. improper use, placement of extension cords... f. other...
8. Miscellaneous: a. remove or store rubbish, waste, and/or oily rags in metal container... b. remove waste, trash and/or weeds from around exterior of building... c. housekeeping problem... d. post "no smoking" sign(s)... e. other...

Remarks: _____

Violations/Hazards Corrected Immediately: _____

Red Tag(s) Issued: _____

Permit(s) Needed: _____

If at any time questions regarding fire safety arise, do not hesitate to contact the Chesapeake Fire Prevention Bureau, 547-6566.

Person(s) Making Inspection: _____

Reinspection Will Be Made in _____ hrs/days. Signature of Occupant or Representative _____

Reinspection: By _____ Date _____ Violations Corrected _____ Not Corrected _____

Referred to FPB by _____ Date _____

BASIC OCCUPANCY REPORT

Date	Document No.	Dist. & Map No.	Property Name				Personnel		
							No.	Hrs.	
Tenant Address			Tenant Name				Phone No.		
Responsible Party			Address				Phone No.		
Property Owner			Address				Phone No.		
TE	Fixed Property Use				Sound Value				
TF	Number of Stories Occupied by Tenant				Total Floor Area of Tenant Space				
TG	Occupancy	Occupant Load		Number of Exits		Exit Width			
TH	Other Exit Problems <input type="checkbox"/> Check If Applicable, Describe:								
TI	Smoking Practice Quality				Interior Finish Not in Egress Routes				
TJ	Plastic Furnishings				Flammable Liquid Use				
TK	Solid Kindling Fuel In Occupied Areas				Solid Kindling Fuel in Storage and Service Areas				
TL	Electrical Service Quality			Heating Service Quality					
TM	Other Unsafe Fire Conditions <input type="checkbox"/> Check If Applicable, Describe:								
TN	Portable Extinguishers								
TO	Type of Special Hazard System			Coverage of Special Hazard System					
TP	Sprinkler Protection		Rack	Density	System Area	Design Area			
TQ	GPM Req'd	PSI Req'd	PSI Avbl	Head Temp	Head Size				
TR	Heat Vents Ratio: Type:		Auto Detection		Auto Alarm	Emergency Light			
TS	Storage Height Allowed		Permit Req'd				Permit Issued		
	TT	Member Making Report					Date		
	TU	Supervisor					Date		
Remarks:									

INSPECTION REPORT
FIRE MARSHAL'S OFFICE

File No. _____

Date: _____

Occupancy: _____

Address: _____

Property Classification: _____

These premises were found to be reasonably fire safe at this time.

Reinspection date: _____

Actions Necessary to Correct Hazards Found:

- Check all fire extinguishers for proper maintenance and recharge all which are expended.
- Provide and maintain _____ rated fire extinguishers for each _____ sq. ft. of floor area.
- Mount fire extinguishers in conspicuous accessible locations, not more than 5 feet above floor level.
- Remove the accumulation of all combustible waste from the building and/or premises.
- Repair partially-burned building or remove it from the premises.
- Remove accumulation of grease from all cooking apparatus, vent hoods, ducts, vents, etc.
- Provide adequate flameproofing for all combustible decorations, drapes, or curtains.
- Provide metal containers with metal covers for the collection and storage of waste combustibles.
- Discontinue use of any flammable liquid having a flash point below 100°F for cleaning.
- Post and maintain "NO SMOKING by Order of Fire Marshal" signs.
- Repair all illuminated exit signs to proper working order.
- Securely close all openings to bldg. to prevent the entry of unauthorized persons.
- Provide metal containers with self-closing metal covers for the storage of soiled shop towels and rags.
- Provide approved safety cans for all dispensing of flammable liquids, except in an approved storage room.
- Post and maintain "NO SMOKING-STOP YOUR MOTOR" signs in conspicuous locations.
- Securely chain or strap all compressed gas cylinders in a vertical position.
- Provide and maintain a minimum of 18" clearance between the top of any storage and sprinkler heads or any overhead obstruction
- Remove all electrical cords from contact with metal objects.
- Discontinue practice of locking or blocking any designated exit.

Maintaining hazardous conditions is in violation of City ordinances.

Inspector: _____

Copy Delivered to: _____

LTRS	
<input type="checkbox"/>	<input type="checkbox"/>
1	2

MEMOS		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BO	PD	HD

SUBJ		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RI	CI	CO

Fire Prevention Bureau
380 Hillsdale Avenue
Borough of Hillsdale, New Jersey 07642

March 20, 1981

Mr. Robert Zeckhauser, Supt.
Pascack Valley Regional High
School District
46 Akers Avenue
Montvale, New Jersey 07645

Dear Mr. Zeckhauser:

A thorough inspection of Pascack Valley High School has been conducted by the Fire Prevention Bureau. In the wake of the recent tragic fires throughout the country, we are implementing a comprehensive fire safety program designed to upgrade safety standards in existing buildings. We have all been shocked and saddened by recent tragic fires. Terrible events such as these cause us to look at fire safety in our own town with a critical eye.

Our inspection at Pascack Valley High School revealed three common problems.

1. Need for more fire extinguishers in high hazard areas (storage areas, around electrical equipment, copy rooms).
2. Need for uniform flammable liquid storage in approved fire safe cabinets.
3. Existing fire safety equipment maintenance should be given a higher priority (including closer inspection of filter system in kitchen and shop area).

All soda acid fire extinguishers must be replaced. These extinguishers have become obsolete and have not been manufactured in the United States since 1969. The chemicals used in these extinguishers include acid and can be harmful if not properly operated. Pressurized water extinguishers are an excellent alternative.

On our inspection, we noticed many coffee machines being used throughout the school. Coffee machines have been found to be one of the highest sources of house fires in 1980. The closest extinguishers to these machines are, in most cases, Class A (water) extinguishers which are located in the corridors. Water extinguishers are extremely dangerous to use on Class B electrical fires. Not only are they dangerous to the person operating the extinguisher but they could also cause the fire to spread more rapidly. Therefore, we strongly recommend that every room having a coffee machine have a Class ABC fire extinguisher as well.

-2-

We would appreciate receiving the following information to complete our inspection.

1. The dates of purchase on the stage area curtains. This is necessary to check for fire resistance.
2. A copy of all boiler certificate numbers.

During actual fire emergencies, we found Dr. Poli's action extremely helpful in resolving the problems at hand. He has been very cooperative with the Fire Prevention Bureau and has initiated Fire Prevention and Student Safety throughout the school. These measures have included upgrading the fire alarm system by additional zones and revising the school fire alarm bell system so that it rings continuously during an emergency.

Our inspection also revealed a high standard of good housekeeping which is an asset to Fire Prevention. We found that Mr. Clyde Sain and his staff were very cooperative and interested in fire safety.

Enclosed are specific listings of violations found at Pascack Valley High School. Please review the list. If you have any questions, feel free to contact the Fire Prevention Bureau. The Bureau is at your disposal and would be glad to conduct you and/or the Board on a walking tour of the high school, if you so desire.

Thank you for your cooperation.

George E. Lucia, Fire Inspector

CC: Mr. John Bauknecht, President
Regional Board of Education
Joseph Poli, Principal

Pascack Valley High School Fire Inspection Report – March 12, 1981 – Page 1

1. Superintendent's Office – Install a Class BC or ABC extinguisher in the reception area in conspicuous place in the path of egress.
2. Teacher's Cafeteria area – Repair ceiling in Men's Room. A properly repaired and maintained ceiling will help to prevent the spread of fire.
3. Kitchen
 - (a) Self contained dry chemical hood extinguisher system is not wired into the school fire alarm system. This must be tied into the school fire alarm system to insure evacuation in case of a fire in the hood.
 - (b) Clean and maintain hood filters.
 - (c) Fusible links in the hood system must be replaced and dated annually. This system was inspected in January of 1981 (by your service company). It appears the links were not changed since no dates are imprinted on them. The Fire Prevention Bureau contacted the service company and was informed that the service company planned to return to check on this.
 - (d) Enforce No Smoking rule in storage area.
4. Cafeteria – Remove extension cord for hot plates in service area. This unit must be properly wired.
5. Upper Cafeteria – In the concession area, install a Class BC or ABC extinguisher in a conspicuous place in the path of egress.
6. Boiler Room (cafeteria area) – This is not a storage room. Remove all storage from this area.
7. Room 133 – Flammable liquids should be stored properly.
8. North Office – Language Wing
 - (a) Portable electrical heater must be removed.
 - (b) Install a Class BC or ABC extinguisher in a conspicuous place in the path of egress.
9. Room 125 – Install heat sensors in this room and the new storage room adjacent to it for the Fire Detection system.
10. Room 124
 - (a) Refill existing fire extinguisher.
 - (b) Install a second extinguisher, Class BC or ABC, in a conspicuous place in the path of egress.
 - (c) Unplug small electrical appliances when not in use.

11. Room 120
 - (a) Compressed gas cylinder must be chained to a rack against the wall.
 - (b) Install fire extinguisher in the proper place. (presently missing)
12. Chemistry Office – Remove the five (5) gallon can of ethyl alcohol. Flammable liquids must be properly stored.
13. Room 119 – Remove extension cord from the fish tank. This must be wired properly.
14. Room 118
 - (a) Remount existing fire extinguisher in a conspicuous place in the path of egress.
 - (b) Remove extension cord that passes through wall.
15. Office by Room 118
 - (a) Remove extension cord operating refrigerator. This must be wired properly.
 - (b) Install a Class BC or ABC extinguisher in a conspicuous place in the path of egress.
16. Room 115 – Extinguisher sitting on floor must be mounted in a conspicuous place.
17. Teacher's Room – (Opposite General Office) – Install a Class BC or ABC extinguisher in a conspicuous place in the path of egress.
18. General Office – Install a Class BC or ABC extinguisher in a conspicuous place in the path of egress.
19. Computer Room – Install a Class BC or ABC extinguisher in a conspicuous place in the path of egress.
20. Room 219 – Install a Class BC or ABC extinguisher in a conspicuous place in the path of egress.
21. Second Floor Corridor – Repair and maintain emergency lighting.
22. Main Boiler Room – (Basement) – Exposed electrical wires. Electrical box must be properly closed.
23. Tractor Garage – Install a Class BC or ABC extinguisher and post No Smoking signs.

24. Gas Pump Area – Install a Class BC or ABC extinguisher in weather-proof cabinet near gas pump used for fueling tractor and cars.
25. Nurses' Room (Clinic) – Mount Exit sign on wall opposite cubicles and over the three (3) Fire Exit doors.
26. Gym #3 (North)
 - (a) Exposed electrical wires. Electrical box must be properly closed.
 - (b) One emergency light fixture missing.
27. Room 101 (Wood Shop)
 - (a) Mount, in a conspicuous place, a Class BC or ABC extinguisher near the entrance to the spray booth.
 - (b) Spray booth – Open cans containing flammable liquids being used for cleaning brushes. Flammable liquids must be stored properly.
 - (c) Spray both – Filters appear to need replacement.
28. Room 102 – Keep combustible materials off flammable liquids safety cabinet.
29. Media Center
 - (a) With all the electrical equipment now used in this room, a Class BC or ABC extinguisher must be installed in a conspicuous place in the path of egress.
 - (b) West Fire Exit Door – BLOCKED
 - (c) South Fire Exit Door – BLOCKED

Remove chairs and tables. A path of egress must remain open to these Fire Exit doors at all times. If a security problem exists in the Media Center, a battery-powered Panic Bar alarm system must be installed on these Fire Exit doors.
30. Social Studies Office
 - (a) Exposed electrical wires. Electrical box on wall must be properly closed.
 - (b) An extension cord is being used to operate numerous electrical appliances. This must be removed and the proper electrical box installed.
 - (c) With all the electrical equipment now used in this room, a Class BC or ABC extinguisher must be installed in a conspicuous place in the path of egress.

31. Room 249 – Keep student's desk and chair away from Exit door.
32. Projection Booth
 - (a) Extinguisher needs inspection
 - (b) Exposed electrical wires. Electrical box must be properly closed.
33. Auditorium – Replace missing tiles in ceiling above south Exit door. A properly maintained ceiling helps to prevent spread of fire.
34. Stage
 - (a) North side – CO₂ extinguisher needs inspection and must be properly mounted.
 - (b) North side – Clear area around electrical panels.
 - (c) Rear Storage area – More tiles are missing in the ceiling than are in place. This area must be properly maintained as it would help to prevent spread of fire.
35. Corridor off Room 112 – Replace knob on wall cabinet door so fire extinguisher is accessible.
36. Room 110 – Nursery – Gas stove being used. Mount a Class BC or ABC extinguisher in a conspicuous place in the path of egress.
37. Room 109
 - (a) Portable electrical heater must be removed.
 - (b) Mount a Class BC or ABC fire extinguisher in a conspicuous place in the path of egress.
38. Room 108
 - (a) Exposed electrical wires in closet. Electrical box must be properly closed.
 - (b) Ceiling tile missing in teacher's room.
39. Guidance Room – Install a Class BC or ABC extinguisher in a conspicuous place in the path of egress.
40. Room 106
 - (a) Found class A combustibles on Kiln.
 - (b) Found several gallon containers of flammable liquids being stored on shelf. Remove to fire safe cabinet.

- (c) Fire Exit door blocked. Keep a path of egress open at all time.
41. Room 107 – The Kiln was in operation during our evening inspection.
- (a) An open five (5) gallon can of turpentine was within five (5) feet of the Kiln. Remove to a fire safe cabinet.
 - (b) Two portable propane cylinders were on a table near the Kiln.
 - (c) Class A Combustibles (cardboard) were being stored on the hot Kiln.

Rooms 106 and 107

1. Place the approved flammable liquids storage cabinet as far away from the Kilns as possible.
2. Mount a BC or ABC extinguisher near the Kilns.
3. Mount present extinguishers in a conspicuous place in the path of egress.
4. Keep all combustible materials at least 36 inches away from heating appliances.

Pascack Valley High School – Fire Zones

The Fire Prevention Bureau has reviewed the Fire Zones at the Pascack Valley High School and has found that, in order to provide access for fire fighting equipment during school hours and during special events held at the high school, the following areas have been designated Fire Zones.

Please label and post areas within thirty (30) days.

REPRINTED WITH PERMISSION