Fire Suppression Systems

This is <u>not</u> to purchase systems, but is for service, maintenance, and /or inspections relative to existing systems. However, Portable Fire Extinguishers *may* be purchased to replace units that are no longer serviceable, or to supplement existing units where needed.

The State intends to award **MANDATORY** Price Agreement(s) resulting from this solicitation for use by delegated State of Colorado agencies, and made available for use by non-delegated purchasing entities and Political Subdivisions.

The Agreement(s) may include inspections, service, or testing of the following as applicable to customer need:

- 1) Backflow Prevention Systems, inspection and testing;
- 2) Automatic Fire Pumps, inspection and testing;
- 3) Fire sprinkler systems (water-based) inspection/test to include the following:
 - a. Annual inspection/test of wet pipe sprinkler systems
 - b. Dry pipe systems
 - c. Pre-action systems
 - d. Deluge systems
 - e. Fire pump(s) testing
- 4) Fire Detection and Alarm Systems; inspection and testing;
- 5) Emergency Lighting Systems; maintenance, inspection and testing;
- 6) Special hazard systems (dry-chemical, wet-chemical, and CO2 suppression systems); semiannual inspection and testing
- 7) Portable fire extinguishers; annual inspections, 6 year internal inspections, 5 year (CO2), and 12 year hydro-static testing.
- 8) Portable Fire Extinguishers, New Sales;
- Commercial cooking fire suppression systems; semiannual inspection/ testing;
- 10) Commercial hood systems cleaning
- 11) Annual performance testing/ inspection of fire alarm system(s), including emergency lighting maintenance and testing.

Customer will contact vendor for price quote prior to scheduling, based on scope of required site services, and using the pricing options available on the posted award.

General Requirements:

- Prospective contractors must include in their pricing all labor, applicable test equipment, and materials to complete the inspection/testing of facility fire protection systems, including fire sprinkler systems, commercial cooking hood suppression systems, fire alarm systems, emergency lighting systems, standpipe and fire hose systems, and special hazard systems. Vendors do NOT have to respond to all parts of this solicitation, but should indicate CLEARLY as to which parts they <u>ARE</u> responding to.
- 2. Prospective vendors must attest by signature to their personnel having appropriate certifications and/or licenses to perform the listed work. Maintaining current certificates and/or licenses is a <u>requirement</u> to be considered responsive and compliant with the terms of the solicitation and scope of work, and subsequently with the terms of an awarded Price Agreement. The State reserves the right to request proof of license and/or certification, and vendor will also provide same to user entities should they request it. Refer to signature response page.
- 3. Please note that certain agencies may require additional pre-screening clearances and scheduled access prior to on-site work (for Department of Corrections or at-risk Human Services facilities, Vendor must submit to background NCIC, for example).
- 4. In accordance with the Colorado Department of Safety, Division of Fire Safety, and in compliance with the Colorado Fire Suppression Rules, all vendors performing Fire Suppression System Tests, Maintenance, and Inspections shall be registered and/or have personnel certified to conduct necessary work. Fire Suppression Systems Contractor: Persons conducting work on backflow prevention systems must possess a valid certification as a Certified Cross-Connection Control Technician from the American Society of Sanitary Engineering (ASSE), the American Backflow Prevention Association (ABPA), or the Association of Boards of Certification (ABC), in conformance with requirements set forth by the Colorado Primary Drinking Water Regulations.
- 5. Vendors performing Overhead Hood Cleaning services must be currently certified under the International Kitchen Exhaust Cleaning Association (IKECA) <u>http://www.ikeca.org/index.asp</u>, or commit to certification within 6 months. Work shall be conducted in accordance with established IKECA standards. Contractors shall also conduct work in compliance with applicable safety and fire codes pertinent to each Authority Having

Jurisdiction (AHJ). Failure to obtain or maintain current IKECA certification shall be grounds for termination of the Price Agreement.

- Contractors doing business in Colorado must understand, agree to and abide by the application and registration requirements set forth by the Colorado Secretary of State and Department of Public Safety, Division of Fire Safety. Refer to full Fire Suppression Rules document at: <u>http://dfs.state.co.us</u>
- 7. All prospective vendors must provide and maintain adequate insurance coverage following award, and prior to commencing any work, in accordance with current required standards. The certificate must contain an endorsement naming the State of Colorado, its Agencies, and Institutions of Higher Education as additional insured. Other Price Agreement users *may* require additional insurance or endorsement(s). See attachment C for State of Colorado minimums.
- 8. Service technicians performing work must be able to conduct proper inspection, functional testing, cleaning and sensitivity testing procedures applicable to the aspects of the Scope of Work to be performed.
- 9. In addition service technicians must be technically knowledgeable, and work must be performed in compliance and accordance with all applicable requirements of the local Authority Having Jurisdiction (AHJ). The following list provides a sampling of main standards; a more comprehensive listing is provided beginning on page 5 of this document:
 - a. Water Based Fire Sprinkler Systems National Fire Protection Association ("NFPA") Standards 13, 14, 16, 25, and 72
 - b. Fire Alarm Systems NFPA Standards 25, 70, and 72
 - c. Special Hazard Systems NFPA Standards12, 17, and 17A
 - d. Fire Extinguishers NFPA 10
- 10. Recharging of dry chemical fire extinguisher process must include a closed hopper system of filtration.
- 11. All testing and maintenance shall be done according to National Fire Protection Association (NFPA), Occupational Safety and Health Administration (OSHA), and National Institute for Certification in Engineering Technologies ("NICET"); additionally, Emergency Lighting, and Fire Detection and Alarm Systems shall be tested and maintained in accordance with National Electric Code (NEC) minimum standards.

- 12. The State will require the contractor to provide ordering agencies with verification of inspection (tags, and/or certifications as applicable), and an overview in the form of a standard report with checklist indicating what has been done and condition of the system inspected. Contractor shall also be responsible for maintaining an accurate record of the number of units, type, date and location of service for all systems that work is performed on. Prospective contractor must include example standard sample report and records form(s) with the returned bid.
- 13. Determination of when a fire extinguisher is no longer serviceable will be made jointly by ordering entity, facilities/maintenance department and contractor.
- 14. A customer shall be notified at least 30 days prior to any regularly scheduled annual inspection/testing so that the ordering entity can arrange access or representative personnel to engage with the contractor as needed.
- 15. Invoices for services shall be submitted directly to the ordering entity for which services were performed. Invoices must clearly show itemized list of inspections or service(s) performed, date service performed, location, and any parts authorized by the ordering entity. The State will not pay for any shop supplies charges unless prior authorization is given by the using agency for these supplies.
- 16. Contractor must provide an equivalent unit to be used during any interim period while fire extinguishers are being charged, when need is determined by the ordering entity.
- 17. Contractor is expected to be cognizant of appropriate codes within the various locations to be serviced.
- 18. Contractor must be able to provide OEM parts for normal maintenance and repairs of systems, to be included in service cost. Applicable discount rate to be offered to the State on any miscellaneous parts required must be listed separately (refer to Pricing Document, Attachment B). The successful contractor(s) must be able to provide this list to all customers.
- 19. Ordering customers may provide equipment lists to an awarded vendor for specific pricing. Pricing for equipment must remain consistent with discounted percentage offered for miscellaneous parts, as applicable.
- 20. Successful bidder must conduct business from a main local office (Denver metro area) and provide a telephone number where a company representative may be reached. Answering services, pagers and/or answering machines are not an acceptable means of communication for

awarded vendors. If vendor has regional service offices in addition to a main local office, specific contact information for that office must also be supplied.

- 21. Maintenance of systems (with the possible exception of Overhead Hood Cleaning) will be performed during business hours, but must not disrupt or interfere with normal business operations.
- 22. If substitution items are offered, the State reserves the right not to procure the substituted items, and additionally retains the right to procure substitutions outside the Agreement. Throughout the term of the Agreement, substitution items may be added or deleted following 30 Day notice to (and with written approval from) the State Purchasing Office according to requests of the using agencies and/or usage reports.

Services will be performed either on-site or contractor will pick-up and return items being serviced, at the vendor's expense. Agencies will not be responsible for dropping items off at vendor's location.

Bidder must be able to demonstrate the ability and capacity to perform according to the terms of this bid. Bidder will be required to have 4 years experience providing these types of services to organizations of similar size and complexity. The State may require additional information of the apparent successful bidder to determine their ability to perform.

Services will be in compliance with the following codes and standards

- Applicable DOT 49 CFR regulations, as applied to inspection, test, and requalification of DOT containers used in fire suppression systems
- The National Fire Protection Association (NFPA), service and maintenance requirements for containers found in the following NFPA Standards (latest edition):

NFPA-1, Fire Code

NFPA-10 Standard for Portable Fire Extinguishers

NFPA 12, Standard on Carbon Dioxide Extinguishing Systems

NFPA-17, Standard for Dry Chemical Extinguishing Systems

NFPA-17A, Standard for Wet Chemical Extinguishing Systems

• The National Fire Protection Association (NFPA), service and maintenance requirements for systems are found in the following NFPA Standards (latest edition):

NFPA-13, Standard on the Installation of Sprinkler Systems

NFPA-14, Standard for the Installation of Standpipes and Hose Systems

NFPA-16, Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems

NFPA-25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems

NFPA-70, National Electrical Code®

NFPA-72, National Fire Alarm Code®

NFPA-75, Standard for the Protection of Information Technology Equipment

NFPA-76, Standard for the Fire Protection of Telecommunications Facilities

NFPA-96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations

NFPA-99, Standard for Health Care Facilities

NFPA-101, Life Safety Code

NFPA-170, Standard for Fire Safety and Emergency Symbols

NFPA-232, Standard for the Protection of Records

NFPA 408, Standard for Aircraft Hand Portable Fire Extinguishers

NFPA-750, Standard on Water Mist Fire Protection Systems

NFPA-2001, Standard on Clean Agent Fire Extinguishing Systems

• applicable Compressed Gas Association (CGA) publications

NO SUB-CONTRACTING OR OUTSOURCING WILL BE ALLOWED FOR ANY ASPECT OF THE SERVICES IN THIS SOLICITATION OR RESULTING AGREEMENT(S)

SYSTEMS AND EQUIPMENT

Backflow Prevention Systems:

It is imperative that backflow prevention devices are installed and properly functioning at a facility for the safety of personnel, occupants and visitors. Backflow prevention systems prevent contamination of the potable water distribution through infiltration of stagnant water or substances from industrial or fire protection piping. Regularly scheduled maintenance and service of backflow prevention devices helps prevent potential health issues due to water supply contamination. Certified inspection and testing services must include a written report of inspection findings, including any specific recommendations for corrective action where needed.

Inspect:

1. each backflow prevention device to determine whether it is in service and in satisfactory condition.

2. site and identify any conditions that could potentially compromise the performance of mechanical and/or electronic components of the backflow preventers.

- 3. backflow preventer control valves for proper position, general condition and accessibility.
- 4. the general condition of backflow preventers, piping, hangers, drains, test ports and related equipment.

Also required:

- 5. Conduct required annual performance differential test.
- 6. Tag devices as required and perform all required record-keeping/ reporting.
- 7. Provide a brief written report of the inspection to customer, detailing any deficiencies.
- 8. Be sure customer is updated with proper operation of the equipment, as needed.

STANDPIPE INSPECTIONS, FIRE HOSE (if applicable)

For ordering entities with existing standpipes and fire hose systems in-service, and in accordance with applicable codes, fire hose is to be taken from its rack, unrolled and physically inspected at least once a year. Hose must be replaced on the rack so that folds do not occur at their former positions. Inspection and re-racking procedure is to identify any problems, maintain the functional condition of the hose and provide a measure of safety at the time of a fire until firefighters can arrive.

Remove the hose from its rack, and check:

- 1. that the last hydro-test date is within code requirements.
- 2. condition of couplings.
- 3. condition of the threads.
- 4. condition of gasket in the coupling, replace if necessary.
- 5. valve for damage, rot or mildew.
- 6. hose for damage, rot or mildew.
- 7. nozzle for damaged threads and damaged or blocked tip.
- 6. and verify that the standpipe hose threads match the type used by the local Fire Department. If threads do not match, an adapter should be supplied.
- 9. Reattach coupling to valve.
- 10. Reposition the hose on the rack so that folds do not occur in previous positions.
- 11. Replace nozzle and attach it to the nozzle clip on the rack.
- 12. Tag the unit properly.
- 13. Check the cabinet for easy access and, where applicable, check that the glass is intact.
- 14. Observe the hazard area to confirm that there is sufficient hose to reach in any direction.
- 15. Check that the standpipe is visible and unobstructed. If it is obstructed, notify the customer representative and have the area cleared.
- 16. Provide a brief written report of the inspection to customer, detailing any deficiencies.
- 17. Be sure customer is updated with proper operation of the equipment, as needed.

Automatic Fire Pumps:

Automatic fire pumps boost water pressure for high hazard areas and where water demand exceeds available pressure. In the event of pump failure, a sprinkler system will not perform at the required levels established for adequate protection of a facility and its occupants. To ensure proper operation of automatic pumps, a scheduled comprehensive inspection and test is required in accordance with local, state and federal codes. Certified pump tests must include a written analysis addressing the current performance of

inspected pump equipment. A report of the inspection findings must also include recommendations for corrective action where needed.

Inspect:

- 1. Automatic fire pumps to determine if they are in service and in satisfactory condition in accordance with NFPA standards.
- 2. Site conditions, and identify any issues that could compromise the performance of mechanical and/or electronic components of the pumps.
- 3. Inspect automatic fire pump control valves for proper position, general condition, accessibility and appropriate signage.
- 4. Inspect automatic fire pump test header for satisfactory condition.
- 5. Inspect automatic fire pump alarm components for satisfactory condition.

Also required:

- 6. Check general condition of automatic fire pump piping, hangers, drain valves, check valves, gauges and related equipment.
- 7. Conduct required annual performance flow test.
- 8. Tag devices as required and perform required record-keeping.
- 9. Provide a brief written report of the inspection to customer, detailing any deficiencies.
- 10. Be sure customer is updated with proper operation of the equipment, as needed.

Fire Sprinkler Systems:

Inspections shall be carried out in accordance with local, state and federal codes. Each inspection shall include a report of the inspection results, and include recommendations for any corrective actions, where needed.

Inspect:

1. System to determine whether it is in service and all components are in satisfactory .condition in accordance with NFPA standards.

- 2. And test fire sprinkler system alarm components.
- 3. Sprinkler heads for adequate clearance and condition to verify proper distribution and activation.
- 4. Sprinkler control valves for proper position, general condition, accessibility and appropriate signage.

- 5. Each system from main drain and inspector's test valve; perform required water-flow tests as weather permits. (In case of inclement weather, inspection must be rescheduled).
- 6. Fire Department connection couplings, caps, threads and clappers, check valves and drains for fit, wear, and serviceability; any exceptions or corrective actions must be specifically detailed in report.
- 7. General condition of visible and accessible sprinkler system piping, hangers, drain valves, gauges and related equipment.
- 8. And test (as applicable), the operation of system air compressors for proper activation and cutoff.
- 9. Deluge or pre-action valves (as applicable), according to manufacturer's specifications, including interior checks of valve body, clapper, clapper facings and latching mechanism
- 10. Reserve supply of sprinkler heads. Report shall note suggested minimum reserve, and existing supply on date of inspection, if deficient.
- 11. And test low-pressure alarms, supervisory circuits and auxiliary functions for proper operation.

When applicable:

- 12. Clean pilot lines and solenoid strainers thoroughly.
- 13. Disassemble the solenoid release, and inspect and clean interior.

Inquire:

- 14. about any changes in building status including any obstructions that may affect performance or reliability of the fire sprinkler system.
- 15. about any changes or modifications made to the fire sprinkler system.

Also required:

- 16. Discuss Customer's general storage and stock arrangements for combustibles in relation to fire sprinkler system protection.
- 17. Tag devices as required and perform required record-keeping.
- 18. Identify site conditions that could compromise mechanical and/or electronic components of system.
- 19. Provide a brief written report of the inspection to customer, detailing any deficiencies.
- 20. Be sure customer is updated with proper operation of the equipment, as needed.

Inspection and draining of low points will be ordered at intervals specified by the Customer, but will comply with NFPA requirements. Provide a written report of the inspection to customer. Services for inspection and draining of all low-point drains on a seasonal, as-needed basis are to avoid pipe breakage and accidental tripping of systems due to freezing.

Fire detection/ fire alarm systems:

The reliability of fire detection and fire alarm systems is crucial to providing safety to building occupants and protection of property. All inspection services will be performed in accordance with appropriate local, state and federal codes. Each inspection service must test that systems operate as designed, which minimizes the incidence of false alarms that interrupt business operations. All inspections must be conducted by certified fire detection and alarm inspection technicians. When specified, inspection services will include inspecting fire suppression system. A report of inspection findings will be prepared.

Inquire:

- 1. about any changes or modifications of the fire detection and alarm system
- 2. about changes in the general occupancy environment, operations and conditions relating to the fire detection and alarm system in accordance with NFPA recommended procedures.
- 3. about the Customer's general storage and stock arrangements for combustibles in relation to fire alarm and suppression systems

Inspect:

4. Each system to determine whether it is in service and in satisfactory condition in accordance with NFPA standards.

5. Site conditions, and identify any issues that could compromise the performance of mechanical and/or electronic components of the system.

- 6. The general condition of the fire alarm panel and related equipment.
- 7. And test smoke and heat detectors in accordance with their manufacturer's specifications.
- 8. Fire alarm control panels and remote fire alarm panels.
- 9. All annunciators and zones physically and visually, and test by tripping a detector.
- 10. And meter batteries.
- 11. And exercise flow switches, tamper switches and low-pressure alarms.
- 12. Output relays and test their activation.

- 13. And verify, if applicable, that all signals are received by designated alarm service provider.
- 14. All smoke detectors for cleanliness. Clean all detectors that require cleaning in accordance with their manufacturer's guidelines, as applicable.
- 15. Operability of non-restorable heat detector circuits by simulating electrical operation at the wiring connection.
- 16. And test functionality of all accessible heat-actuating devices, both electrically and pneumatically in accordance with the manufacturer's specification. When explosive conditions are present, hot water shall be used to heat-test accessible heat actuating devices.
- 17. And exercise all supervised control valves and switches.

Also required:

- 18. During testing of the fire detection system, activate outputs for the purpose of equipment shutdown, start-up and HVAC/smoke control.
- 19. Tag devices as required, and perform required record-updates.
- 20. Provide a brief written report of the inspection to customer, detailing any deficiencies.
- 21. Be sure customer is updated with proper operation of the equipment, as needed.

Emergency Lighting

In the event of power loss or fire, building occupants depend on emergency lighting and exit signs that guide evacuees to safety. Improperly maintained emergency lighting systems are unacceptable. Vendor is required to perform complete inspections of these systems in accordance with applicable codes. Vendor providing maintenance services for these systems are required to maintain an adequate inventory of replacement parts applicable to servicing a full range of system brands.

Inspect:

- 1. each system to determine whether it is in service and in satisfactory condition in accordance with NFPA standards.
- 2. site conditions, and identify any issues that could compromise the performance of mechanical and/or electronic components of the emergency lighting system.
- 3. and test each unit to ensure that lighting systems will illuminate a minimum of 90 minutes (OSHA, NFPA and NEC minimum standards).
- 3. and adjust the PC board float voltage, where applicable to ensure extended life of batteries and other key components.

- 4. all bulbs and lamp heads to ensure they are operational and meet code-specified lighting requirements.
- 5. all exit signs for proper function.
- 6. and clean all battery terminals and leads.
- 7. emergency lights and exit signs for appropriate placement.

Also required:

- 8. Check energy efficiencies of all units, bulbs and lamps.
- 9. Tag devices as required and perform required record-keeping.
- 10. Provide a brief written report of the inspection to customer, detailing any deficiencies.
- 11. Be sure customer is updated with proper operation of equipment, as needed.

Special hazard fire suppression systems.

Used where chemicals, flammables, equipment or processes require specialized fire suppression strategies. Such systems protect aircraft, computer rooms, fuel pump islands, clean rooms, rare documents, telecommunications centers, power plants, tire storage facilities and many other high-value and/or high-hazard assets. The suppression agents vary with the application, and may include CO2, FM200, Inergen, Novec1230, FE25/ECARO 25, foam, dry chemical or other special chemical formulations. A written report of findings from inspection must include recommendations for corrective action where needed.

Inspect:

- 1. System to determine whether it is in service and in satisfactory condition, in accordance with NFPA standards.
- 2. Site conditions, and identify any issues that could compromise the performance of mechanical and/or electronic components of the system
- 3. Discharge devices for adequate condition and clearance to allow for proper distribution and activation.
- 4. Each release control device for proper position, general condition, accessibility and appropriate signage.
- 5. Each special hazard system, and conduct required tests, weather permitting. (In case of inclement weather, technician will need to reschedule for earliest possible date.)
- 6. Fire Department connection couplings, caps, threads, clappers, check valves and drains.

- 7. General condition of visible and accessible piping, hoses, hangers, drain valves, gauges and related equipment.
- 8. Cylinders, straps and outlet fittings connected to the discharge manifold for tightness and bracing.
- 9. Agent storage devices for the proper quantity of extinguishing agent, check storage pressure, and record the last hydro-test date for agent cylinders and hoses.

Inquire:

- 10. About changes in building status that may affect the performance or reliability of the special hazard system, including obstructions.
- 11. About changes or modifications made to the special hazard fire suppression system.
- 12. about the Customer's general storage and stock arrangements for combustibles in relation to special hazard fire suppression.
- 13. Tag devices as required and perform all required record-keeping.
- 14. Provide a brief written report of the inspection to customer.
- 15. Be sure customer is updated with proper operation of the equipment, as needed.

Portable Fire Extinguisher Inspection, Service, and Testing:

Portable extinguishers must be tested to be certain that they are charged and in proper working order, and suitably located according to their potential hazard environment. All fire extinguisher inspections, service, selection and placement, will be conducted annually in compliance with all applicable codes, and each extinguisher use class must be clearly identified, properly positioned and appropriate to location. Following inspection, a written report of findings shall be provided noting inspection date, time, and service technician. The report will also identify equipment type/class or placement discrepancies and offer recommendations, if applicable.

Inspect:

1. Each unit to be sure it is properly hung with the proper manufacturer's hanger.

Remove each extinguisher from its hanger, and check:

- 2. gauge pressure.
- 4. condition of gauge and its compatibility with extinguisher.
- 5. weight of extinguisher.

- 6. that last hydro-test test date is within code requirements.
- 7. last 6-year maintenance inspection, if applicable.
- 8. valve and shell for damage or corrosion.
- 9. hose and inspect it for cracks or splits (remove hose to inspect closely).
- 10. hose threads for signs of wear.
- 11. condition of discharge horn.
- 12. for obstructions that may interfere with access to the extinguisher.
- 13. additionally by breaking extinguisher seal and remove locking pin.
- 14. upper and lower handles.

To complete:

- 15. Replace locking pin and reseal extinguisher.
- 16. Inspect valve opening for powder or any foreign matter.
- 17. For dry extinguishers, fluff the powder by turning the unit.
- 18. Clean extinguisher shell with spray cleaner.
- 19. Return hose to its proper position.
- 20. Check condition of hose/horn retention band at the side of the extinguisher.
- 21. Verify that each unit's classification is properly identified with the appropriate decal.
- 22. Check that all operating instructions are clean and legible.
- 23. Properly tag each extinguisher.
- 24. Survey the area around the unit to verify that the unit classification corresponds properly with all potential hazards.
- 25. Verify unit is properly located within normal travel pathways, and positioned at a conspicuous and accessible height.
- 26. Ensure unit is visible and unobstructed.
- 27. Replace extinguisher on its hanger.
- 28. Provide a brief written report of the inspection to customer, detailing any deficiencies.

Portable Fire Extinguishers, New Sales:

Minimum requirements of all new fire extinguishers:

- All fire extinguishers, including all component hardware, charge and propellant, shall be new
- Must have a six-year factory warranty
- Must meet all organizational (UL, DOT, NFPA, OSHA, FEMA, etc.) standards.
- Must be corrosion resistant and be painted red, except water spray-type (class A), which shall be stainless steel.
- Valve assemblies must be metal.

Also required:

- 1. Extinguishers must be delivered with a current inspection tag.
- 2. Packaging and shipping must conform to applicable federal and state regulations.
- 3. Deliveries must have HM-126C MSDS sheets for proper extinguishing agents.

4. A 24-hour toll free 800 number must appear on all copies of the invoice/packing slip. 8. All invoiced shipments must be delivered in accordance with all state and federal regulations.

5. Vendor is required to replace defective, incorrect contents, incorrectly sized or incorrectly placed fire extinguishers at no charge, and within 12 hours of notification.

Kitchen Fire Suppression/ Commercial Hood Systems:

Most commercial kitchens use high-temperature appliances, cooking oils, and solid fuels. Kitchen fire suppression systems must be in peak working condition to ensure the safety of employees and patrons alike. In government and educational food service environs, safety considerations are especially important.

Thorough inspections must be performed in accordance with applicable standards, current codes and requirements for this equipment, including use of dry chemical extinguishing agents. All inspections must be scheduled and conducted with the goal of minimizing downtime.

User personnel must be familiarized with the proper use and care of kitchen fire suppression systems to reduce the possibility of expensive, unnecessary discharges, resulting in safer, more productive working environments for staff. A detailed, written report of all inspection findings is required, including recommendations for any corrective actions where needed.

Inspect:

1. System to determine whether it is in service and all components are in satisfactory .condition in accordance with NFPA standards.

2. Site conditions, and identify any issues that could compromise the performance of mechanical and/or electronic components of system.

- 3. And test remote pulls for condition and operability.
- 4. Automatic trip, perform a trip test of system.
- 5. And Test manual release of system.

Additional duties:

- 6. Verify mechanical operation of system.
- 7. Check gas shutoff function, if applicable, or electrical shutoff function, if applicable.
- 8. Replace fusible links where required.
- 9. Inspect system components for cleanliness.
- 10. Restore system to normal operation.
- 11. Reset system.
- 12. Install new tamper seals.
- 13. Inspect suppression agent cylinder.
- 15. Verify cylinder/cartridge pressure, agent weight and condition.
- 16. Check that last hydro-test test date is within code requirements.
- 17. Inspect and verify piping/bracing to manufacturer's specifications.

18. Inspect all nozzles and verify that they are properly aimed, free of any damage or blockages, and have proper blow-off caps intact.

19. Verify that system Owner's Manual is available on-site.

20. Verify that a proper portable fire extinguisher is available in an easily seen, accessible location, and a suitable type to the environment.

21. Ask customer about general occupancy relating to the kitchen fire suppression system in accordance with all applicable NFPA recommended procedures.

22. Inspect for any changes in the hazard area that may affect performance and reliability of fire suppression system.

23. Tag devices as required and perform required record-keeping.

24. Compile a report of the inspection.

25. Familiarize the Customer with proper operation of system equipment.

Commercial hood systems cleaning

The State desires that vendors incorporate, to the fullest extent possible, environmentally responsible business practices. To that end, the State expects all prospective contractors to demonstrate commitment to and experience in environmental sustainability and public health protection practices applicable to their line of services. In accordance with the State's EPP Policy, the cleaning products used for Commercial Hood Systems Cleaning should be in accord with the standards and recommendations of the United States Environmental Protection Agency EPP program, the Green Seal organization, and standards and practices specified by the U.S. Green Building Council. Hood cleaning products registered under NSF International are also acceptable.

Contractor will:

- 1. Provide high pressure spray unit(s) for cleaning commercial hoods.
- 2. Provide agency's representative with a cleaning schedule.
- 3. When cleaning multiple units, schedule off-peak hours for cleaning.
- 4. Prearrange with agency's representative for kitchen key(s) and roof accessibility, as applicable.
- 5. Be required to provide ladder(s) for buildings without roof access and all other ladder requirements.
- 6. Supply lighting accessories.
- 7. Provide all tools and equipment necessary to perform hood cleaning & clean-up.
- 8. Grease bearings on blower shaft, (if noted on job order).
- 9. return all issued keys to customer's representative upon completion of job (if applicable).

Note: Customer representative will inspect each cleaning upon completion

(Example cleaning Scope of Work)

Kitchen Setup:

- 1. Turn off appliances and pilot lights
 - a. Remove or place boards over deep fat fryers
 - b. Place boards over range, cookers, etc.
 - c. Place polyurethane over all appliances and clip to troughs
 - d. Clip and drape polyurethane from the hood canopy, directing water to suitable drain or collection container
- 2. Remove grease filters
- 3. Clean filters, as noted on job order

Set-Up for Roof Fan Cleaning:

- A. Locate and use roof access or Use ladder for roof access if required,
 - a. secure at bottom and tied off at top
 - b. take lighting equipment, tools and equipment to roof
 - c. turn off fan at roof and main junction, if possible

Roof and Upper Duct Cleaning Operations:

- B. Contractor will gain access to and clean unit(s) as required:
 - a. Open hinged exhaust fan unit to access fan, fan housing and roof duct or
 - b. Disassemble and dismount fan as required
 - c. Remove access panels from ductwork and fan housing
 - d. Clean fan and housing watch balance weights on blades DO NOT REMOVE
 - e. Clean horizontal and vertical ductwork and access panel(s)
 - f. Disassemble cold air damper and clean, if noted on job order
 - g. Remove any grease from roof area
 - h. Remove any grease or debris from roof drain

C. Contractor will reassemble unit(s) as required

Close and secure hinged exhaust unit(s) as required. Re-install ductwork access panels – adding a continuous bead of silicone at edge.

- a. Replace screws be sure to check for and replace any missing screws
- b. Reinstall cold air damper
- c. Reassemble and remount fan
- d. Reinstall fan access panels adding a continuous bead of silicone at edge
- e. Replace screws be sure to check for and replace any missing screws
- f. Turn fan on and check for proper operation and balance
- g. Turn fan off
- h. Remove all tools or equipment from work area

Hood and Lower Duct Cleaning:

Contractor will:

- a. clean the ductwork between the hood and roof, removing access panels from lower duct if required
- b. clean the inside of hood including all corners and grease troughs
- c. clean fire protection system pipes be careful not to move fusible link(s)
- d. clean and reinstall lower duct access panels adding a continuous bead of silicone at edge
- e. Restart fan

Clean-Up:

- a. Unclip and remove polyurethane from appliances
- b. Remove boards from appliances
- c. Wipe down back-flashing and appliances
- d. Remove tools
- e. Re-light all pilot lights
- f. Mop floors and let dry
- g. Remove any grease or debris from floor drain(s)
- h. Leave fan switches or lights on or off as requested
- i. Check job site again for cleanliness and tools
- m, Contact agency's representative's to return key(s) and obtain signature for job order!
- n. Lock doors and return key, if applicable