

The City of Hickory

Chemical Hygiene Plan

Safety Standard Operating Procedures

Date: June 7, 2001

Revision: 01

I. Policy

The City of Hickory is firmly committed to providing a safe and healthy work environment. It is a matter of city policy as well as an important public program under OSHA, that the City of Hickory has implemented this Chemical Hygiene Plan as outlined herein.

The City of Hickory's Risk Manager will have the overall responsibility for coordinating the program for the City of Hickory.

II. Purpose

The Chemical Hygiene Plan for the City of Hickory is implemented to protect laboratory employees from health hazards associated with the use of hazardous chemicals in the Hickory Regional Laboratory. Also this plan will assure that the employees of the Hickory Regional Laboratory are not exposed to substances in excess of the permissible exposure limits as defined by OSHA in 29 CFR 1910 subpart Z.

III. Application

This Chemical Hygiene Plan applies to any employee at the Hickory Regional Laboratory, whereby they may be exposed to chemicals in normal conditions, or in a foreseeable emergency.

IV. Reference

Federal and North Carolina Occupational Safety and Health Act Standard 29 CFR 1910 subpart Z.

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Foreword

On January 31, 1990 the Occupational Safety and Health Administration (OSHA) promulgated a final rule for occupational exposure to hazardous chemicals in laboratories. Included in the standard, which became effective on May 1, 1990 is a requirement for all employers covered by the standard to develop and carry out the provisions of a Chemical Hygiene Plan (CHP).

A CHP is defined as a written program which sets forth procedures, equipment, personal protective equipment and work practices that are capable of protecting employees from the health hazards presented by hazardous chemicals used in that particular workplace. Components of the CHP must include standard operating procedures for safety and health, criteria for the implementation of control measures, measures to ensure proper operation of engineering controls, provisions for training and information dissemination, permitting requirements, provisions for medical consultation, designation of responsible personnel, and identification of particularly hazardous substances.

This plan is the Chemical Hygiene Plan developed for Hickory, North Carolina located at the Hickory Regional Laboratory. This CHP is maintained readily available to laboratory employees therein.

All laboratory personnel must know and follow the procedures outlined in this plan. All operations performed in the laboratory must be planned and executed in accordance with the enclosed procedures. In addition, each employee is expected to develop safe personal chemical hygiene habits aimed at the reduction of chemical exposures to themselves and co-workers.

This document was developed to comply with paragraph (e) of the referenced OSHA 1910.1450 standard. _____ will maintain the facilities and procedures employed in the laboratory compatible with current knowledge and regulations in laboratory safety. This CHP will be reviewed, evaluated and updated at least annually and is readily available to employees, their representatives and any representative of the Assistant Secretary of Labor of OSHA.

Ranking Official

CHEMICAL INVENTORY FOR HICKORY REGIONAL LABORATORY

Acetone
Alcohol - Reagent grade
Alcotabs
Alkaline-Iodide-Sodium Azide solution
4-Aminoantipyrene
Ammonia Internal Filling Solution
Ammonia pH adjusting ISA
Ammonia standard solution
Ammonium Chloride
Ammonium Hydroxide
Ammonium Molybdate
Ammonium Peroxydisulfate
Antimony Potassium Tartrate
Argon
L-Ascorbic Acid
Black dry ink / Black toner
Blanking reagent for ULR chlorine
Boric Acid (granular)
Brucine-Sulfanilic Acid
Buffer solution - 4
Buffer solution - 7
Buffer solution - 10
Cadmium reference solution
Calcium Chloride solution
Chloroform
Chromium reference standard solution
COD Digestion Solution (0-150 ppm)
COD Digestion Solution (0-1500 ppm)
COD Digestion Solution (High Range Plus)
Color standard solution
Conductivity/TDS standard solutions
Copper reference solution
Cupric Sulfate (anhydrous) (Copper 11 Sulfate)
Demand quality control sample
Dextrose (Glucose)
Digestion reagent
Dilution water concentrate, APHA (Magnesium chloride pillows)
Dilution water concentrate, (Potassium Dihydrogen Phosphate pillows)
Diphenylcarbazone Bromophenol blue
Diphenylcarbazone-Xylene Cyanole
DPD Free Chlorine reagent pillows
DPD Indicator for ULR chlorine
DPD Total Chlorine reagent pillows
Drierite
Ethyl alcohol

Ferric Chloride solution [Iron (III) Chloride solution]
Ferrous Ammonium Sulfate
Fire Extinguisher (ABC Dry Chemical)
L-(+)-Glutamic Acid
Hydrochloric Acid
Hydrogen Peroxide
Hydroxylamine Sulfate
LabSolutions (Dishwashing Detergent)
Lead reference solution
m-FC Broth
m-FC Broth base (dehydrated)
Magnesium Sulfate solution
Manganous Sulfate solution
Marvel Mystery Oil
Mercontainer
Merconspray
Merconvap
Mercuric Chloride
Mercuric Nitrate
Mercury Methanol
Methyl Red
Methylene Blue
Minerals - quality control sample
NB-350 (Liquid Concentrated Soap)
Nickel reference solution
Nitrate Nitrogen standard solution (10 mg/L as N)
Nitrate Nitrogen standard solution (500 mg/L as N₃-N)
Nitraver Nitrate reagent pillows
Nitric Acid
Nitrite - quality control sample
Nitrogen standard solution
Nutrients - quality control sample
pH - quality control sample
Phenol - quality control sample
Phenol standard
Phosphate standard solution (1 mg/L as P₀₄)
Phosphate standard solution (50mg/L as P₀₄)
Platinizing solution
Potassium Bi-iodate solution
Potassium Chloride sat. w/ Silver Chloride
Potassium Chloride solution
Potassium Ferricy Anide
Potassium Hydrogen Phthalate
Potassium Iodide (granular)
Potassium Iodide solution
Potassium Iodide Solution Alkaline
Potassium Permanganate
Potassium Persulfate
Potassium Phosphate Monobasic

Residual Chloride - quality control sample
Silver reference solution
Sodium Carbonate
Sodium Chloride (crystal)
Sodium Chloride solution
Sodium Sulfate (anhydrous)
Sodium Sulfite
Sodium Thiosulfate (Granular)
Sodium Thiosulfate solution
Solids - quality control sample
Spill-X-A Agent
Spill-X-C Agent
Spill-X-s Agent
Stannous Sulfate
Starch Indicator solution
Sulfanilamide reagent
Sulfuric Acid
Sulfuric Acid solution (0.1N - 2.6N)
Sulfuric Acid standard Solution (5.25N)
Trace Metals - quality control sample 1 & 2
Trace Metals quality control sample 3 & 4
Triton X - 100
ULR Chlorine Buffer
Versa Clean
Zinc reference solution

I. STANDARD OPERATING PROCEDURES FOR LABORATORY CHEMICALS

A. Chemical Procurement

1. The decision to procure a chemical shall be a commitment to handle and use the chemical properly from initial receipt to ultimate disposal.
2. Requests for procurement of new chemicals shall be submitted to the Chemical Hygiene Officer for approval. Information on proper handling, storage and disposal shall be known to all involved personnel prior to the procurement of the chemical. Chemicals utilized in the laboratory shall be those which are appropriate for the ventilation system.
3. All chemicals shall be received in a central location. Personnel who receive chemical shipments shall be knowledgeable of the proper procedures for receipt. Chemical containers shall not be accepted without accompanying labels and packaging in accordance with all appropriate regulations. All chemical shipments should be recorded when received and opened.

B. Chemical Storage

1. Received chemicals shall be immediately moved to the designated storage area. Large glass containers shall be placed in carrying containers or shipping container during transportation.
2. The storage area shall be well-illuminated, with all storage maintained below eye level. Large bottles shall be stored no more than two feet from ground level.
3. Chemicals shall be segregated by hazard classification and compatibility in a well-identified area, with local exhaust ventilation.
4. Mineral acids should be separated from flammable and combustible materials. Separation is defined by NFPA 49 as storage within the same fire area but separated by as much space as practicable or intervening storage from incompatible materials.
5. Acid-sensitive materials such as cyanides and sulfides shall be separated from acids or protected from contact with acids.

6. Highly toxic chemicals or other chemicals whose containers have been opened shall be stored in unbreakable secondary containers.
7. The storage area shall not be used as a preparation or repackaging area.
8. The storage area shall be accessible during normal working hours. The storage area is under the control of _____ (Job Title)
9. Storage of chemicals at the lab bench or other work areas shall be limited to those amounts necessary for one operation or shift. The container size shall be the minimum convenient. The amounts of chemicals at the lab bench shall be as small as practical. Chemicals in the workplace shall not be exposed to sunlight or heat.
10. Stored chemicals shall be examined at least annually by the Chemical Hygiene Officer for replacement, deterioration, and container integrity. The inspection should determine whether any corrosion, deterioration, or damage has occurred to the storage facility as a result of leaking chemicals.
11. Periodic inventories of chemicals outside the storage area shall be conducted by the Chemical Hygiene Officer. Unneeded items shall be properly discarded or returned to the storage area.

C. Chemical Handling

Each laboratory employee with the training, education and resources provided by supervision, shall develop and implement work habits consistent with this CHP to minimize personal and coworker exposure to the chemicals in the laboratory. Based on the realization that all chemicals inherently present hazards in certain conditions, exposure to all chemicals shall be minimized. General precautions which shall be followed for the handling and use of all chemicals are:

1. Skin contact with all chemicals shall be avoided.
2. All employees shall wash all areas of exposed skin prior to leaving the laboratory.
3. Mouth suction for pipeting, or starting a siphon is prohibited.

4. Eating, drinking, smoking, gum chewing, or application of cosmetics in areas where laboratory chemicals are present shall be avoided. These areas have been posted. Hands shall be thoroughly washed prior to performing these activities.
5. Storage, handling and consumption of food or beverages shall not occur in storage areas, refrigerators, glassware or utensils also used for laboratory operations.
6. Risk determinations shall be conservative in nature.
7. Any chemical mixture shall be assumed to be as toxic as its most toxic component.
8. Substances of unknown toxicity shall be assumed to be toxic.
9. Laboratory employees shall be familiar with the symptoms of exposure for the chemicals with which they work and with the precautions necessary to prevent exposure.
10. The intent and procedures of this Chemical Hygiene Plan shall be continuously adhered to.
11. In all cases of chemical exposure, neither the Permissible Exposure Limits (PELs) of OSHA or the Threshold Limit Values (TLVs) of the American Conference of Governmental Industrial Hygienists (ACGIH-1) shall be exceeded.
12. The engineering controls and safety equipment in the laboratory shall be utilized and inspected in accordance with Appendix A of this plan.
13. Specific precautions based on the toxicological characteristics of individual chemicals shall be implemented as deemed necessary by the Chemical Hygiene Officer(see VIII-B). These special precautions are listed in Section VIII.

D. Laboratory Equipment and Glassware

Each employee shall keep the work area clean. All chemicals and equipment shall be properly labeled in accordance with Section I-G. at the completion of each work day or operation, the work area shall be thoroughly cleaned and all equipment properly cleaned and stored.

In addition, the following procedures shall apply to the use of laboratory equipment:

1. All laboratory equipment shall be used only for its intended purpose.
2. All glassware will be handled and stored with care to minimize breakage; all broken glassware will be immediately disposed of in the broken glass container.
3. Labels shall be attached to all chemical containers, identifying the contents and related hazards.
4. Waste receptacles shall be identified as such.
5. All laboratory equipment shall be inspected on a periodic basis as specified in Appendix A, and replaced or repaired as necessary.

E. Personal Protective Equipment

1. Safety glasses meeting ANSI Z87.1 are required for employees in the laboratory and will be worn during testing in the laboratory. Contact lenses are prohibited in the laboratory, except if approved by the Chemical Hygiene Officer and supervisor.
2. Chemical goggles and/or full-face shield shall be worn during chemical transfer and handling operations as procedures dictate.
3. Sandals, perforated shoes, and bare feet are prohibited. Safety shoes, per ANSI 47 are recommended where employees routinely lift heavy objects.
4. Lab coats are provided and must be worn in the laboratory. Laboratory coats will be laundered on a periodic basis, at a minimum of monthly. Laboratory coats shall be removed immediately upon discovery of significant contamination.
5. Appropriate chemical-resistant gloves shall be worn at all times when there may be skin contact with chemicals. Used gloves shall be inspected and washed prior to re-use. Damaged or deteriorated gloves will be immediately replaced. Gloves shall be washed prior to removal from the hands.
6. Thermal-Resistant gloves shall be worn for operations involving the handling of heated materials and exothermic reaction vessels. Thermal-Resistant gloves

shall be non-asbestos and shall be replaced when damaged or deteriorated.

F. Personal Work Practices

1. Laboratory supervision must ensure that each employee knows and follows the rules and procedures established in this plan.
2. All employees shall remain vigilant to unsafe practices and conditions in the laboratory and shall immediately report such practices and/or conditions to the laboratory supervisor. The supervisor must correct unsafe practices and or conditions promptly.
3. Use only those chemicals appropriate for the ventilation system.
4. Avoid unnecessary exposure to all chemicals by any route.
5. Do not smell or taste any chemicals.
6. Encourage safe work practices in coworkers by setting the proper example. Horseplay is strictly forbidden.
7. Seek information and advice from knowledgeable persons, standards and codes about the hazards present in the laboratory. Plan operations, equipment and protective measures accordingly.
9. Use engineering controls in accordance with Section III.
10. Inspect personal protective equipment prior to use, and wear appropriate protective equipment as procedures dictate and when necessary to avoid exposure.

G. Labeling

1. All containers in the laboratory shall be labeled. This includes chemical containers and waste containers. The label shall be informative and durable, and at a minimum, will identify contents, source, and indication of hazard.
2. Exemptions for labeling requirements shall be made for chemical transfers from a labeled container into a container which is intended only for the immediate use of the employee who performed the transfer.

3. The labeling program shall be periodically inspected by the Chemical Hygiene Officer to ensure that labels have not been defaced or removed.

II. CRITERIA FOR IMPLEMENTATION OF CONTROL MEASURES

A. Housekeeping

1. Each laboratory worker is directly responsible for the cleanliness of his or her workspace, and jointly responsible for common areas of the laboratory. The Laboratory supervisor shall insist on the maintenance of housekeeping standards.
2. The following procedures apply to the housekeeping standards of the laboratory:
 - (a) All spills on lab benches or floors shall be immediately cleaned and properly disposed of. Large spills will necessitate the implementation of the Emergency Action Plan per OSHA 1910.38 and 1910.120.
 - (b) The lab benches shall be kept clear of equipment and chemicals except those necessary for the work currently being performed.
 - (c) The work area shall be cleaned at the end of each operation and each shift.
 - (d) All apparatus shall be thoroughly cleaned and returned to storage upon completion of usage.
 - (e) All floors, aisles, exits, fire extinguishing equipment, eyewashes, showers, electrical disconnects and other emergency equipment shall remain unobstructed.
 - (f) All labels shall face front.
 - (g) Chemical containers shall be clean, properly labeled and returned to storage upon completion of usage.
 - (h) All chemical wastes will be disposed of in accordance with the waste disposal plan.

B. Safety and Emergency Equipment

1. Telephone numbers of emergency personnel, supervisors and other workers as deemed appropriate shall be posted.

2. All laboratory personnel will be trained in the proper use of fire extinguishers when hired and annually thereafter. Prior to the procurement of new chemicals, the Chemical Hygiene Officer shall verify that existing extinguishers and other emergency equipment are appropriate for such chemicals.
3. All employees who might be exposed to chemical splashes shall be instructed in the location and proper usage of emergency showers and eyewashes. The eyewash and emergency shower shall be inspected weekly. These inspections shall be performed by the laboratory employees. These inspections shall be in accordance with ANSI Z358.1 and manufacturer's specifications. Records shall be maintained.
4. Location signs for safety and emergency equipment have been posted.

III. ENGINEERING CONTROLS

A. Intent

The engineering controls installed in the laboratory are intended to minimize employee exposure to chemical and physical hazards in the workplace. These controls must be maintained in proper working order for this goal to be realized.

B. Modification

No modification of engineering controls will occur unless testing indicates that worker protection will continue to be adequate.

C. Improper Function

Improper function of engineering controls must be reported to the Chemical Hygiene Officer immediately. The system shall be taken out of service until proper repairs have been executed.

D. Usage

All employees shall follow proper work practices when using the engineering controls.

1. Local Exhaust Ventilation:

The following procedures shall apply to the use of local exhaust ventilation:

- (a) Openings of hoods shall be placed as close as possible to sources of the air contaminant.
- (b) Clear the glass on the face of the hood periodically.
- (c) Hood fans shall operate when hoods are being used.
- (d) After using hoods, operate the fan for an additional period of time sufficient to clear residual contaminants from the ductwork.
- (e) The ventilation system shall be inspected every six months. The duct velocity shall be maintained at 3500 feet per minute, minimum. A record of each inspection shall be maintained by the Chemical Hygiene Officer.
- (f) Prior to a change in chemicals or procedures, the adequacy of the ventilation system shall be determined by the Chemical Hygiene Officer.

2. Laboratory Hoods:

The laboratory hoods shall be utilized for all chemical procedures which might result in release of hazardous chemical vapors or dust. As a general rule, the hood shall be used for all chemical procedures involving substances which are appreciably volatile and have a permissible exposure limit (PEL) less than 50 ppm.

The following work practices shall apply to the use of hoods:

- (a) Confirm adequate hood ventilation performance prior to opening chemical containers inside the hood. Each inspection shall be maintained by the Chemical Hygiene Officer.
- (b) Keep the sash of the hood closed at all times except when adjustments within the hood are being made. At these times, maintain the sash height as low as possible.
- (c) Storage of the chemicals and equipment inside the hood shall be kept to a minimum.

- (d) Minimize interference with the inward flow of air into the hood.
- (e) Leave the hood operating when it is not in active use if hazardous chemicals are contained inside the hood or if it is uncertain whether adequate general laboratory ventilation will be maintained when the hood is non-operational.
- (f) The ventilation system shall be inspected every six months. The hood face velocity shall be maintained between 75 and 125 feet per minute. A record of each inspection shall be maintained by the Chemical Hygiene Officer.
- (g) The hood shall not be used as a means of disposal for volatile chemicals.
- (h) Prior to the introduction of new chemicals, the adequacy of hood ventilation systems shall be determined by the Chemical Hygiene Officer.

3. Storage Cabinets:

Storage cabinets for flammable and hazardous chemicals will be ventilated as needed.

IV. EMPLOYEE INFORMATION AND TRAINING

A. Hazard Information

All employees will be apprised of the hazards presented by the chemicals in use in the laboratory. Each employee shall receive training at the time of initial assignment to the laboratory, prior to assignments involving new exposure situations, and at a regular frequency as determined by the Chemical Hygiene Officer.

B. Forms

The form in Appendix C entitled "Orientation and Training Checklist" shall be used for these purposes.

C. Training

This training shall include methods of detecting the presence of a hazardous chemical, physical and health hazards of chemicals in the lab, and measures employees can take to protect themselves from these hazards. The

training shall present the details of the Chemical Hygiene Plan, and shall include:

1. the contents of the OSHA laboratory standard, and its appendices.
2. the location and availability of the Chemical Hygiene Plan;
3. the permissible exposure limits for OSHA regulated substances or recommended exposure values for other hazardous chemicals not regulated by OSHA which are present in the laboratory;
4. signs and symptoms associated with exposure to the chemicals present in the laboratory;
5. location and availability of reference material on chemical hygiene;
6. training shall be conducted by _____ (Job Title). The following materials are used during training:

Audiovisual Programs	_____
Written Materials	_____
Other Training Materials	_____

V. PRIOR APPROVAL OF LABORATORY ACTIVITIES

A. Prior Approval Requirements

1. Off-Hours Work Procedures:

Laboratory personnel are not permitted to work after hours in the lab, except when authorized.

2. Sole Occupancy:

At no time shall work be performed in the laboratory when the only person in the building is the laboratory person performing the work. Under unusual conditions, crosschecks or other measures may be taken when permitted.

3. Hazardous Work:

All hazardous operations are to be performed during a time when at least two personnel are present at

the laboratory. At no time shall a laboratory person, while working alone in the laboratory, perform work which is considered hazardous. The determination of hazardous operations shall be made by the laboratory supervisor.

4. Unattended Operations:

When laboratory operations are performed which will be unattended by laboratory personnel (continuous operations, overnight reactions, etc.), the following procedures will be employed:

- (a) Prior approval is required
- (b) The laboratory supervisor will review work procedures to ensure for the safe completion of the operation.
- (c) The overhead lights in the laboratory will be left on.
- (d) Precautions shall be made for the interruption of utility service during the unattended operation (loss of water pressure, electricity, etc.).

VI. MEDICAL CONSULTATIONS AND EXAMINATIONS

A. Opportunity for Medical Attention

An opportunity to receive medical attention is available to all employees who work with hazardous chemicals in the laboratory. The opportunity for medical attention will be made available to employees under the following circumstances:

1. Whenever an employee develops signs or symptoms associated with a hazardous chemical to which the employee may have been exposed in the laboratory,
2. Medical surveillance programs will be established where exposure monitoring reveals an exposure level above the action level for an OSHA regulated substance for which there are exposure monitoring and medical surveillance requirements, and/or,
3. Whenever an event takes place in the laboratory such as a spill, leak, explosion or other

occurrence resulting in the likelihood of a hazardous exposure the employee will be provided an opportunity for medical consultation for the purpose of determining the need for medical examination.

B. Cost

These medical consultations and examinations shall be provided without cost to the employees, without loss of pay and at a reasonable time and place.

C. Supervision

These medical consultations and examinations shall be administered by or under the direct supervision of a licensed physician.

VII. CHEMICAL HYGIENE RESPONSIBILITIES

A. Chief Executive Officer

_____ has the ultimate responsibility for chemical hygiene throughout the laboratory and with assistance of other program administrators, will provide continued support for chemical hygiene.

B. Chemical Hygiene Officer

The Chemical Hygiene Officer shall:

1. work with administrators and other employees to develop and implement appropriate chemical hygiene policies and practices,
2. monitor procurement and use of chemicals in the lab, including determining that facilities and training levels are adequate for the chemicals in use,
3. perform regular, formal chemical hygiene and housekeeping inspections including inspections of emergency equipment,
4. maintain current knowledge concerning the legal requirements of regulated substances in the laboratory,
5. review and improve the Chemical Hygiene Plan on an annual basis,

6. maintain overall responsibility for the laboratory operation,
7. ensure that workers know and follow the chemical hygiene rules,
8. determine the proper level of personal protective equipment, ensure protective equipment is available and in working order,
9. ensure that appropriate training has been provided to employees,
10. monitor the waste disposal program

C. Laboratory Workers

The laboratory workers are individually responsible for:

1. planning and conducting each laboratory operation in accordance with the Chemical Hygiene Plan
2. developing good personal chemical hygiene habits

VIII. RECORDKEEPING

- A. Accident investigations will be conducted by the immediate supervisor with assistance from other personnel as deemed necessary.
- B. Accidents reports will be written and retained for _____
- C. Exposure records for hazardous chemicals and harmful physical agents will be maintained for 30 years per 29 CFR 1910.20.
- D. Medical records for employees exposed to hazardous chemicals and harmful physical agents, will be maintained for the duration of employment plus 30 years per 29 CFR 1910.20.
- E. Inventory and usage records for high risk substances (amounts of substances on-hand, amounts used and names of workers involved) shall be maintained for _____

- F. Records of inspections of equipment will be maintained for _____
- G. Records of employee training will be maintained for _____

IX. CHEMICAL SPILLS, RELEASES AND ACCIDENTS

In the event of a chemical spill, release or other accident personnel will adhere to the procedures outlined in the Emergency Response plan as required by OSHA standard 29 CFR 1910.38 and 1910.120.

X. ANNUAL CHEMICAL HYGIENE PLAN AUDIT

The Chemical Hygiene Officer will conduct an audit of all phases of the Chemical Hygiene Plan each year. Results will be provided to the ranking official and the laboratory supervisor. Supervisors are responsible for taking corrective action.

APPENDIX A

Laboratory Safety Equipment Inspection Schedule For Hickory Regional Laboratory

Laboratory:

Address:

Laboratory Manager:

Telephone:

Purpose:

The purpose of this schedule is to assure that competent personnel inspect all laboratory safety equipment on a routine basis. Records in the form of inspection tags, stickers, of logs will be maintained for all equipment

Equipment	Location	Frequency of Inspection	Reference Standard Code, Procedure	Inspector

Chemical Hygiene Officer:

Telephone:

APPENDIX B

Chemical Hazard Audit Checklist

1. Chemical Substance Audited: _____
2. Work Area Audited: _____
3. Audit Performed By: _____
4. Reason for Audit:
 Routine
 Special – Reason: _____
5. Date Audit Performed: _____ 6. Time of Audit: _____ am _____ pm
7. Items Audited and Findings:

Item	Finding	Recommendation
<input type="checkbox"/> Current MSDS in work area <input type="checkbox"/> Engineering controls maintained <input type="checkbox"/> Employees Trained <input type="checkbox"/> Labels Appropriate <input type="checkbox"/> Local Fire Chief Notified <input type="checkbox"/> Emergency procedures known <input type="checkbox"/> Personal protective equipment used <input type="checkbox"/> Workplace monitoring performed <input type="checkbox"/> Employees told of monitoring results <input type="checkbox"/> Required medical tests performed <input type="checkbox"/> Employee concerns, if any <input type="checkbox"/> Supervisory concerns, if any		
8. Auditors Signature/Date:	Comments:	

APPENDIX C

Orientation and Training Checklist

Name: _____ S.S.# _____

Job Assignment: _____ Supervisor: _____

Employment Date: _____

BY PERSONNEL DEPARTMENT ON THE FIRST DAY OF EMPLOYMENT

- ___ Management's safety and health philosophy
- ___ Management's, supervisor's and employees' safety and health responsibilities
- ___ General plant safety and health rules

Completed By: _____ Date: _____

BY NEW EMPLOYEES IMMEDIATE SUPERVISOR

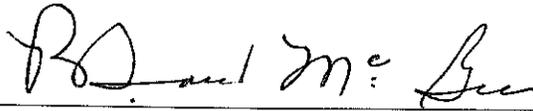
First Day in Work Area Date: _____

- ___ Introduction to operations where chemical and physical hazards are present; types encountered
- ___ Required work practices
- ___ Personal Protective Equipment
- ___ Emergency Procedures
- ___ Detection of Chemical Hazards
- ___ Location and availability of manuals
- ___ Labeling Systems

One Week Follow-Up Date: _____

- ___ Review Work practices and procedures with employee
- ___ Answer employee questions
- ___ Return completed checklist to Human Resources to be filed in personnel file

APPROVED:



B. Gary McGee, City Manager

7-10-01

Effective Date