NOTICE OF VIOLATION

Code Services, Inc. Huntsville, Alabama

Docket No. 150-00001 License No. General License EA 99-074

During an NRC inspection conducted on March 17 and 18, 1999, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedures for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

10 CFR 150.20 provides in part that any person who holds a specific license from an Agreement State is granted an NRC general license to conduct the same activity in areas of exclusive Federal jurisdiction within Agreement States, provided an NRC Form-241 is properly filed. The general license is subject to all provisions of the Act and to all applicable rules, regulations and orders of the Commission including Subpart C of Part 34.

10 CFR 34.47(a) requires, in part, that a licensee may not permit any individual to act as a radiographer or a radiographer's assistant unless, at all times during radiographic operation, each individual wears, on the trunk of the body, an operating alarm rate meter.

Contrary to the above, on February 16, 1999, an individual, employed by Code Services, Inc., who holds a specific license from the State of Alabama and was granted an NRC general license pursuant to 10 CFR 150.20, acted as a radiographer's assistant at the NASA Marshall Space Flight Center, Huntsville, Alabama, an area of exclusive Federal jurisdiction, and the individual failed to wear an alarm rate meter. (01013)

This is a Severity Level III violation (Supplement VI).

Pursuant to the provisions of 10 CFR 2.201, Code Services, Inc. is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555 with a copy to the Regional Administrator, Region II, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for the violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previously docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response to the Director, Office of Enforcement, U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and the Enforcement Officer, Region II.

Under the authority of Section 182 of the Act, 42 U.S.C. 2232, this response shall be submitted under oath or affirmation.

Enclosure 1

Because your response will be placed in the NRC Public Document Room (PDR), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be placed in the PDR without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then, please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.790(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice with two working days.

Dated at this 7th day of May, 1999

LIST OF ATTENDEES

Nuclear Regulatory Commission:

- L. Reyes, Regional Administrator
- D. Collins, Director, Division of Nuclear Materials Safety (DNMS)
- A. Boland, Enforcement Officer, Enforcement and Investigations Coordination Staff (EICS)
- C. Evans, Regional Counsel
- M. Lesser, Chief, Materials Licensing/Inspection Branch 2, DNMS
- A. Jones, Enforcement Specialist, EICS
- R. Gibson, Health Physicist, DNMS
- D. Moser, Health Physicist, DNMS
- J. DelMedico, Senior Enforcement Specialist, Office of Enforcement (telephone conference)
- D. Dambly, Assistant Counsel for Hearings and Enforcement, Office of General Counsel

Code Services, Inc.

Reggie Lambert, Managing Partner Chris Chandler, Radiation Safety Officer

NRC Meeting

We appreciate the opportunity to address this body, offer an explanation of the occurrence in question and to demonstrate our commitment to safety. The management of Code Services realizes the importance of safety and has committed the company and it's employees to full implementation of its' radiation safety as well as its' industrial safety programs.

In the binder provided are the following items of information that may be pertinent to the conclusion of this hearing today. Each item will be addressed during our presentation.

- > Company History
- > Resume's of Managing Partner and Radiation Safety Officer
- Employee Handbook
- > MSFC Finding
- > Written Statements of Radiographer and Assistant Radiographer
- > Management Evaluation and Conclusion of Finding (Included within this document)
- > Recovery Plan / Corrective Action
- > Copies of Safety Meeting (Subject Matter and Attendance)
- > History of Unannounced Audits By Code Services.

Company History:

The company was formed in 1991 under the name of Code Services, Inc. The founder and owner until October of 1998 was W. H. Stewart III. Mr. Stewart also held the position of radiation safety officer. During the years 1992 through 1998 the company was audited by the State of Alabama to test compliance of the safety program. On many occasions findings ranged in severity and in some cases were repeat offences. It became apparent that the company lacked implementation of its' safety program and the commitment of management was not visible. At this point the company was in jeopardy of losing its license.

On October 1, 1998 Reggie Lambert acquired the company. The company name was changed to Code Services, LLC.

On October 3, 1998 the State inspector arrived for an un-announced audit of the company safety program. On this occasion there were nine findings ranging in severity and some were repeat offences. This was an inherited problem of the former regime.

Mr. Chris Chandler was brought on board as Radiation Safety Officer and along with the new owner committed themselves to the task of implementing the company safety program.

In the month of January 1999 the State again performed an un-announced audit on the company and its safety program. Although there were seven findings, none were in a severe category and most were clerical in nature. The vast improvement in the program and its implementation was obvious.

On March 17th and 18th the NRC performed an un-announced audit on Code Services at the MSFC while performing radiography and at its office. During this audit there were no findings.

Management Team:

The resume's included demonstrate the skills and background of the Managing Partner and the Radiation Safety Officer.

Personnel Handbook:

The company personnel handbook (included) contains the company policy with regard to conduct and safety.

MSFC Finding:

The finding states in part that the radiographer assistant was observed entering a restricted area without wearing proper monitoring equipment, (alarming rate meter).

Upon notification of this finding the Code Services RSO immediately investigated the situation. The radiographer in charge and the assistant were interviewed. Written statements were taken and are included.

Written Statements:

The statements of the radiographer and assistant indicate that there was a misunderstanding of what the MSFC RSO was asking for and what the radiographer assistant understood.

Conclusion of Management:

Although there are conflicting statements and an apparent misunderstanding, the management of Code Services has concluded that neither the radiographer nor the assistant acted in a manner conducive to lending assistance to the MFSC RSO.

It is the company's position and policy that any employee working in any area should not only answer direct questions but also assist any authorized person performing surveys or audits. Individuals should offer for inspection all personal monitoring equipment whether asked or not.

These individuals have been reprimanded and all personnel have been made aware of the company policy that requires immediate termination of employment if an individual is discovered not wearing all required monitoring equipment.

Recovery Plan / Corrective Action:

Included

Safety Meetings:

Included

Un-announced Audits:

Included

Summary:

The management of Code Services is committed to the implementation of its safety program. Willful non-compliance with our program or those of clients will not be tolerated. The company will continue to enhance personnel training and safety awareness.

In the few months this management team has been in place, the program has undergone vast improvements both in structure, content and implementation. The management has taken an active role with regard to quality and safety and will continue to participate and set the pace for the company.

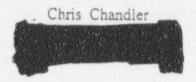
Reggie Lambert am land

Enclosures

Curriculum Vitia for Reggie Lambert

Mr. Lambert has 25 years experience in Management, Quality Assurance and Quality Control. Having served as General Manager and Quality Assurance Manager for a fortune 500 company, Mr. Lambert has developed a panoramic understanding of the quality needs of the client. Building on this, Mr. Lambert has assembled a management and service team capable of providing the very best quality service.

Summary Experience for



Over eighteen years of experience in Non-Destructive examination and interpretation, field supervision and Radiation Safety Assurance. Extensive experience in various military standards and specifications and ASME piping and vessel codes. Certifiable Level III in RT, PT, MT, VT.

Work Experience:

Visual Testing, Level II
Liquid Penetrant, Level II
Radiographic Testing, Level II
Magnetic Particle Testing, Level II
Ultrasonic Testing (Thickness Only), Level II

Employment History:

11-98 to Present	Code Services Madison, AL	Technical Manager Radiation Safety Officer Level III Technician RT, UT, MT, PT, VT
8-97 to 11-98	MQS Inspection. Madison, AL	Operations Supervisor Extended Radiographer Level II RT, UT, MT, PT, VT
3-93 to 2-97	Code Services, Incorporated Madison, AL	Level III NDT Inspector RT, UT, MT, PT, VT
2-87 to 11-92	Morton Thiokol. Redstone Arsenal, AL	Level II Film Interpretor
1-81 to 2-87	Hitco, Inc. Athens, AL	Level II Inspector RT, MT, PT, VT

:1

CODE SERVICES

EMPLOYEE HANDBOOK

Revised 10-1-98

Table of Contents

POLICY STATEMENT

CHAPTER 1

Conditions for Employment

Confidentiality Clause

Work Week

Holiday Pay

Overtime Pay

Minimum Pay

Rework Pay

Per Diem and Expense

Overhead Time

CHAPTER 2

Vacation

Sick Leave and Personal Time

On the Job injuries/lilness

Necessary Time Off

Company Sanafits

Performance Reviews/Merit Increases

CHAPTER 3

Facilities Use Policy

Equipment Policy

Vehicle Policy

Code of Conduct

Code of Conduct Violations

Job Site Policy

CHAPTER 4

Security Policy

CHAPTER 5

Safety Policy

CHAPTER 6

Drug Policy

Code Services is a Total Quality Management Company. It is the policy of our Company that the function of Quality Management shall exist in each individual operation to the degree necessary to ensure that:

- 1. The acceptance and performance standards of our products and services are met.
- 2. The cost of quality goals for each operation is achieved.

policy statement

Code Services is an equal opportunity employer. Hiring, promoting, pay or benefits are not based on religion, age, sex, national origin, race or color.

Employees of Code Services are required to comply with all Local, State and Federal laws regarding sexual harassment in the work place. This applies to all circumstances including employees of Code, clients or visitors.

This Company strives to achieve the highest quality of service, workmanship and client approval in a congenial atmosphere. In order to maintain this goal, individuals who violate this policy, Code's drug policy, safety policy or code of conduct will be subject to dismissal for cause.



CONDITIONS FOR EMPLOYMENT

No individual shall be considered for employment with Code Services unless two forms of identification can be produced, as required by the U.S. Department of Justice, Immigration and Naturalization Service.

No individual shall be considered for employment with Code Services until he has been administered and passed a drug test.

No individual shall be considered for employment unless that individual agrees to the terms of this policy, its addendum and Code Services <u>Code of Conduct</u> that is made a part of this document.

No individual employed by Code Services is considered hired until completion of a thirty-day probationary period. During this probationary period a new employee can be dismissed without a hearing on the cause.

No individual shall be eligible for company benefits until the above-described probationary period has been satisfied. Thereafter, enrollment in insurance programs and other benefits will be offered on the first day of the month subsequent to completion of said probationary period.

No individual shall be considered for employment with Code Services until they have complied with the pre-employment testing procedure.

Confidentiality Clause

Divulging company or customer information to outsiders is a serious offense and may be cause for dismissal and/or legal action. The acceptance of this policy by an employee's signature affixed to the back of this document is a legally binding commitment to non-disclosure.

Any employee who knowingly interferes with, circumvents or causes the loss of Company contracts will be subject to dismissal and/or legal action in civil courts.

WORK WEEK

Code's workweek begins on Monday and ends on Sunday. Employee time is tracked through work orders and overhead authorization sheets. Work Orders are to be filled out and submitted daily. Overhead Authorization sheets and expense accounts must be filled out daily left in the office and must be submitted on Monday by 10: 00 AM. Failure to submit paper work in a timely fashion may result in delay of paycheck. By noon on Tuesday, Accounting shall provide each hourly employee with a listing of the hours worked the previous week. Any errors or omissions should be reported by Wednesday evening. Employee's paychecks will be available on the following Friday morning by 8:00 AM at the front office.

Office personnel are to report as directed upon hire date. Lunch is one hour and must be scheduled to allow at least one secretary to be on duty at all times during the workday. Closing time is 5:00 PM. Unscheduled early arrival or late departure does not accumulate and can not be used to offset late arrival or early departure. Tardy arrival will be docked to the nearest 1/10 hour.

HOLIDAY PAY

Code has no paid holidays; however, if work is performed on a Company observed holiday; pay will be at double time rate. The following are recognized holidays:

New Year's Day

Memorial Day

July 4

Labor Day

Thanksgiving Day

Christmas Day

OVERTIME PAY

Employees will be paid the equivalent of time and one half after completion of forty hours of work during any pay period. Over eight hours in one day will be paid at straight time. The cognizant department supervisor must approve all overtime.

MINIMUM PAY

It is recognized that individuals may be called in to perform certain minimum charge projects. Employees are paid on the basis of actual time worked without regard to Company's charge to client. On occasion, it may be necessary to call employees in for short-term projects. In the event of such an occurrence, employees will be paid two hours.

REWORK PAY

Code provides training, materials and equipment for technicians to perform work to required codes and specifications. Substandard work can not be tolerated. It shall be the technician's responsibility to assure all work meets specific codes and standards.

- 1. Code Services will not pay for hours of rework for film turned into customer that does not meet code.
- 2. Wages will be deducted as follows:
 - a. Time will be deducted in proportion to the number of hours necessary to perform rework.
 - b. If the responsible technician(s) is not available to perform the rework, those performing the work will be paid and that amount of time required to perform the rework will be deducted from the responsible technician(s).
 - c. Individuals on guaranteed forty would have rework deducted from their forty-hour minimum if no overtime is worked.
- 3. Processing rework will be deducted from the darkroom technician. Technique rework will be deducted from the radiographer.
- 4. Continued rework may result in dismissal.
- 5. Individuals may redeem lost hours when:

- a. There has been no rework for a period of three months.
- 6. This policy has become a necessity due to the amount of rework done during the past. It is designed to insure the success of Code Services and to instill a better work ethic in all that contribute to a joint effort of quality and services.

PER DIEM AND EXPENSES

Hourly employees will receive payment for meals plus lodging for any out of town overnight assignments. Lodging will be paid in advance by Code Services; per diem will be included in employees' paycheck for that pay period. Meals will be paid for employees on overnight assignment in the following manner:

Breakfast.......\$ 5.00 Maximum

Lunch......\$ 5.00 Maximum

Dinner......\$ 510.00 Maximum

Code Services will not pay for alcoholic beverages or meals that exceed the allowances set forth above.

EXPENSES

Meals are not provided by Code Services for any jcb that does not involve overnight travel. Mileage will be reimbursed at the rate of 31 cents per mile for personal vehicles. Unless personal vehicle usage is approved in advance, mileage will be disallowed.

An expense report must be submitted by 7:00 AM the following Monday. Mileage will be included in paychecks. Gas or credit cards for anticipated expenses (gasoline, oil, etc.) will be issued for out of town assignments. Receipts for these purchases must be submitted with expense account or be subject to payroll deduction.

Lodging arrangements will be made through the office (purchasing department).

Itemized receipts are required for all expenses. Receipts are to be submitted with an expense report. Reimbursement will be included in your paycheck. Cash advances for expenses must be approved in advance and the amount deducted from the paycheck for that pay period.

Code Services will not reimburse any expenses without a receipt and only the expenses listed above, under the conditions set forth.

In the event that special circumstances arise, any other expenses not listed above must be approved in advance.

Code Services does not deduct time for meals when eaten during work. Time taken for meals away from the assigned job site are to be deducted from the time sheet by the employee.

OVERHEAD TIME

Any employees who charge time to overhead must first fill out an Overhead Authorization form and have it approved by management or this time will not be paid.



VACATION

Code Services Employees with more than one-year service and less than three years service are entitled to one week paid vacation per year. Those with over three years service are entitled to two weeks paid vacation per year. Vacation time does not accrue.

Thirty days notice, in writing, must be given when requesting vacation.

Vacations may only be taken in seven-day increments.

Vacation time not taken by the employee's anniversary is lost. If vacation is requested and denied, it is still lost upon the employee's anniversary.

At employee termination, for any reason, all accrued vacation is lost.

SICK LEAVE AND PERSONAL TIME

Code Services does not have paid sick leave or personal time for employees. However, reasonable time off for bereavement in the event of death of an immediate family member will be allowed with consent of management.

NECESSARY TIME OFF

Code recognized that time off is required for jury duty, maternity leave and military service. Time off for these situations should be approved in advance. Positions will be secured for a period of 12 weeks. There is not pay for these absences from work...

ON THE JOB INJURIES / ILLNESS

Although every effort is made to ensure a safe and healthy workplace, accidents will happen. On the job injuries/illnesses are normally fully covered by Workman's Compensation; however, in order for them to be covered, they must be reported to our insurance company within 24 hours of the occurrence.

In the event that you are injured or become ill while on the job, notify your supervisor or the Company Personnel Manager immediately. If the injury happens while the office is closed, notify the Company Personnel Manager the next business day. Except in an emergency; notify Personnel prior to going to the doctor.

Supervisors are responsible for ensuring that their subordinates receive proper medical treatment and that Personnel is notified of any accidents, injuries, or illnesses.

COMPANY BENEFITS

Code Services insurance coverage for all full time employees. Company pays 50% of the premium for the employee only. Family coverage is available at the employees' expense.

PERFORMANCE REVIEWS / MERIT INCREASES

All employees will be given Objectives at the end of their 30-day trial work period and each January thereafter. Periodic performance reviews will be conducted utilizing the objectives assigned to each employee. Increases in pay rates will be determined from the performance reviews and will be based solely on merit and performance without regard to length of employment.



FACILITIES USE POLICY

Unauthorized or personal use of company facilities or client facilities and/or equipment is forbidden.

Employees that are not scheduled for work are not allowed in the facility after work hours. (NO EXCEPTIONS)

Technicians are not permitted in the front offices of Code's facility unless summoned on official business. (NO EXCEPTIONS)

All technicians are to park in the east parking lot. Office personnel and visitor parking is on the west side. There will be no parking at any time in loading dock area. No personal vehicles are allowed in the west drive or in back of the building.

Each employee is responsible for maintaining the area of Code's facility in which he/she works. The following "housekeeping" chores are to be assumed by all employees:

Maintaining a clean and orderly lobby area

Maintaining a neat and orderly desk

Cleaning and maintaining an orderly restroom and kitchen area

Removal of garbage

Keeping floors and furniture clean...includes vacuuming, sweeping and dusting as necessary.

Keeping items in designated places

Cleaning of mobile darkrooms.

EQUIPMENT POLICY

Equipment assigned to employees for use must be maintained and any damage or needed repair is to be reported to the employee's supervisor immediately.

Certain equipment requires employee signature prior to assignment to the employee.

Loss, theft, damage and/or abuse of this equipment will be charged to the employee to whom it was assigned. Equipment that has been assigned should NEVER be loaned to another employee. It should be turned in to the supervisor and removed from the employee's equipment list prior to being reassigned.

VEHICLE POLICY

Employees using Code vehicles should observe the applicable State laws for the use of motor vehicles. Obey all traffic rules.

Employees using Code vehicles should observe all clients site requirements for the use of motor vehicles.

Vehicles should be kept clean and in order. Each truck should have its own racks, cassettes, flashes, etc. Documentation should be kept in a designated area and be maintained. Insurance information and accident information should be kept within easy reach.

Chemicals in the trucks should be replenished when needed and changed after every 300 pieces of film.

Repairs that are needed should be reported immediately. Repair Request Forms are kept in the lab office for your use.

Oil should be changed every 3 months. Check the Vehicle Service Record on the vehicle you use to determine any needed service. Fill out a Repair Request Form and turn in to the supervisor.

CODE OF CONDUCT

The Code of Conduct is to be strictly adhered to at all time by all employees.

- 1. Insubordination or refusing to follow directions will not be tolerated.
- Sleeping on the job will not be tolerated.
- 3. Stealing or hiding property belonging to Code Services, its customers or other employees will not be tolerated.
- 4. Divulging Company proprietary or confidential information is strictly forbidden.
- 5. Deliberate misuse of Company property will not be tolerated.
- 6. Unauthorized use of or neglect of Company property is unacceptable.
- 7. Commission of an unlawful act or conduct, which discredits the Company in any way, whether on or off Company property or time will not be tolerated.
- 8. Failure to call in to the office and report unavailability for work is unacceptable.
- 9. Failure to call in to the office and report availability for work is unacceptable.
- 10. Refusal to accept a job assignment is not acceptable.
- 11. Violation of any governmental law, regulation, rule or ordinance that affects the Company or your employment with the Company is unacceptable.
- 12. Fighting with or attempting bodily harm to a fellow employee; fighting with or attempting bodily harm to any other person on Company property or at a job site will not be tolerated.
- 13. Code Services will not tolerate the use of abusive language.
- 14. Failure to report for work is not acceptable.
- 15. Failure to work safely is not acceptable.
- 16. Performance of substandard work will not be tolerated.
- 17. Excessive absences or tardiness is not acceptable.

- 18. Leaving company premises or a job site without supervisor's approval is not permitted.
- 19. Stopping work before supervisor's authorization to do so is not permitted.
- 20. Horseplay or practical jokes are not permitted.
- 21. Refusal to wear safety equipment or improper use of safety equipment will not be tolerated.
- 22. Carelessness in observing quality, safety, and housekeeping requirements is not acceptable.
- 23. Conducting personal business on Company time or with Company equipment and resources is not permitted.
- 24. Violation of the Company's Substance Abuse Policy will not be tolerated.
- 25. Failure to immediately report personal injury and/or incident to supervision is not acceptable.
- 26. Malicious gossip is unacceptable.
- 27. Filling out another employee's time sheet or changing another employee's time sheet will not be tolerated.
- 28. Failure to submit Company required reports or other documents in a timely manner is unacceptable.
- 29. Unauthorized or improper use of motel room or restaurant charges and/or Company credit cards will not be tolerated.
- 30. Overstaying breaks or lunch periods is unacceptable.
- 31. Giving false information to the Company will not be tolerated. Falsifying or cheating on x-rays will not be tolerated and will result in immediate termination of employment.
- 32. Unnecessarily talking to, or in any other way, distracting the attention of another employee during working hours is not permitted.
- 33. Failure to promptly respond to business related pages are unacceptable.
- 34. Use of personal vehicles for Company purposes without management approval is not permitted.

- 35. Gambling on Company time or property is not permitted.
- 36. Posting of any material on Company or Customer property is not permitted.
- 37. Failure to comply with Company notices is unacceptable.
- 38. Removing, defacing or changing Company notices or any other Company documents is unacceptable.
- 39. Possession of a firearm or weapon at a job site or on Company property will not be tolerated.
- 40. Any other offense that, in supervision or management's judgment, threaten the well being of Code Services or any of its employees will not be tolerated.

VIOLATIONS OF CODE OF CONDUCT

Any employee who violates this policy is subject to (1) disciplinary action, (2) report in permanent employee file and (3) discharge from employment.

JOB SITE POLICY

- 1. When on client's construction site or property, Code employees will be governed by the terms of the particular contract and by the regulations and/or requirements of the client.
- 2. Code employees will use the gate designated for contract personnel.
- 3. Code personnel are confined to the particular area in which they are working.
- 4. All employees will wear an identifying badge at all times when on client property.
- 5. Employees are responsible for the care of Code's property and Client property. Damage to property belonging to Code or their client is to be reported immediately to your supervisor.
- 6. Employees are responsible for personal conduct and behavior representative of Code Services. That means no abusive language, no gambling, no horseplay, fights or practical jokes. Drinking liquor or use of rarcotics on Company time on Company or client property is strictly forbidden. Possession of narcotics on Company time on Company or client property is strictly forbidden. Possession and/or use of any type of explosive device or weapon are not allowed on Code property or client property.

7.	Employees	may	not	post	notices	on	client	property	and	may	not	distribute	written
ma	iterial of any	type	2.										

8.	Employees	with	beards	are not	allowed	in	any	chemical	areas.
----	-----------	------	--------	---------	---------	----	-----	----------	--------

VIOLATIONS OF POLICY

An employee who violates this policy is subject to disciplinary action, up to and including discharge from employment.

I have received, read, understand and agree to the Code of Conduct and Job Site Policy as stated above.

Signature	Date



SECURITY POLICY

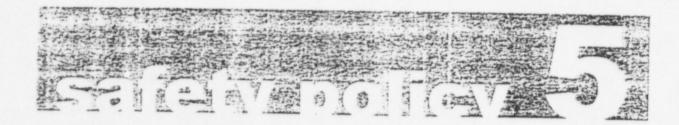
- 1. Counterfeit badges or use of another employee's badge is not permitted and is grounds for dismissal.
- 2. Terminated employees must surrender their badges(s) to personnel when leaving Code's employment.
- 3. Code's employees or visitors will be required to identify themselves when entering or leaving client's property by exhibiting his/her authorized badge to the plant guard or security staff. BADGES MUST BE WORN VISIBLY AT ALL TIMES WHILE ON CLIENT'S PROPERTY.
- 4. If gate passes are required, Code employees are required to comply with all client requirements for vehicle use and safety.
- 5. In those cases where permits are required to perform work on client property, Code employees are responsible for obtaining the proper permits and complying with the client's requirements regarding use of the permit.

VIOLATIONS OF POLICY

Any employee who violates this policy is subject to disciplinary action, up to and including discharge from employment.

I have received,	read,	understand	and	agree	to th	ue Safety	Policy i	is stated abo	ove.

THE RESIDENCE OF THE PARTY OF A SHARE LAND AND AND AND AND AND AND AND AND AND	
Signature	Date



INTRODUCTION

This policy sets forth guidelines and rules for Code Services employees while on Code Services property or while representing Code at any client facilities.

Code Services shall provide for the safety of its agents and employees and assure compliance with applicable local, state and federal legal requirements. A Code representative is available to assist you with any questions you may have regarding this guide or other company practices.

Code is required to have you (1) attend a company safety and health orientation, (2) conduct weekly safety meetings, (3) inspect your job for safety, and (4) have a safety program to promote improved safety. You are expected to participate fully in these activities and make safety an integral part of your job every day.

GOVERNMENT REQUIREMENTS

Code shall comply with all federal regulations as specified under 29 CFR, Chapter XVII, Part 1926 Safety and Health Regulations for Construction and Part 1910, General Industry Safety and Health Regulations identified as Applicable to Construction.

GENERAL SAFETY RULES

- 1. Do not do any job you think is unsafe. Contact your supervision and others as needed to make your job safe <u>prior</u> to proceeding.
- 2. Except in office areas, employees are required to wear safety glasses and protective headgear. They are to wear goggles and/or face shields when required.
- 3. All openings (including excavations) where hazards to personnel exist will be adequately barricaded.
- 4. Construction or contractor personnel must report to his/her foreman any unsafe condition(s) found.

- 5. Each employee is responsible for knowing AREA SAFETY RULES, conditions related to his or her work, and the personal protective equipment required for his/her job and the area.
- 6. Defective equipment should not be used. Use the proper equipment in good condition.
- 7. Portable electrical equipment must be of the three-wire ground type or protected by an approved system of double insulation.
- 8. Read all signs and follow the warnings or instructions given.
- 9. Never place sealed or closed containers of any kind in dumpsters. Never put liquid chemicals of any kind in dumpsters.
- 10. Clean up any chemicals you spill immediately. Report such spills to the company representative. Store solvent soaked rags in metal containers with tight lids. Your supervision and/or the company representative on a case will determine disposal by case basis.
- 11. All electrical lines must be coiled and stored out of aisles when not in use.
- 12. Do not store material closer than ten feet from railroad tracks and power poles.

HAZARD COMMUNICATIONS

- 1. Code Services maintains an up-to-date Material Safety Data Manual, which is available for each employee to review.
- 2. For Code Services' sub-contractor personnel, the assigned Code Services foreman or supervisor is responsible for informing sub-contractor supervision of hazardous chemicals to which their employees may be exposed while performing their duties. Any recommendations or requirements for protective measures will be provided through review of Material Safety Data Sheets with sub-contractor supervision.
- 3. Before any chemical is brought into the plant by Code Services a company representative will notify and produce a copy of the MSDS to the client liaison foreman.
- 4. Client employees expected to be associated with Code Services work will be made aware of the appropriate hazards regarding the chemical(s) being used through the clients' contractor liaison.

TESTING OCCASIONS

1. Pre-Employment:

Prior to hiring / placement of an applicant, as a condition of an offer of employment.

2. Reasonable Cause:

When any employee appears to be unfit for work, based on specific observation of the employee, conditions such as, but not limited to: appearance, behavior, speech, breath odor, any obviously altered condition or reasonable basis to suspect alcohol or other drug use, possession, abuse or misuse.

3. Post-Accident:

Following an on-the-job injury requiring medical attention or any accident that results in damage to a company vehicle or property or client property.

4. Random:

Testing of all employees, including administrative personnel, to be performed on a quarterly basis, or as dictated by client policies.

VIOLATIONS OF POLICY

An employee who violates this policy is subject to disciplinary action, up to and including discharge from employment.

I have received, Policy as stated	read, above	understand	and agre	e to the	Alcohol	and	Controlled	Substance

Signature	_ Date
-----------	--------

EMPLOYEE ACKNOWLEDGEMENT

I HAVE RECEIVED, READ, UNDERSTAND AND AGREE TO THE POLICIES AND PROCEDURES AS STATED IN THIS HANDBOOK

Signature	
	copy of this page to be filed in employee file
	EMPLOYEE HANDBOOK



AJT & Associates, Inc. Building 4249, Room 116 Marshall Space Flight Center Huntsville, Alabama 35812

Fax Cover Sheet

DATE: 2/9/99

TO: CHRIS CHANDLER

PHONE:

FAX: 340-1134

PHONE:

FAX:

(256) 544-5746

2

FROM: JIM BULT - MSFC RSO

(256) 544-5738

Number of pages including cover sheet:

MESSAGE:

Buit, James

Ta: Cc: Thaxton, David; Eagan, Joyce; Harvey, David; Ramsey, Brian; Crowe, Lesley; Holt, Donald Phillips, Eddie; Pinkston, Scott; Smith, Greg;

Subject:

Radiography Contractor Problems

Code Services, of Greenbriar, Alabama, occasionally performs source radiography of various components at this site in support of EG&G, LB&B, and other contractors. This organization has a history of violating MSFC procedures when performing work at this site. In addition, this company has recently had problems with state regulators.

Several attempts have been made to reconcile these problems. Most recently, Greg Smith and myself made a trip to their office and discussed the problem areas with company president, Reggie Lambert. Unfortunately, this has not solved the problems.

There will be a meeting on Thursday, February 18, at 9:00 AM in building 4249, room 116, to discuss this issue. Reggie Lambert and Chris Chandler from Code Services will be here. Please make plans to attend if possible.

Jim Bult, RRPT ATO10M/AJT MSFC Radiation Safety Officer 544-5738

Code Services Problem History

Perpetual problems in the areas of posting during radiography

On-site personnel have been cautioned repeatedly.

There seems to be confusion among staff concerning posting vs. surveillance requirements.

Perpetual problems with failure on nousy MSFC RSO prior to radiography

On-site personnel have been cautioned several times.

Office has been called several times.

In late December 1998, Jim Bult, RSO, and Greg Smith, CIH made a visit to Code Services office to discuss posting and notification problems.

February 9, 1998 - Code Services personnel again performed radiography without prior notification of MSFC RSO. Chris Chandler, operations manager was contacted, and knew nothing about the prior notification requirement.

Failure to locate emergency procedures

On 1 of 2 inspections by MSFC RSO in this area, on-site personnel were unable to locate emergency procedures.

Failure to utilize required equipment

MSFC RSO observed radiographer's assistant enter radiography boundary and approach the exposed source without an alarming ratemeter. Individual stated that this piece of equipment required by 10 CFR 34.47 was in the truck. The radiographer in charge declined to address the problem immediately when requested by the MSFC RSO to do so. This incident also indicates a continuing disregard for ALARA practices.

Code Services has been recently cited by the State of Alabama for this type of violation.

Regulatory History

Last State of Alabama inspection showed 7 areas of noncompliance. Two of these areas were repeat deficiencies.

Previous State of Alabama inspection showed 9 areas of noncompliance.

Code Services, due to its poor history of regulatory compliance, is currently on an accelerated inspection schedule by it's licensor, the State of Alabama.

Summary of Compliance.

	NONCOMPLIANCE	RULE/CONDITION	N SEVERITY CLASS
1.	Inadequate shipping papers		LASS
2.	IMIS IS A REPEAT DEFICIENCE	420-3-2602(24)	IV - Transportation
	Inadequate labeling of devices THIS IS A REPEAT DEFICIENCY	420-3-2604(23)(b)	IV - Operations
3.	madequate utilization loge		
4.	Failure to mainerin	420-3-2604(10) 420-3-2601(4)	IV - Operations IV - Operations
5.	John Court of Change Climitate	420-3-2603(32)	IV - Operations
6. 7.	Overdue leak & brace devices	420-3-2602(24) License Cond. 17A	IV - Transportation IV - Operations

III. Correction of Deficiencies Noted on the Previous Inspection.

	ITEM .		
1.		CORRECTE)?
2.	Unauthorized users of radioactive material	Yes	
3.	Failure to properly use alarm rate meters Improper use of radiographic exposure device	Yes	
4.	Inadequate internal inspection program	Yes	٠
5.	ratture to leak test sealed sources	Yes	
6.	The property label radiogrammic	Yes	
7.		NO	
8. 9.	improper transport of an Amaraha	Yes	
	Failure to use SI units on shipping papers & transport labels	Yes	
IV.	Scope of Licenses O		

IV. Scope of Licensee Operation

1. Describe the number of personnel, the number of devices, and the frequency of use. The licensee possesses 3 AEA 660B cameras and 2 SPEC 150 cameras. They are used by radiographers and one assistant radiographer and one person classified as a helper. The channel scale of the person of the companion of the person of the p



To: Chris Chandler, RSO Code Services, LLC

NASA Re: NRC Inspection of 2-16-99

Chris,

Mr. Bult, at the end of his inspection of our operation asked Mr. out his alarming dosimeter. Mr. hen showed Mr. Bult his pocket dosimeter thinking that was what he was inquiring about. After showing Mr. Bult his pocket dosimeter, Mr. went into the darkroom to load film holders. At that time, Mr. (the lead technician on the job), was asked about his alarming dosimeter. Mr. showed Mr. Bult his alarming rate meter. Mr. Bult told Mr. Mat Mr. was not wearing his rate meter. Mr. Id Mr Bult that he would talk to Mr. pout this when he terurmed from the darkroom. At this time, Mr Bult left. eturned from darkroom, Mr. sked him about his rate alarm. When Mr. howed Mr. his rate alarm which he had in front pocket. He told that he thought that Mr. Bult was asking about his pocket dosimeter. Mr. also stated that Mr. Bult did not identify himself and that he (Mr. had his stated that he had witnessed Mr. putting on his pocket dosimeter, tilm badge, and rate alarm before beginning radiographic operations.



DATE: 2-17-99



February 22, 1999

A J T & Associates Inc.
Marshall Space Flight Center
Huntsville AL 35812
ATTN: Mr. Jim Bult
e-mail: james.bult@msfc.nasa.gov

Re: Problems while working on NASA site

Dear Mr. Bult.

Enclosed I have addressed the problems discussed at the meeting held at your facility on 2/18/99. Each problem has been noted with recovery plan and the implementation date.

We at Code Services share your concern about safety and procedure and are committed to the implementation of our program. After our meeting there we held an afternoon safety meeting. In this meeting all personnel viewed the video from the NRC. Additionally we made personnel aware of the problems noted. Discussions were held and policy was made clear. There should be no question from our personnel as to Code's commitment to safety and implementation of all its procedures.

With regard to our regulatory history, vast improvement has been accomplished during the first three months of the new ownership. We fully intend to continue enhancement of our program while assuring compliance.

I hope this recovery plan meets with your approval and will follow up by phone after you have had time for review. Should you have questions or comments, please contact me at your convenience.

Best regards. Code Services

Reggie Lambert Managing Partner

Code Services Recovery plan of sited problems at NASA

Problem: Posting during radiography

Recovery: 1) Additional training of radiographers to address posting and surveillance.
2) Frequent unannounced site audits to assure compliance and identify deficiencies.

Implementation: 2/18/99 Complete.

Problem: Failure to notify MSFC RSO of on site radiography.

Recovery: 1) Send FAX notification of planned radiography.

2) Radiographers shall check in at bldg. 4942. Notify RSO or other safety personnel. 4249

Implementation: Upon each trip to NASA site for radiographic testing.

Problem: Radiographer was unable to locate emergency procedures quickly.

Recovery: 1) Procedures are located in all vehicles used for radiography.

2) Further training and better tabulation will result due to this observation.

Implementation: 2/28/99

Problem: Assistant radiographer did not appear to be wearing required personal monitoring equipment.

Recovery: 1) Weekly safety meetings shall be held to address radiation safety and compliance. Operational safety shall be addressed at these same meetings.

 Any personnel found not wearing required personal monitoring equipment while performing radiography or being in a controlled area, shall be immediately terminated.

3) Any violations or observations noted by MSFC personnel and mentioned to radiographers shall be immediately reported to the Code Services RSO.

4) Frequent unannounced site audits Shall be performed to assure procedure and safety compliance.

Implementation: 2/18/99

SAFETY MEETING

DATE: 2/18/99	CONDUCTED REGGIE LAMBERT & CUR	BY:
SUB.	REGGIE LAMBERT & CHRI	S CHANDLER
	TO BE COVERED	COMPLETED
1.		
NASA ON SITE R	ADIATION VIOLATIONS	
2. VIDEO ON NRC REC	JULATIONS	YES WOO
	702.4110113	
3. ATTITUDE AND PRO	FESIONALISM OF TECHS.	YESTO
	TOTALISM OF TECHS.	
		YES WOO
Lundosso	the material covered in this safe-	YES NO

Sam Bulle Employee Signature

SAFETY MEETING

DATE: 2/18/99	CONDUCT	ED BY:
SU	BJECT TO BE COVERED	CHRIS CHANDLER
	- TO BE COVERED	COMPLETED
1.		
NASA ON SITE	RADIATION VIOLATIONS	
*		
. VIDEO ON NRC RI	CCY'Y . TYOUR	YES VO
TIDEO OIT TRE RI	EGULATIONS	
TTITITE		YESTENOT
ATTITUDE AND PR	ROFESIONALISM OF TECHS.	1.23(7.40)
		YES MOD
l understa-	ad the material covered in this safety meeting	YES TO NO
	1 11 11/ M/ knowledg	ge into my job performance.

SAFETY MEETING

DATE: 2/18/99	CONDUCTE	D BY:
SUB.	REGGIE LAMBERT & CHI	RIS CHANDLER
	TO BE COVERED	
1.		COMPLETED
MASA ON SITE R	ADIATION VIOLATIONS	
. VIDEO ON NRC REC		YES TNO
TIDEO ON ARC REC	JULATIONS	101,101

ATTITUDE AND PRO	FESIONALISM OF TECHS.	YES TO
	LESTONALISM OF TECHS.	
The state of the s		
		The second secon
		YES NOT
The state of the s		
		YES TINOP

knowledge into my job performance.

Employee Signature

SAFETY MEETING

DATE: 2/18/99	CONDUCTED	BY:
SUBJ	REGGIE LAMBERT & CHR	IS CHANDLER
	TO BE COVERED	COMPLETED
1.		
NASA ON SITE RA	DIATION VIOLATIONS	
VIDEO ON NRC REG	ULATIONS	YES NO [
* **		
. ATTITUDE AND PROP	FESIONALISM OF TECHS.	YES NO D
And the second s		
		The state of the s
		YES NO
	The second secon	
l understand t	he material covered in this safety	YES NO

nd the material covered in this safety meeting and will incorporate this knowledge into my job performance.

Employee Signature

SAFETY MEETING

DATE:	CONDUCTED	RV.
2/13/99	REGGIE LAMBERT & CUP	IS CHANDLER
SUB.]]	ECT TO BE COVERED	
		COMPLETED
1.		
NASA ON SITE RA	DIATION VIOLATIONS	
2. VIDEO ON NRC REG	III ATIONS	YES EKO
	CLATIONS	
A P ST COLOR DE CONTRACTOR DE		
-		
ATTITI DE AND BROS		YES CHO
ATTICOL AND PROP	FESIONALISM OF TECHS.	The state of the s
	A TOTAL CONTRACTOR OF THE PARTY	
		V20 (
The second secon		YESTRO
THE CONTRACT CONTRACT OF THE CONTRACT C		
The state of the second		
understand :		YES THOM

I understand the material covered in this safety meeting and will incorporate this knowledge into my job performance.

Hicked X Chandle - Employee Signature

SAFETY MEETING

DATE: 2/18/99	CONDUCTED	BY:
SUBJE	REGGIE LAMBERT & CHE	US CHANDLER
	JE COVERED	COMPLET
1.		COMPLETE
NASA ON SITE RA	DIATION VIOLATIONS	
and the same of th	DIATION VIOLATIONS	
VIDEOONING		V== /-
. VIDEO ON NRC REGI	LATIONS	YESTAOT
		1
ATTITUDE AND PROF	ESIONALISM OF TECHS.	YESTINOT
The second secon		
The Desire of the State of the		
		1
		YES NO
The state of the s		
Lunderstand	e material covered in this safety meaning	YES NOT

understand the material covered in this safety meeting and will incorporate this knowledge into my job performance.

Billy Bon Employee Signature

SAFETY MEETING

DATE: 2/18/99	CONDUCTED	RV.
THE RESERVE THE PROPERTY OF TH	KEGGIE I AMPERT & CUIT	IS CHANDI ED
SUBJE	CT TO BE COVERED	The state of the s
		COMPLETED
1.		
NASA ON SITE RAI	DIATION VIOLATIONS	
	TOLATIONS	
		The same of the sa
2. VIDEO ON NRC REGU	LATIONS	YES NO
3 ATTITUDE AND SEE		YES Z NO
S. ATTITUDE AND PROF	ESIONALISM OF TECHS.	1 100. 101 1
		A distance of the second state of the second s
1.		YES NO
The second secon		
l understand th	e material covered in this safety meeting	YES NO

I understand the material covered in this safety meeting and will incorporate this knowledge into my job performance.

Employee Signature

SAFETY MEETING

DATE: 2/18/99	CONDUCTED B	Y:
SUB	REGGIE LAMBERT & CHRIS	CHANDLER
	TO DE COVERED	COMPLETE
1.		
NASA ON SITE F	RADIATION VIOLATIONS	
		YES NO
. VIDEO ON NRC RE	GULATIONS	133(01.01
* × × × × × × × × × × × × × × × × × × ×		
ATTITUDE AND PRO	OFESIONALISM OF TECHS.	YES NO
		YES NO
		13540
		-
Lundageton	d the material covered in this safety meeting and	YES NO

this A Clay Employee Signature

Code Services Recovery plan of sited problems at NASA

Problem: Posting during radiography

Recovery: 1) Additional training of radiographers to address posting and surveillance.

2) Frequent unannounced site audits to assure compliance and identify

deficiencies.

Implementation: 2/18/99 Complete.

Problem: Failure to notify MSFC RSO of on site radiography.

Recovery: 1) Send FAX notification of planned radiography.

2) Radiographers shall check in at bldg. 4942 Notify RSO or other safety personnel.

Implementation: Upon each trip to NASA site for radiographic testing.

Problem: Radiographer was unable to locate emergency procedures quickly.

Recovery: 1) Procedures are located in all vehicles used for radiography.

2) Further training and better tabulation will result due to this observation.

Implementation: 2/28/99

Problem: Assistant radiographer did not appear to be wearing required personal monitoring equipment.

Recovery: 1) Weekly safety meetings shall be held to address radiation safety and compliance. Operational safety shall be addressed at these same meetings.

 Any personnel found not wearing required personal monitoring equipment while performing radiography or being in a controlled area, shall be immediately terminated.

3) Any violations or observations noted by MSFC personnel and mentioned to radiographers shall be immediately reported to the Code Services RSO.

4) Frequent unannounced site audits Shall be performed to assure procedure and safety compliance.

Implementation: 2/18/99

WEEKLY SALITIES

DATE: 2 22 99

108 LOCATION: Code Shop

SUBJECTS COVERED:	JOB LOCATION: Lode Shop
a Reiterate	
	NRC and NASA Regulations
of sali	Safety and Transportations Sources
·	200
Maintance	and Inspection of comeras
COURCETIONS	cables pigtail
SPEAKERS: C. C	handler

MAMEIPLEASE PRINT	SIGNATURE
TIM MCMURRY	JSilli, Samuel
Mike Chondler	- My Me Murry
BL Cenin	The lines
JO CHANDLES	10/10/10/10
Chandler	1
A. (151.)	The Mounts
L. Dunne	1 m A Cient
G. Schillack	1 1/1/1

WHINST I

DATE: 3-1-99

SUBJECTS COVERED:

Radiation Surveys - Proper Survey of comercs

TI SI writs

Barricade and Signs - High Rad Areas

Rad Areas and the

difference Survey bounds

SPEAKERS: RLAMBERT CINENDIER

NAME IPLEASE PRINT	
Pilly Praner	SIGNATURE
Tilly Manner	Rills R
TIM MCMURRY	122:11
51 0000	- Juning un
4:11	- 77/
Mike Chandler	7/10/10
A (10:7	11.11
1	the A (leg)
Drewy	
12 Schellere	14 610
JO CHANNIER	The state of the s
O CHANNER	JACA I
C-Chandler	
X Lanbert	1111 Work
	X mh

WENTERS !

DATE: 3-8-99

SUBJECTS COVERED:

ORIVING - 28 FYING TRAFFIC LAW WHILE IN

COMPANY VEHICLES (REED LIMITS & SEAT BENTS)

1N PUBLIC HIGHWAYS AND COSTOMEX

JOB SITES

RAD SAFETY - NASA SITE VIOLATION:

FILLOW - UP

SPEAKERS: COMMAND: EX PLATERT

SIGNATURE
Bill B
Chi 1 lu
Chi / Cu
13/1/1/
11111
1
The same of the sa
I imet of Mich. won
Mil dolle
19/1/
2/1/10
In Chandles

WANTASA TO S

SUBJECTS COVERED:	JOB LOCATION: CODE SHOP
M.S.D.S - BIGHT AT PLANTS	TO KNOW" LOCATING MSDS
HAZARDS OF FILM P	ROCESIALE OIL
SAFETY - C	HECKING CAUBLATION DATES
SPEAKERS: C. CHANDLER	AND WIPE TEST

RILLY BENNEY	SIGNATURE
Bicein	1 Sill 1. Bin
TIM MCMURRY	Jim Million
Mike Chandler	1 24 6 11 60
S. Scholler	1
JD CHANOLER	
Chandler	Mandle Chandle

WERTESAL TO S

SUBJECTS COVERED:	JOB LOCATION: CODE SHOP
and the state of t	FETY - TRANSPORTATION OF SOURCES
- SI UNITS	ON SHIPPING PAPERS ABEL IT'S ON CAMERA'S AND
SPEAKERS: C. CHAND	

NAME (PLEISE PRIVE)	TEATORNES:
Rilly Bonner	SIGNATURE
Rilly Rouner Mike Chandler	1 3 11
BUCCOLO	The Charles
TIM MICMURRY	
UD CHANDI ED	Jam Mc Marian.
C. Chandler	
(ACVILY	The nouse
El Drown	Me of Cree
GREG Shiller	10/1/1
The second secon	

WEST WEST TO STATE OF THE STATE

DATE: 3-29-99

108 LOCATION: Code Shop

PERSONAL	PROTECTIVE	EDILION:	
TOMER AND	COMPANY	PP A 11 - 1	- FOLLOW
ETY GLASCES	STEEL TOE	- COLONE	S HARD HAT
ON SAFET)	- 2000-	SHOES EA	R PLUGS, ETC.
TING OF	Co. to do.	BARRIC	ADING AND
	SNIESCLED	AREA	
100	ETY GLASSES	ON SAFETY - PROPERY	PERSONAL PROTECTIVE EQUIPMENTOMER AND COMPANY PROXECULE ETY GLOSGES, STEEL TOE SHOES, EAD ON SAFETY - PROPERTY BARRICA TING OF CONTROLLED AREA

NAME (PLEASE PRINT)	SIGNATURE
Rilly Bruner	Rill Ro
Mike Chandler	Just 11
TIM MEMURRY	1 Min MACIM 00
5L Crany	1757/
. A Crain	Chi f (y)
A Brance	The state of the s
J. SchullEL	4 RAVA
UD CHANDLEK	
2. Chandler	101.06
	The standard

WERLYSA, II.

DATE: 4 5 9 9 SUBJECTS COVERED:	JOB LOCATION: Code Services
Equipment check -	discuss the importance of a clean work area related to safe work place discuss the importance and requirements of a daily check of safety Equipment
SPEAKERS: Chris	Chandler Reggie Lambert

NAME (PLEASE PRINT)	SICNITION
Bill Primer	SIGNATURE
Mixe Chondler	Milia Ch
RI Ca.	The state of the s
TIM MCMURRY	1 di lucio
G. Scheller	Jun Mein ann
JO CHANDLER	The state of the s
A Cigin	J. D. Lake
A Drucer	I had by
Chandler	1000 11
Reggie Lambert	the Maurice
- 991 - Lambert	1 8 cm/m

WESTASA III -

DATE: 4/8/99 SUBJECTS COVERED:	JOB LOCATION: Code Service
Please re NRC Case	ed Attached History
SPEAKERS:	
ATT HAME (ALEASE PRINT)	ENDANCE: SIGNATURE
M.K. CHANDLER	W. D. CHANDIAN
BLCRains Bills Bonne	Billy Bonner
Christopher Craig TIM MCNVRRY	CRIEGO SELIA
TIM MCMURRY	Jim D. McMuran



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
Division of Radiological Health
3rd Floor, L&C Annex
401 Church Street
Nashville, TN 37243-1532

March 29, 1999

Radiological Information Notice

Addressees: All Radiography Licensees

Subject: Unplanned Radiation Exposures to Radiographers, Resulting from Failures to Follow Proper Radiation Safety Procedures

On March 1, 1999, the United States Nuclear Regulatory Commission (NRC) issued an information notice (attached) reminding radiographers of the risk of unplanned high radiation exposures from radiography equipment, and the need for proper radiation safety practices to prevent such exposures. This notice was prompted by a series of incidents that have occurred recently and that resulted in unplanned exposures; all of which involved failures to follow proper radiation safety procedures.

If you are an industrial radiographer and you do not use you survey meter and alarming dosimeter, you may suffer severe injury or you may die!

It is expected that recipients will review this information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems. If you have further questions concerning this correspondence, please contact the individual named below:

Charles Arnott Licensing Manager of Radioactive Materials (615) 532-0364

UNITED STATES NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS WASHINGTON, D.C. 20555-0001

March 1, 1999

NRC INFORMATION NOTICE 99-04: UNPLANNED RADIATION EXPOSURES TO RADIOGRAPHERS, RESULTING FROM FAILURES TO FOLLOW PROPER RADIATION SAFETY PROCEDURES

Addressees:

All radiography licensees.

Purpose:

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice to remind addressees of the risk of unplanned high radiation exposures from radiography equipment, and the need for proper radiation safety practices to prevent such exposures. The notice was prompted by a series of incidents that have occurred recently and that resulted in unplanned exposures, all of which involved failures to follow proper radiation safety procedures. These to the exposed individuals. However, there was the potential, in all cases, for high exposures that could have led to serious health consequences. It is expected that recipients will review the similar problems. However, suggestions contained in this information notice are not NRC requirements; therefore, no specific action nor written response is required.

Description of Circumstances:

1. Pipe welds were being radiographed at a temporary job site in Indiana on August 21, 1998. A Source Production and Equipment (Spec) 150 carnera, with a 3.9 terabecquerel controlled area had been set up around the work site to keep unauthorized people out of shots, when the source was out of its shield. He was wearing a film badge, but not an from that incident was estimated to be 3.5 millisievert (mSv) [350 millirem (mrem)] to the whole body and 70 mSv (7 rem) to the right hand.

- A radiographer and a radiographer is assistant were making radiographs on a large-using a Spec camera with an 3.2 TBq (87 Ci) Ir-192 source. The camera was placed one of the pipe during this work to obtain panoramic views of some welds. At the end of equipment and prepare for the next shot. When it was time for the shot, the assistant discovered that the source was not in the locked position. She alerted the radiographer, drive cable crank. A review of the incident showed that the assistant had not made a ratemeter. She was estimated to have received a dose of about 110 mSv (11 rem) to
- 3. Two radiographers were using an Amersham-660B camera with a 2.7 TBq (72 Ci) Ir-192 source at a temporary job site at a refinery in Montana on November 20, 1998. They had just finished one shot and were preparing for a second. They then noticed that the source was not in the locked position. One of the radiographers was able to put the source back in the locked position with a half turn of the drive cable handle. A check of the self-reading dosimeters on the two radiographers showed that they were both offscale. It was later estimated that they were exposed to the unshielded source for about the radiographers and 120 mSv (12 rem) to the other. Although both radiographers had turned off. Surveys had not been done after the first shot to confirm that the source was in the shielded position.
- A radiographer and a radiography trainee were conducting radiography operations at a 4. temporary job site in Texas on December 31, 1998. The radiographer, who had been with the company for only two weeks, had not met his partner before that day, and did not know that he was a trainee, but had assumed that he was a qualified radiographer. The trainee had assumed that the radiographer knew he was a trainee, and had not said anything about his position with the company. As a result, the radiographer had asked the trainee to do most of the shots that day, using a camera with a 4.6 TBq (123 Ci) Ir-192 source, and he had himself spent most of the time in the dark room. At the end of the day, the trainee thought they had finished shooting, and had removed his belt and put it in his truck. The belt has his TLD and alarming dosimeter on it, but his pocket ionization chamber was in his trousers pocket. Before he could leave, however, the radiographer told him that they had to reshoot a 5 cm (2") and a 7.6 cm (3") pipe. They both set up for the 5 cm (2") pipe shot and the radiographer then went to the dark room and left the trainee to complete the shot. After shooting the 5 cm (2") pipe, the trainee set up for the 7.6 cm (3") pipe shot. When he went to the camera to extend the source for the shot, he found that he had forgotten to retract it into the camera after the previous shot. He immediately retracted the source and reported the incident to the radiographer. Investigation of the incident showed that, although the trainee had a survey meter with him at the time of the shots, he had not used it. The investigation also concluded that the trainee received a whole body dose of about 100 mSv (10 rem), and a dose to the index finger of about 30 - 50 Sv (3,000 - 5,000 rem). The dose to the

IN 99-04 March 1, 1999 Page 3 of 4

index finger was high because the shots were being made without a collimator, and the trainee had therefore handled the end of the guide tube, with the source in it, without any appear on his index finger.

Discussion:

An obvious fact about which radiographers should be repeatedly reminded is that, without a suitable instrument such as a survey meter or an alarming rate meter, both of which are required equipment for radiography work, there is no way for them to be sure that the source in a radiography camera is not out of its shield when it should have been shielded. Another fact, maybe not as obvious, that radiographers should be reminded of is that, with a typical radiography source such as 3.7 TBq (100 Ci) of Ir-192, the dose rate at 30.5 cm (1 foot) from the unshielded source is about 4.5 Sv/hr (450 rem/hr). Exposure at a foot from such a source will result in exceeding NRC s annual whole body-dose limit in about 40 seconds. A dose to the whole body of about 2.5 Sv (250 rem) would have a 50 percent chance of being fatal, and could be delivered by a 3.7 TBq (100 Ci) Iridium source a foot away in about half an hour. Such an exposure scenario is unlikely, but it is possible, as for example in a situation where extended preparation work is being done close to a camera with an unshielded source. Another type of severe injury that can result from exposure to such a source is that resulting from localized exposures, such as to the hands. For example, handling the guide tube with the source in it could result in dose rates, to the hand, on the order of 10 gray (Gy) [1,000 rads] per minute. Such dose rates could quickly lead to very serious injury to the skin and underlying tissues.

To avoid serious radiation injury, it is necessary to ensure that people are never close to an unshielded radiography source. Radiography cameras are designed to keep the sources locked in their shields when not in use, but the mechanisms used to accomplish this occasionally fail, either because of mechanical problems or because of improper use. The source may also have been cranked out by one person, without knowledge of another person who may later walk into the work area. In all these cases, there is usually no obvious indication that the source is unshielded. Without the proper instruments, a person would not know that a high radiation field exists in the area, and for this reason good radiation safety practices, as well as NRC s regulations, require the use of radiation detection instruments to ensure that the source is securely in the snielded position after use, or that it is safe to approach a radiography camera or a radiography work area.

The instruments needed for that purpose are ones that give a quick indication that a high radiation field exists. Dosimeters issued to radiographers, such as thermoluminescence dosimeters (TLD), film badges, and pocket dosimeters, do not serve this purpose. TLD and film must be sent away for processing before they can indicate a dose. Pocket dosimeters, although they can be read out in the field, are not suitable because they do not give a sufficiently quick indication of a high radiation field, and also because they are meant to be checked only occasionally during work. The only practical options available to the radiographer in the field are survey instruments and alarming rate meters. A radiation survey instrument is carried by the worker and has a meter that shows the dose rate all the time it is in use. It is the instrument of choice when making sure it is safe to enter an area and to verify that the source is in the shield. At times, however, it may be necessary to set the survey instrument aside to prepare for the next shot, or reposition equipment or barriers. Even though the camera may not

IN 99-04 March 1, 1999 Page 4 of 4

be in use at such times, it is still necessary to have an instrument that will continue to monitor for possible high radiation fields without the need to continuously look at a meter. The instrument for this purpose is the alarming ratemeter, usually wom on the worker side. It does not require the worker to look at a meter, because it is equipped with an alarm that goes off when the radiation field exceeds a preset level. This alerts the worker to a possible problem.

Survey instruments and alarming ratemeters can fail to work for a variety of reasons, or the meter may appear to be working but may be showing an incorrect dose rate reading. Because of this, and because of the serious dangers involved in using radiography sources, both also act as backups to each other. Note also that, because these instruments are fairly delicate, they must be checked regularly in the field to make sure they are still working properly. A and also by holding the instrument next to a check source and making sure it reads roughly the proper scale. Alarming rate meters are checked by ensuring that the batteries are in good meter is placed in a sufficiently high test radiation field.

In addition to using ratemeters and alarming dosimeters, radiographers should be reminded to follow proper safety procedures when using radiography equipment. These include, as examples: procedures for properly posting and roping off work area; controlling access to the radiography area during radiography; properly ensuring that the source is actually locked when it is retracted into the camera; periodically checking the camera to make sure that there is no apparent damage, and that moving parts do not show undue wear; and similar actions that ensure that the equipment is in good mechanical condition and that it is operated properly.

This information notice does not require any specific action nor written response. If you have any questions about the information in this information notice, please get in touch with the technical contact listed below, or the appropriate regional office.

Donald A. Cool, Director Division of Industrial and Medical Nuclear Safety Office of Nuclear Material Safety and Safeguards

Technical Contact:

Bruce Carrico, NMSS 301-415-7826

E-mail: jbc@nrc.gov

COM STREETS WEEKLY SAFETY LETTERS

Scaffolds & Lodders - follow on site regulations 10070 Tie-off secure camer Lock out / Tag out - Each worker must have his	SUBJECTS COVERED:	JOB LOCATION: Code Shop
Lock out Tag out - Each worker must have his	6 0611	
own for a to the most have his		100% ou site regulations
Rad. Safety - follow all regs and sompany		ech worker must have his
- SC COMPANY	tollac	all regs and company
SPEAKERS: Chais Chadler	Proce	edure s

SIGNATURE
in the same of the
2 Junior
A CENTY AND
the sall
in A Che
1/1/
In Phanelle
and the same of th



Audits for 1st Quarter 1999

Radiographer	Date of Audit	Audit Location	Auditor	Results
Greg Schuller	2-02-99	Code Shop	J. D. Chandler	Acceptable
Carl Allen	2-04-99	Code Shop	J. D. Chandler	Acceptable
Mike Chandler	2-15-99	Code Shop	J. D. Chandler	Acceptable
Sam Brewer	2-15-99	Code Shop	J. D. Chandler	Acceptable
Barry L. Craig	2-17-99	Code Shop	J. D. Chandler	Acceptable
Billy Bonner	3-02-99	Code Shop	J. D. Chandler	Acceptable
Mike Chandler	3-16-99	Redstone Arsenal	Chris Chandler	Acceptable
Sam Brewer	3-16-99	Redstone Arsenal	Chris Chandler	Acceptable
Bill Franklin	3-18-99	Monsanto (Solutia)	Chris Chandler	Acceptable
Greg Schuller	3-27-99	Redstone Arsenal	Chris Chandler	Acceptable
James Chandler	3-30-99	Redstone Arsenal	Chris Chandler	Acceptable

PREDECISIONAL ENFORCEMENT CONFERENCE AGENDA CODE SERVICES, INC. APRIL 22, 1999, AT 1:00 NRC REGION II OFFICE, ATLANTA, GEORGIA

l.	OPENING REMARKS AND INTRODUCTIONS L. Reyes, Regional Administrator	
II.	NRC ENFORCEMENT POLICY A. Boland, Director Enforcement and Investigation Coordination Staff	
III.	SUMMARY OF THE ISSUES L. Reyes, Regional Administrator	
IV.	STATEMENT OF APPARENT VIOLATION / CONCERNS D. Collins Director Division of Nuclear Materials Safety	
٧.	Mr. Reggie Lambert, Managing Partner Code Services, Inc.	
VI.	BREAK / NRC CAUCUS	
VII.	NRC FOLLOWUP QUESTIONS	
VIII.	CLOSING REMARKS L. Reyes, Regional Administrator	

Apparent Violation

10 CFR 150.20 provides in part that any person who holds a specific license from an Agreement State is granted an NRC general license to conduct the same activity in areas of exclusive Federal jurisdiction within Agreement States, provided an NRC Form-241 is properly filed. The general license is subject to all provisions of the Act and to all applicable rules, regulations and orders of the Commission including subpart C of part 34.

10 CFR 34.47 (included in Subpart C of part 34) requires in part that the licensee may not permit any individual to act as a radiographer or a radiographer's assistant unless, at all times during radiographic operations, each individual wears, on the trunk of the body, an operating alarm ratemeter.

On February 16, 1999, during radiographic operations, the radiographer's assistant failed to wear an alarm ratemeter.

The apparent violation discussed in this predecisional enforcement conference is subject to further review and is subject to change prior to any resulting enforcement action.





26412 OLD HIGHWAY 20 MADISON, AL 35756 PHONE: 256-340-1117 FAX: 256-340-1134

FAX

Reggie Lambert

To:	Mark Lesser	From:	Neggie Lamoen	
Fax:	(404) 562-4900	Pages:	(4) Includes Cover Sheet	
Phone	: 800-577-8510	Date:	April 27, 1999	
Re: In	nfo discussed in mtg last week	cc:		
□ Ung	gent X For Review D Pla	case Comment	☐ Please Reply	☐ Please Recycle
. Con	nments			
Foll	Mr. Lesser, lowing please find the statements of the statement of the stat	as objective ev	idence. Additiona	ally, the individual in
Since	erely,		٠,	

Enclosure 5



To: Mr. Reggie Lambert Code Services

Mr. Lambert,

In reference to the field audit by the NRC on March 17, 1999, the NRC official was asking me various questions about safety procedures, work habits, etc. At this time, he asked me if we had ever had any problems and I replied that we had not had any, other than the one where the radiographer's assistant was audited and he wasn't wearing his rate alarm. I was referring to a prior incident which had already been discussed.

Best regards,





To: Mr. Reggie Lambert Code Services

.. Re: NRC Reciprocity Field Audit of Merch 17, 1999

Mr. Lambert,

In reference to the NRC reciprocity field audit on March 17, 1999, the NRC inspector asked if we had had any problems on Redstone Arsenal before. Mr. thinking that the inspector was referring to Code Services in general, answered that yes, we had an assistant who got caught without wearing his rate alarm.

