



FEMA

Br. 2

September 2, 2008

Licensing Assistance Team
Division of Nuclear Materials Safety
U.S. Nuclear Regulatory Commission, Region 1
475 Allendale Road
King of Prussia, PA 19406-1415

LL 31331
03037827
03122

2008 SEP - 9 PM 1:04
RECEIVED
REGION 1

Re: New NRC License Application

(01-31331-01)

Dear Addressee:

Please accept the enclosed application for a new NRC license titled to the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), Center for Domestic Preparedness (CDP). The CDP is a federally funded training center tasked with training the Nation's first responder community. In delivery of this training, the CDP utilizes various detection devices and radiation sources to condition responders to the many disciplines and procedural knowledge needed to safely respond to a potentially hazardous chemical, biological and/or radiological accident, man-made disaster or act of terrorism.

Sincerely,

Dr. Christopher T. Jones
Superintendent, CDP

142784

NRC FORM 313
(10-2005)
10 CFR 30, 32, 33,
34, 35, 36, 39, and 40

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0120

EXPIRES: 10/31/2008

Estimated burden per response to comply with this mandatory collection request: 4.4 hours. Submittal of the application is necessary to determine that the applicant is qualified and that adequate procedures exist to protect the public health and safety. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0120), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

APPLICATION FOR MATERIAL LICENSE

INSTRUCTIONS: SEE THE APPROPRIATE LICENSE APPLICATION GUIDE FOR DETAILED INSTRUCTIONS FOR COMPLETING APPLICATION. SEND TWO COPIES OF THE ENTIRE COMPLETED APPLICATION TO THE NRC OFFICE SPECIFIED BELOW.

APPLICATION FOR DISTRIBUTION OF EXEMPT PRODUCTS FILE APPLICATIONS WITH:

DIVISION OF INDUSTRIAL AND MEDICAL NUCLEAR SAFETY
OFFICE OF NUCLEAR MATERIALS SAFETY AND SAFEGUARDS
U.S. NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

IF YOU ARE LOCATED IN:

ILLINOIS, INDIANA, IOWA, MICHIGAN, MINNESOTA, MISSOURI, OHIO, OR WISCONSIN, SEND APPLICATIONS TO:

MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

LL 31331
03037027
03122

ALL OTHER PERSONS FILE APPLICATIONS AS FOLLOWS:

IF YOU ARE LOCATED IN:

ALABAMA, CONNECTICUT, DELAWARE, DISTRICT OF COLUMBIA, FLORIDA, GEORGIA, KENTUCKY, MAINE, MARYLAND, MASSACHUSETTS, MISSISSIPPI, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, NORTH CAROLINA, PENNSYLVANIA, PUERTO RICO, RHODE ISLAND, SOUTH CAROLINA, TENNESSEE, VERMONT, VIRGINIA, VIRGIN ISLANDS, OR WEST VIRGINIA, SEND APPLICATIONS TO:

ALASKA, ARIZONA, ARKANSAS, CALIFORNIA, COLORADO, HAWAII, IDAHO, KANSAS, LOUISIANA, MONTANA, NEBRASKA, NEVADA, NEW MEXICO, NORTH DAKOTA, OKLAHOMA, OREGON, PACIFIC TRUST TERRITORIES, SOUTH DAKOTA, TEXAS, UTAH, WASHINGTON, OR WYOMING, SEND APPLICATIONS TO:

LICENSING ASSISTANCE TEAM
DIVISION OF NUCLEAR MATERIALS SAFETY
U.S. NUCLEAR REGULATORY COMMISSION, REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

NUCLEAR MATERIALS LICENSING BRANCH
U.S. NUCLEAR REGULATORY COMMISSION, REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TX 76011-4005

(01-31331-01)

PERSONS LOCATED IN AGREEMENT STATES SEND APPLICATIONS TO THE U.S. NUCLEAR REGULATORY COMMISSION ONLY IF THEY WISH TO POSSESS AND USE LICENSED MATERIAL IN STATES SUBJECT TO U.S. NUCLEAR REGULATORY COMMISSION JURISDICTIONS.

1. THIS IS AN APPLICATION FOR (Check appropriate item)

- A. NEW LICENSE
- B. AMENDMENT TO LICENSE NUMBER
- C. RENEWAL OF LICENSE NUMBER

2. NAME AND MAILING ADDRESS OF APPLICANT (include ZIP code)

Center for Domestic Preparedness
61 Responder Drive
Anniston, AL 36265

3. ADDRESS WHERE LICENSED MATERIAL WILL BE USED OR POSSESSED

61 Responder Drive
Anniston, AL 36205

4. NAME OF PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Michael Vice

TELEPHONE NUMBER

(256) 847-2266

SUBMIT ITEMS 5 THROUGH 11 ON 8-1/2 X 11" PAPER. THE TYPE AND SCOPE OF INFORMATION TO BE PROVIDED IS DESCRIBED IN THE LICENSE APPLICATION GUIDE.

5. RADIOACTIVE MATERIAL

a. Element and mass number; b. chemical and/or physical form; and c. maximum amount which will be possessed at any one time.

6. PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED.

7. INDIVIDUAL(S) RESPONSIBLE FOR RADIATION SAFETY PROGRAM AND THEIR TRAINING EXPERIENCE.

8. TRAINING FOR INDIVIDUALS WORKING IN OR FREQUENTING RESTRICTED AREAS.

9. FACILITIES AND EQUIPMENT.

10. RADIATION SAFETY PROGRAM.

11. WASTE MANAGEMENT.

12. LICENSE FEES (See 10 CFR 170 and Section 170.31)

FEE CATEGORY AMOUNT ENCLOSED \$

13. CERTIFICATION. (Must be completed by applicant) THE APPLICANT UNDERSTANDS THAT ALL STATEMENTS AND REPRESENTATIONS MADE IN THIS APPLICATION ARE BINDING UPON THE APPLICANT.

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATION ON BEHALF OF THE APPLICANT, NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH TITLE 10, CODE OF FEDERAL REGULATIONS, PARTS 30, 32, 33, 34, 35, 36, 39, AND 40, AND THAT ALL INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF THEIR KNOWLEDGE AND BELIEF.

WARNING: 18 U.S.C. SECTION 1001 ACT OF JUNE 25, 1948 62 STAT. 749 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

CERTIFYING OFFICER -- TYPED/PRINTED NAME AND TITLE

Mike King, Associate Director, Operations & Support

SIGNATURE

DATE

08/25/2008

FOR NRC USE ONLY

TYPE OF FEE FEE LOG FEE CATEGORY AMOUNT RECEIVED CHECK NUMBER COMMENTS

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APPROVED BY

DATE

**U.S. Department of Homeland Security
Federal Emergency Management Agency Center for Domestic Preparedness**

Application for Materials License

Introduction

FEMA's Center for Domestic Preparedness (CDP), located in Anniston, Alabama, is the United States Department of Homeland Security (DHS)'s only federally chartered Weapons of Mass Destruction (WMD) training center.

The CDP began operations in June 1998 as the only all-hazards training center, offering training on Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) weapons. On March 31, 2007, the Noble Training Facility (NTF) was transferred from the U.S. Fire Administration (USFA) to the CDP. NTF is the only hospital facility in the United States dedicated to training hospital and healthcare professionals in disaster preparedness and response.

5. Radioactive Material

Element and Mass Number	Chemical and/or Physical Form	Maximum Amount that will be possessed at any one time
A. Nickel 63	Foil or Sealed Sources	Not to exceed 15 mCi per foil or source and 2 Ci total
B. Cesium 137	Sealed Sources	Not to exceed 20 mCi each and 300 mCi total
C. Americium 241	Foil or Sealed Sources	Not to exceed 18 mCi total

6. Purpose(s) for which licensed material will be used.

- A. Metallic foils used in detectors for chemical and/or biological agents.
- B. Sealed sources used to simulate package and radiological surveying.

7. Individuals responsible for Radiation Safety Program and their training and experience

Radiation Safety Officer	Michael Vice
Alternate Radiation Safety Officer / Source Manager	John Nicodemus

Michael Vice:

Fundamentals of Radiation Safety September 2007
Radiation Safety Academy (4) hours

Radiation Safety Officer September 2007
Radiation Safety Academy (40) hours

Responsibilities: Management oversight of government contractors utilizing various detection devices and radiation sources during delivery of first responder training. Ensures instructional staff and students receive proper training of general radiation safety, radiation hazards, radiation control measures to include time, distance and shielding. Coordinates radiation source inventory, maintenance, calibration, wipe tests and storage with authorized custodian/source manager

John Nicodemus:

Radiation Safety Officer April 2001
Radiation Safety Academy (40) hours

Radiation Safety Officer Refresher September 2005
Radiation Safety Academy (40) hours

DOT & NRC Requirements for Shipping & Receiving Radioactive Materials September 2005
Radiation Safety Academy (40) hours

Responsibilities: Directly manages radiation source inventory, maintenance, calibration, wipe tests and storage. Delivers radiation safety training for instructional staff, logistical personnel and employees required to work with radiation sources.

8. Training for Individuals working in or frequenting restricted areas.

- 1) Training in aspects of the safe use of radioactive material and ionizing radiation producing equipment will be provided at least annually to all radiation workers. Oral training will be supplemented by written materials, films, computer training packages, or other means to ensure a comprehensive training program for personnel.
- 2) The RSO will determine who will provide the training and who, in addition to radiation workers, will require training. The training may be provided by the Radiation Safety Officer, by health physics personnel or by a private contractor deemed suitable. The RSO will determine the need for training of non-radiation workers such as security personnel, emergency response personnel, safety personnel, etc. The RSO will determine the need for knowledge testing of trainees based on the type of work performed by the trainees and the previous training in radiation safety provided to these individuals. The RSO will maintain records of training.
- 3) Each new radiation worker will receive initial orientation training with the Radiation Safety Officer or other suitable personnel. This orientation will include:
 - a) Previous occupational exposure of the new worker.
 - b) Previous training in radiation safety.
 - c) Experience with radioactive material or radiation producing equipment.
 - d) A discussion of the hazards of radioactive material and/or radiation producing equipment. This will include a discussion of biological risk to the worker and to the fetus/embryo.
 - e) A briefing on the safe practices and protective equipment required for the intended work. The proper use of fume hoods, gloves, lab coats, dosimetry and other protective items is discussed.
 - f) Special instructions on declaration of pregnancy and exposure limits for pregnant women.
 - g) Instructions on the rights of radiation workers, including the right to notify the NRC of license violations.
 - h) A discussion of radioactive waste requirements, to include the proper segregation and packaging of radioactive waste awaiting pick up.
 - i) Training in emergency procedures.
 - j) Training in radioactive material acquisition requirements and shipment requirements.
 - k) Training in worker performed monitoring of his / her work area, to include beta-gamma survey and smear wipe survey.

9. Facilities and Equipment.

Licensed material will be used only at locations approved by the Radiation Safety Officer. The principal use locations will be NTF; Chemical, Ordnance, Biological Radiological Training Facility (COBRATF), Main Responder Training Complex and 500Area Training Complex.

Proposed new locations (i.e. training areas) are surveyed by radiation protection personnel prior to start of work to establish baseline data and to ensure adequacy of equipment, operating procedures, facilities, caution signs and radioactive waste containers. No radioactive material will be used where release of radioactivity to the environment is possible. If it is necessary to use the radioactive material at other temporary sites off post, the material will be in the form of sealed sources or plated metal foils installed within equipment/instruments, which will be used, handled and stored under the direct control of designated personnel at the site. The personnel will be designated by the RSO. Prior coordination will be accomplished with responsible persons at the site to arrange administrative, security, radiation protection, and emergency procedures. The FEMA personnel will be instructed to comply with local procedures and FEMA procedures.

Due to the nature of the chemical agents used for testing, the manufacturer of their chemical agent monitors will need to service or repair detectors onsite. These procedures will be conducted under the FEMA CDP license. At no time will the disassembly include open sources; i.e. the source will remain sealed in the cell or enclosure designed to contain the sealed source at all times.

10. Radiation Safety Program.

A written Radiation Safety Program is attached.

The Program addresses organization for radiation control, duties and responsibilities, personnel radiation dosimetry, survey meters and monitoring equipment, spill procedures, waste disposal, record keeping, and other key issues of radiation safety.

11. Waste Management.

Radioactive waste will be disposed of in accordance with all NRC regulations using only licensed and authorized waste brokers and disposal facilities.



FEMA

**U.S. Department of Homeland Security
Federal Emergency Management Agency
Center for Domestic Preparedness**

CDP Radiation Safety Program

CDP 5304.0

(August 2008)

CDP Radiation Safety Program

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CDP Radiation Safety Program Introduction

1. **PURPOSE.** This program establishes policies and procedures for the use of, licensing, disposal, transportation, safety design, and inventory control of ionizing radiation sources used by the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), Center for Domestic Preparedness (CDP). It also provides radiation exposure standards, dosimetry monitoring, and accident reporting instructions. Its objective is to assure safe use of radiation sources and compliance with all applicable Federal and State regulations.
2. **APPLICABILITY.** This program applies to all elements of the CDP and all activities supported by the CDP involving procurement, receipt, handling, transporting, storage, use, maintenance, and disposal of radioactive materials and other sources of ionizing radiation. This program also applies to contractors, sub contractors, and all other individuals who work in (or visit) CDP facilities.
3. **REFERENCES.** Required, related and referenced publications are listed in Appendix A.
4. **EXPLANATION OF TERMS.** Abbreviation and special terms used within this program are explained in the glossary, Appendix B.
5. **RESPONSIBILITIES.**
 - a. Superintendent, CDP will:
 - (1) Designate, in writing a qualified individual to serve as Radiation Safety Officer (RSO);
 - (2) Ensure a written Radiation Safety Program is established to provide compliance with applicable Federal and State regulations.
 - b. Associate Director, Operations and Support will:

Ensure that adequate personnel are assigned, and the necessary facilities and equipment are available to manage the CDP Radiation Safety Program.

- c. CDP Safety & Occupational Health Manager / RSO will:
 - (1) Establish written policies and procedures to assure compliance with applicable Federal and State radiation safety regulations and directives;
 - (2) Ensure that an internal or external audit of the Radiation Safety Program is conducted annually;
 - (3) Direct the CDP Radiation Safety Program;
 - (4) Serve as technical advisor to the CDP Superintendent and senior management on matters pertaining to the acquisition, use, storage, and disposal of all radioactive materials;
 - (5) Perform and/or oversee radiation surveys required to document that operations involving the use of radiation sources are conducted in compliance with all Federal and State regulations and directives;
 - (6) Review plans and procedures relating to operations conducted or being proposed which involve radioactive materials
- d. CDP Contractor Project Managers that conduct operations involving ionizing radiation sources will:
 - (1) Ensure adequate facilities, personnel and equipment is available to comply with applicable Federal and State regulations regarding the use of radiation sources;
 - (2) Provide management assistance in the enforcement of policies and procedures established within this program.

6. DEVIATIONS.

- a. This program document serves as the Nuclear Regulatory Commission's (NRC) mandated Radiation Safety Program document and as such becomes a condition of the NRC license.
- b. Request for deviations will be reviewed and forwarded through the office of the RSO.
- c. Deviations will be documented and a copy of the deviation granted will be maintained by the RSO.

**CDP Radiation Safety Program
Annex A
Ionizing Radiation**

1. GENERAL.

- a. Compliance with NRC regulations and NRC licenses
 - (1) All personnel working with radioactive material under an authority issued by CDP will comply with all applicable NRC regulations and conditions of NRC licenses.
 - (2) All Associate/Assistant Directors, Contractor Project Managers, and Supervisors will ensure that personnel working with radioactive materials are aware of applicable regulations and conditions that apply.
- b. Sources of ionizing radiation used that do not require NRC licensing will be controlled to the same extent as those requiring licensing.
- c. Shielding and control designs. The RSO will evaluate all design plans for use with any source of ionizing radiation capable of generating a "Radiation Area" as defined in the glossary.

2. NUCLEAR REGULATORY COMMISSION LICENSES.

- a. The issuance of an NRC license is required for the possession of by-product, source, and/or special nuclear material.
- b. The management of the CDP NRC license is conducted through the CDP Radiation Safety Officer.
- c. Requests for radioactive materials not already authorized by the current NRC license will be processed through the Radiation Safety Officer. Requisition of sources requiring NRC licensing will not be initiated until necessary NRC license amendments are received.

3. NON-NRC LICENSED RADIATION SOURCES.

- a. Radioactive materials not requiring NRC licensing are authorized for use by the CDP Radiation Safety Officer.
- b. Exempt quantities of radioactive material may be possessed and used only by RSO approval and will be inventoried annually.

- c. Applicable authorizations will be approved and implemented prior to the acquisition of any radiation sources.

4. INVENTORY MANAGEMENT.

- a. Current radiation inventories are required to ensure the CDP does not exceed the established limits of possession assigned by the CDP NRC license.
- b. Procurement of all radiation sources will be coordinated through the Radiation Safety Officer.
 - (1) Requested radioactive isotope and activity will be verified against license authorization and current inventory to ensure that material is authorized and that possession limits are not exceeded.
 - (2) All radioactive material will be processed through the radiation safety office. If special handling is necessary (chemical surety material, biological material, classified, etc...) appropriate personnel will work in conjunction with the radiation safety office to ensure proper handling and safety precautions.
- c. The radiation safety officer will ensure active inventories are documented and maintained. An inventory check will be conducted at the end of each exercise as well as annually to ensure the control of radioactive materials.
- d. Records of isotope inventories will be maintained and will include, at a minimum, the following information: radionuclide, quantities, manufacturer's name and model numbers and the date of the inventory.

5. LEAK TEST.

- a. Sealed sources of radioactive material authorized by the CDP NRC license are required to have periodic leak testing unless specifically exempted by the NRC.
 - (1) Sealed sources designed to emit alpha radiation will be leak tested at least every 3 months.
 - (2) Sealed sources designed to emit beta/gamma radiation will be leak tested at least every six months.

- (3) Sealed sources that are designated as "in storage" and/or awaiting disposal shall be leak tested every (10) years.
- b. Radioactive material authorized under a manufacturer's general license will be leak tested at a frequency not to exceed that required by the manufacturer.
- c. Results of leak tests will be in units of microcurie (μCi) and maintained on file.

6. SURVEYS.

- a. Surveys will be conducted monthly to ensure the magnitude and extent of radiation levels of radioactive materials do not exceed regulatory limits.
- b. Portable radiation instrumentation used to quantify radiation levels or to make determination of the presence and extent of radioactive contamination will be calibrated "Active" through the Test Measurement and Diagnostic Equipment (TMDE) Activity or approved commercial calibration facility. Calibration frequencies will be in accordance with manufacture's specifications, but will not exceed a period of at least once per year.
- c. Records of required surveys will be maintained by the RSO.

7. RADIOACTIVE MATERIALS DISPOSAL.

- a. Transfer of unwanted radiation sources will be coordinated through the CDP RSO. No radioactive material or sources of radiation will be disposed of through the use of normal trash removal.
- b. Unwanted radiation sources will be transferred using the following general guidelines:
 - (1) Items that have other hazardous materials as well as a radioactive component will be segregated and all hazards identified at the time of request for disposal.
 - (2) Radioactive material will remain on the inventory until physical transfer of material has occurred.
 - (3) Sealed sources of radioactive material, not known to be leaking, will be placed in an intermediate container (i.e., zip lock bag or single clear trash bag). Sources known or suspected of leaking will be placed in double bags.

- (4) The RSO will maintain the active inventory for items designated for disposal.
- c. Equipment containing radiation sources will only be transferred or sent for disposal to licensed and or permitted facilities. Transfers and/or disposals will follow all pertinent NRC and DOT regulations.
- d. Records of transfer and/or disposal of radioactive material will be maintained by the RSO and kept for a minimum of three years.

**CDP Radiation Safety Program
Annex B
Safety Standards, Dosimetry, and Recordkeeping**

1. GENERAL.

It is the responsibility of the licensee and all users of radiation sources to conduct operations to ensure that radiation exposures received by workers and members of the general public are below those limits established by Federal and State regulations. Furthermore, doses shall be maintained at levels that are As Low As Reasonably Achievable (ALARA).

2. IONIZING RADIATION.

a. The Code of Federal Regulations (CFR) Title 10, Part 20, prescribes the maximum annual exposures to workers and members of the general public. While it is understood that 10 CFR applies only to the NRC Licensed materials, the CDP accepts those limits for all sources of ionizing radiation.

b. The following table identifies the standards as specified by 10 CFR Part 20:

Category	Maximum^{1,2,3}
Member of the General Public	100 mrem (TEDE) in a calendar year ⁴
Fetus/embryo of occupationally exposed declared pregnant worker	500 mrem (DDE of mother + ED due to radionuclides in fetus/embryo) for entire pregnancy
Occupationally Exposed Adult	5 rem TEDE in a calendar year
Lens of the Eye	15 rem EDE in a calendar year
Individual Organ	50 rem DDE+CDE in a calendar year
Skin or Extremity	50 rem SDE in a calendar year
Occupationally Exposed Minor	10% of applicable limit for adult

1. Maximum doses will be the limit listed in this table or the current version of 10 CFR Part 20, which ever is the most restrictive.
2. Abbreviations: TEDE = Total Effective Dose Equivalent; DDE = Deep Dose Equivalent; ED = Effective Dose; EDE = Effective Dose Equivalent; CDE = Committed Dose Equivalent; SDE = Shallow Dose Equivalent
3. OSHA standard for occupational exposure of adults and for the lens of the eye is 1¼ rem in a calendar quarter. OSHA standard for skin of whole body is 7½ rem in a calendar quarter. OSHA standard for hands and forearms; feet and ankles is 18¾ rem in a calendar quarter.
4. The dose in any unrestricted area from external sources of ionizing radiation will not exceed 2 mrem in any one hour.

- c. All CDP employees conducting operations involving ionizing radiation sources must comply with the above exposure criteria.
- d. Dosimetry. Occupationally exposed individuals requiring monitoring will only use dosimeters supplied by the RSO. The CDP Dosimetry Program will be managed by the CDP RSO.
 - (1) Dosimetry will be issued based on the following criteria:
 - (a) Personnel likely to receive 10% of any limits established above.
 - (b) Personnel entering restricted areas where the external radiation requires the posting of a "Radiation Area, High Radiation Area, or Very High Radiation Area" sign.
 - (c) Personnel not permanently assigned to the CDP meeting the requirements above may be issued a dosimeter as a "Visitor/Student".
 - (2) Storage of dosimeters while not being worn will only be in locations authorized by the RSO.
 - (3) Individuals assigned dosimeters will contact the RSO immediately if any of the following situations occur:
 - (a) Dosimeter is lost or damaged during wear period.
 - (b) Dosimeter is inadvertently exposed (i.e. dosimeter falls off during set-up and not noticed until after exposure.)
 - (c) Dosimeter is worn by an individual other than the individual it is assigned.

3. RADIOACTIVE CONTAMINATION.

- a. Operations with radioactive materials will be conducted to ensure that radioactive contamination is avoided.
- b. Contamination in "restricted areas" will be maintained below the applicable levels in the table below:

Nuclide	Average^{2,3}	Maximum^{2,4}	Removable^{2,5}
Alpha emitters	100 dpm/100 cm ²	300 dpm/100 cm ²	20 dpm/100 cm ²
Beta-Gamma emitters	5,000 dpm/100 cm ²	15,000 dpm/100 cm ²	1,000 dpm/100 cm ²

- 1. Where surface contamination by both alpha and beta-gamma nuclide exists, the limits established for alpha and beta-gamma emitting nuclides should apply independently.
 - 2. As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.
 - 3. Measurements of average contamination should not be averaged over more than 1 square meter. For objects of less surface area, the average should be derived for each object.
 - 4. The maximum contamination level applies to an area of not more than 100 cm².
 - 5. The amount of removable radioactive material per 100 cm² of surface area should be determined by wiping that area with filter or soft absorbent paper, applying moderate pressure, and assessing the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of less surface area is determined, the pertinent levels should be reduced proportionally and the entire surface should be wiped.
- c. Areas of contamination above the limits stated above will be decontaminated to levels below those listed.
 - d. Equipment stored and/or used in restricted areas identified for release to unrestricted areas will be surveyed to ensure that contamination levels are as far below the limits as practicable.

**CDP Radiation Safety Program
Annex C
Special Reporting Requirements**

1. GENERAL.

- a. Accidents and/or incidents involving radiation sources requiring reporting as described below, will be reported to the CDP Radiation Safety Officer (RSO) at (256) 847-2266.
- b. The CDP RSO will be responsible for conducting an appropriate investigation and making any additional notifications as required.

2. IONIZING RADIATION. The following situations will require notification of the CDP RSO:

- a. Any accident or incident where occupational workers or members of the general public are likely to receive an exposure greater than normal anticipated exposures.
- b. The loss of control of any radioactive material.
- c. Contamination levels indicated within a restricted area ten times greater than the limits specified in Annex B, paragraph 3.b.
- d. Contamination levels indicated within an unrestricted area greater than the limits specified in Annex B, paragraph 3.b.

**CDP Radiation Safety Program
Appendix A
References**

1. **Title 10 Code of Federal Regulations** Nuclear Regulatory Commission
2. **Title 21 Code of Federal Regulations, Subchapter J** Radiological Health
3. **Title 29 Code of Federal Regulations** Occupational Safety and Health Administration
4. **Title 49 Code of Federal Regulations** Department of Transportation
5. **NUREG-1556, Volume 1** Program-Specific Guidance About Portable Gauge Licenses
6. **NUREG-1556, Volume 7** Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope
7. **USNRC Regulatory Guide 8.13** Instruction Concerning Prenatal Radiation Exposure
8. **USNRC Regulatory Guide 8.29** Instruction Concerning Risk for Occupational Radiation Exposure

CDP Radiation Safety Program
Appendix B
Glossary

1. **ALARA.** Acronym for "As Low As Reasonably Achievable" means making every effort to maintain exposures to radiation as far below applicable dose limits as is practical consistent with the purpose for which the source of radiation is required.
2. **Authorized User.** An individual who has been authorized by the Radiation Safety Committee to possess and use CDP radiation sources.
3. **Background Radiation.** Radiation received from cosmic, terrestrial, inhaled radionuclides, and other sources of radiation not resulting from the possession, use, or disposal of a radiation source.
4. **Committed Dose Equivalent.** The dose equivalent to organs or tissues of reference that will be received from an intake (internal exposure) of radioactive material by an individual during the 50-year period following the intake.
5. **Committed Effective Dose Equivalent.** The sum of the products of the weighing factors applicable to each of the body organs or tissues that are irradiated and the committed dose equivalent to these organs or tissues.
6. **Declared Pregnant Woman.** A woman who has voluntarily informed her employer, in writing, of her pregnancy and the estimated date of conception.
7. **Decommission.** To remove (as a facility) safely from service and reduce residual radioactivity to a level that permits release of the property for unrestricted use and termination of the NRC License, or CDP Permitted operations.
8. **Deep Dose Equivalent.** Applies to external whole-body exposure and is the dose equivalent to a tissue depth of 1 centimeter (1000 mg/cm²).
9. **Deviation.** A departure from the requirements of this program document.
10. **Effective Dose Equivalent.** The sum of the products of the dose equivalent to the organ or tissue and the weighting factors applicable to each of the body organs or tissues that are irradiated. The units of dose equivalent are the rem and the Sievert (Sv).

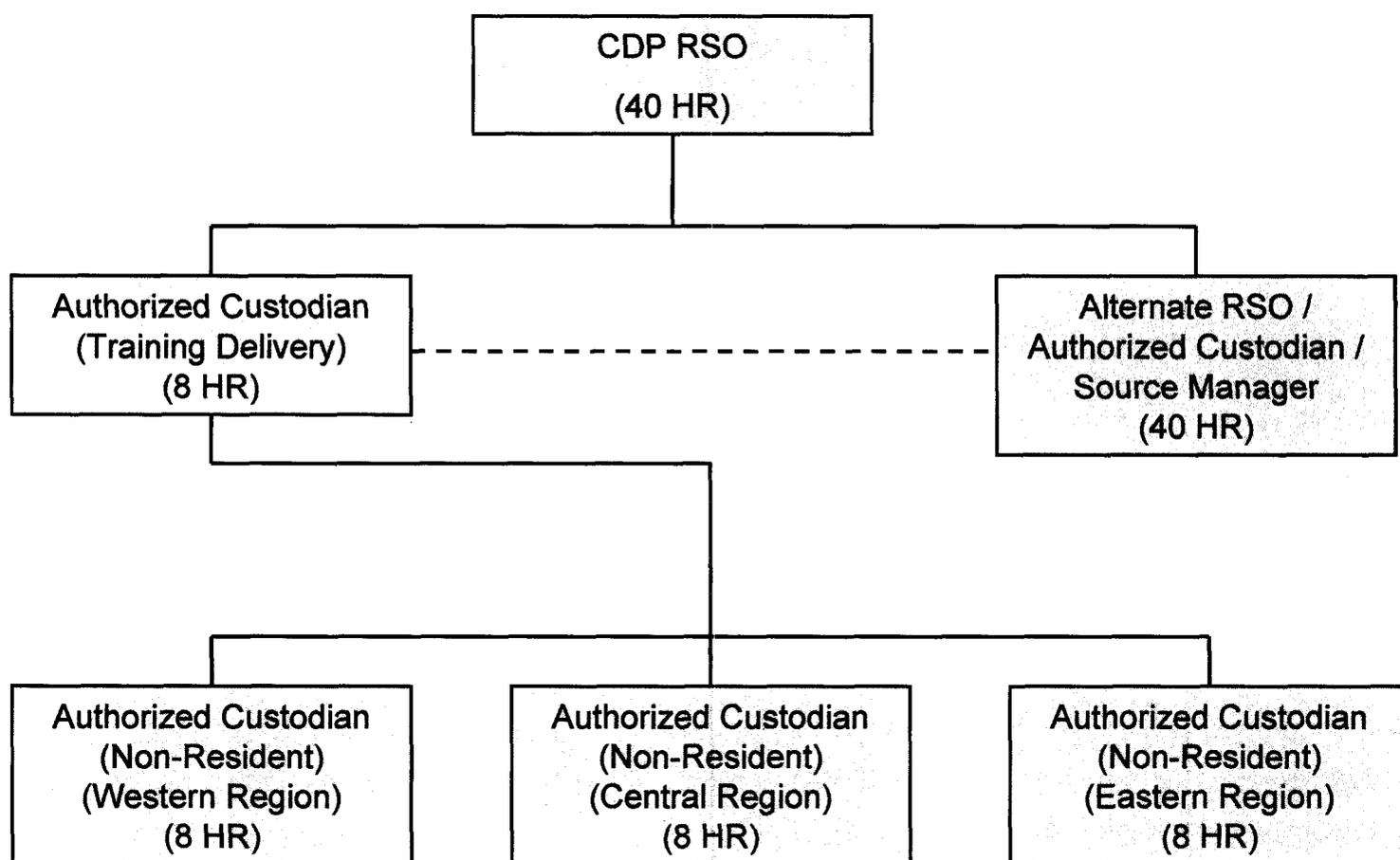
11. **Exposure.** In risk management, the frequency and length of time subjected to a hazard.
12. **High Radiation Area.** An area, accessible to individuals, in which radiation levels could result in an individual receiving a dose equivalent in excess of 0.1 rem (1 mSv) in 1 hour at 30 centimeters from the radiation source or from any surface that the radiation penetrates.
13. **Ionizing Radiation.** Charged subatomic particles and ionized atoms with kinetic energies greater than 12.4 eV, electromagnetic radiation with photon energies greater than 12.4 eV, and all free neutrons and other uncharged subatomic particles (except neutrinos and antineutrinos).
14. **Member of the Public.** Any individual that is not involved with the direct possession, use or disposal of a radiation source.
15. **Occupational Dose.** Exposure received in the course of employment in which duties involve the exposure to radiation sources or radioactive materials.
16. **Radiation Area.** An area, accessible to an individual, in which radiation levels could result in an individual receiving a dose equivalent in excess of 0.005 rem (0.05 mSv) in 1 hour at 30 centimeters from the radiation source or from any surface that the radiation penetrates.
17. **Restricted Area.** An area whose access is controlled for the purpose of minimizing exposure of individuals to sources of radiation.
18. **Sealed Source.** A radioactive material that is permanently bonded or fixed in a capsule or matrix designed to prevent release and dispersal of the radioactive material under the most severe conditions which are likely to be encountered in normal use and handling and which is used in that configuration.
19. **Shallow Dose Equivalent.** Applies to external exposure of the skin or an extremity and is taken as the dose equivalent at a tissue depth of 0.007 centimeter (7 mg/cm^2) averaged over an area of 1 square centimeter.
20. **Survey.** The evaluation of a facility or operation to determine the effectiveness of the radiation safety program. Surveys may include, but are not limited to, review of operations, the taking of and analysis of physical measurement.
21. **Unrestricted Area.** An area, access to which is neither limited nor controlled for the purpose of ionizing radiation safety.

22. **Very High Radiation Area.** An area, accessible to individuals, in which radiation levels could result in an individual receiving an absorbed dose in excess of 500 rads (5 gray) in 1 hour at 1 meter from a radiation source or any surface that the radiation penetrates.

**CDP Radiation Safety Program
Appendix C
Radiation Management Flow Chart**

See Attached Flow Chart

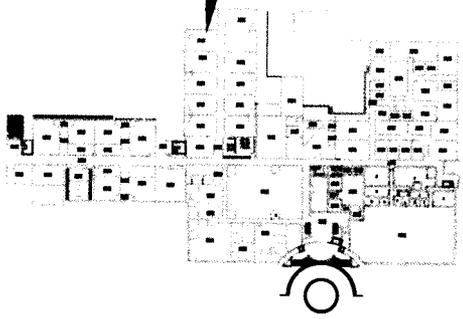
CDP Radiation Management



**CDP Radiation Safety Program
Appendix D
Facility Drawings**

See Attached Facility Drawings

RADIOACTIVE MATERIAL
STORAGE AREA



1046

1044

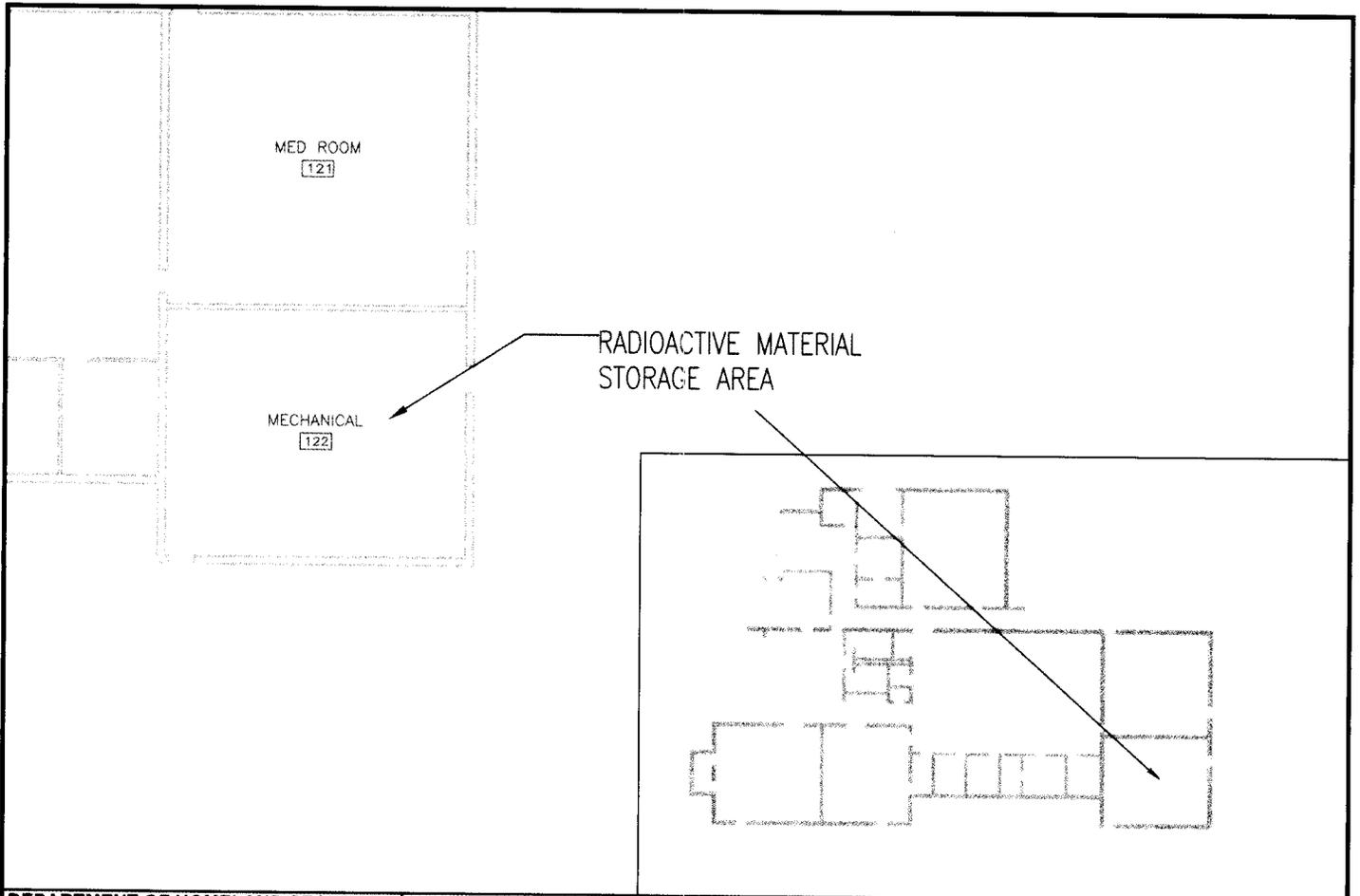
DEPARTMENT OF HOMELAND SECURITY
CENTER FOR DOMESTIC PREPAREDNESS
 61 RESPONDER DRIVE
 ANNISTON, AL 36205
 256.847.2142



DATE: 6/4/2008
 SCALE: 3/32" = 1'-0"
 VERSION:
 DRAWN BY: BKENT
 CHECKED BY:
 APPROVED BY:

BUILDING 61 1ST FLOOR
 ROOM 1046
 61 RESPONDER DRIVE
 ANNISTON, AL

REVISIONS:	
DATE:	COMMENTS:



DEPARTMENT OF HOMELAND SECURITY
CENTER FOR DOMESTIC PREPAREDNESS
 61 RESPONDER DRIVE
 ANNISTON, AL 36205
 256.847.2142



DATE:	6/4/2008
SCALE:	3/32" = 1'-0"
VERSION:	CURRENT
DRAWN BY:	BKENT
CHECKED BY:	
APPROVED BY:	

COBRA TF
MECHANICAL ROOM
ADMIN BUILDING
ANNISTON, AL

REVISIONS:	
DATE:	COMMENTS:

LIPSEY
PLEX

RADIOACTIVE MATERIAL
STORAGE AREA

DEPARTMENT OF HOMELAND SECURITY
CENTER FOR DOMESTIC PREPAREDNESS
111 RESPONDER DRIVE
ANNISTON, AL 36810
334-847-2142



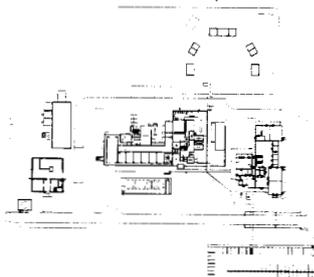
COBRA TF
LIPSEY PLEX
ANNISTON, AL

RADIOL	

RADIOACTIVE MATERIAL
STORAGE AREA

HAZMAT
TRAILER

NORTHVILLE
TRAINING
VENUE



DEPARTMENT OF HOMELAND SECURITY
CENTER FOR DOMESTIC PREPAREDNESS
1745 SPONGER DRIVE
ANNISTON, AL 36810
(205) 944-7400

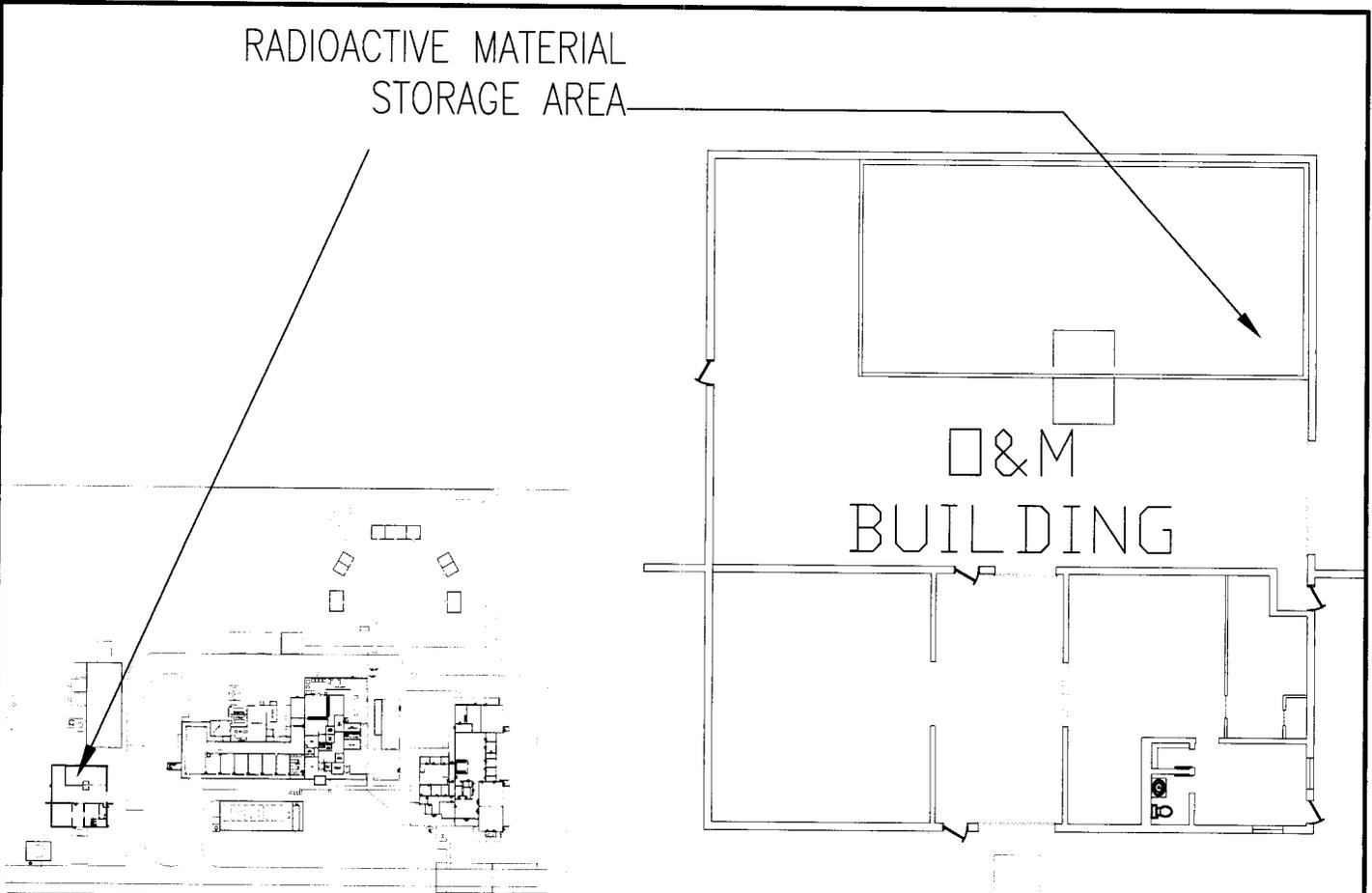


DATE	11/11/11
TIME	14:00
LOCATION	ANNISTON
UNIT	1000
OPERATOR	1000
STATUS	1000

COBRA TF
NORTHVILLE TRAINING AREA
HAZMAT TRAILER
ANNISTON, AL

REVISION	
NO.	DESCRIPTION

RADIOACTIVE MATERIAL
STORAGE AREA



O&M
BUILDING

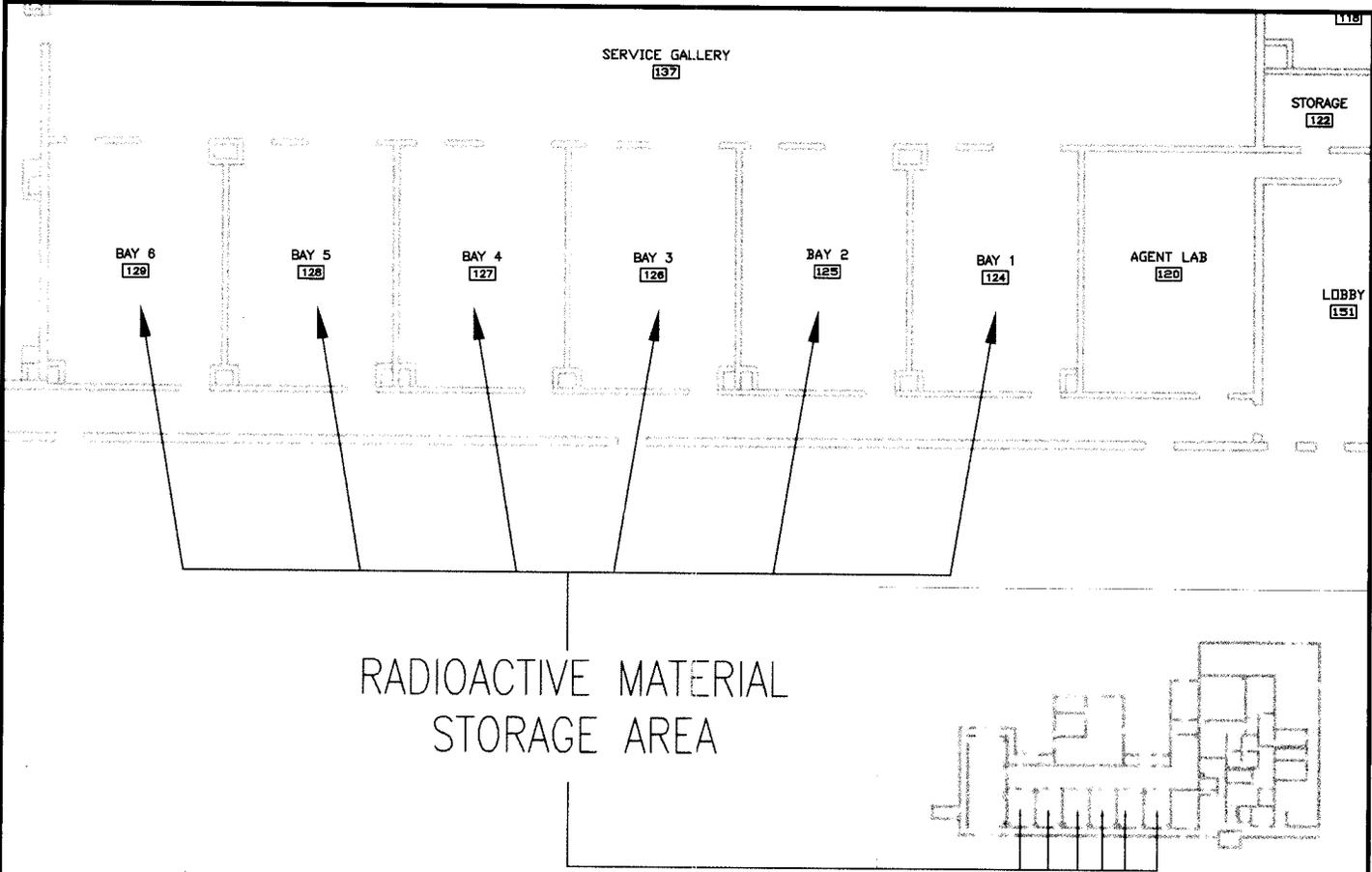
DEPARTMENT OF HOMELAND SECURITY
CENTER FOR DOMESTIC PREPAREDNESS

1155 E. 9th Drive
Mobile, AL 36688
334-875-2111



COBRA TF
O&M BUILDING
ANNISTON, AL

REVISIONS	
NO.	DESCRIPTION



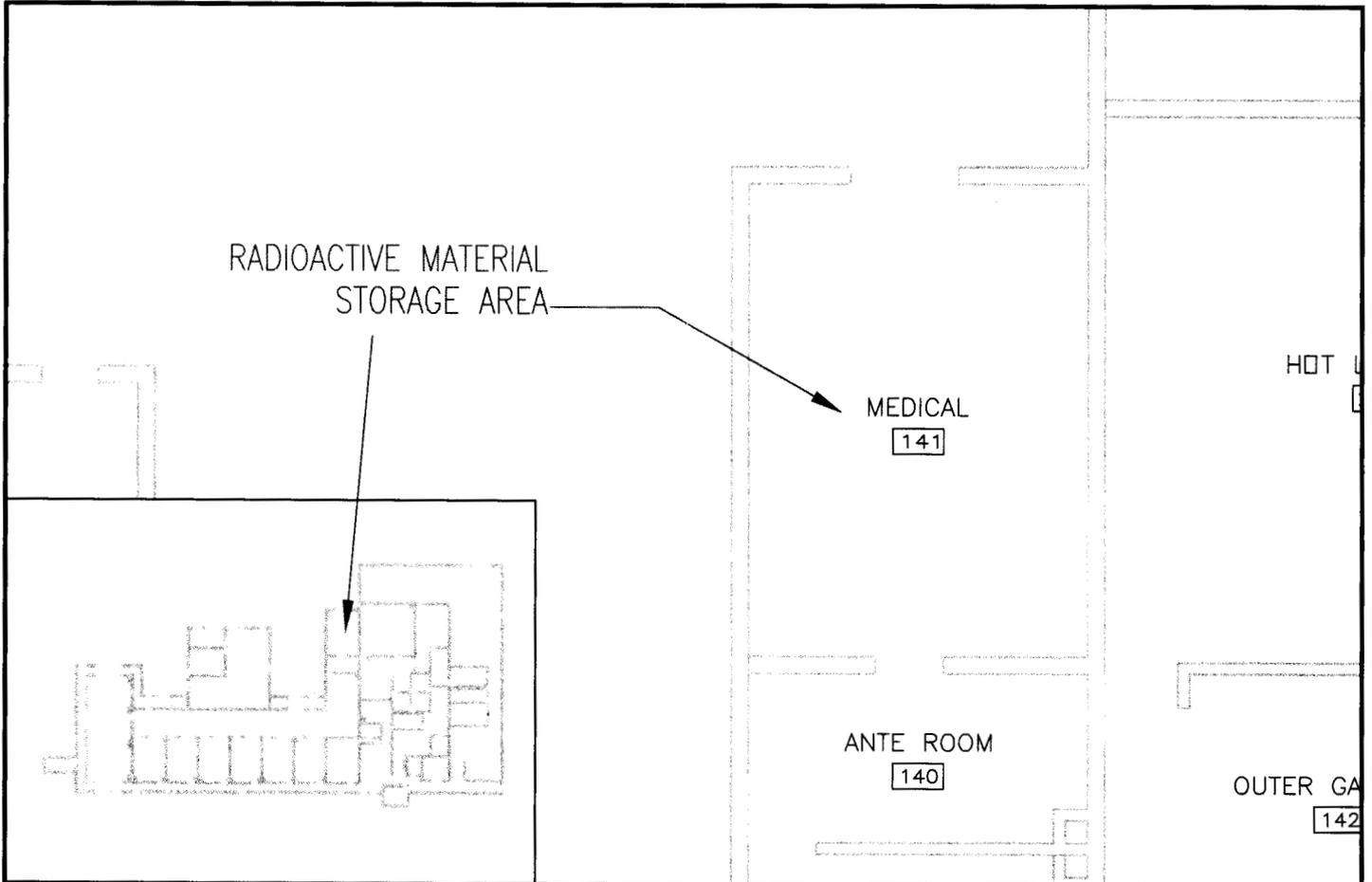
DEPARTMENT OF HOMELAND SECURITY
CENTER FOR DOMESTIC PREPAREDNESS
 61 RESPONDER DRIVE
 ANNISTON, AL 36205
 256.847.2142



DATE:	5/4/2008
SCALE:	1/16" = 1'
VERSION:	CURRENT
DRAWN BY:	S. KENT
CHECKED BY:	
APPROVED BY:	

COBRA TF
 TRAINING BUILDING
 HOT AREA
 ANNISTON, AL

REVISIONS:	
DATE:	COMMENTS:



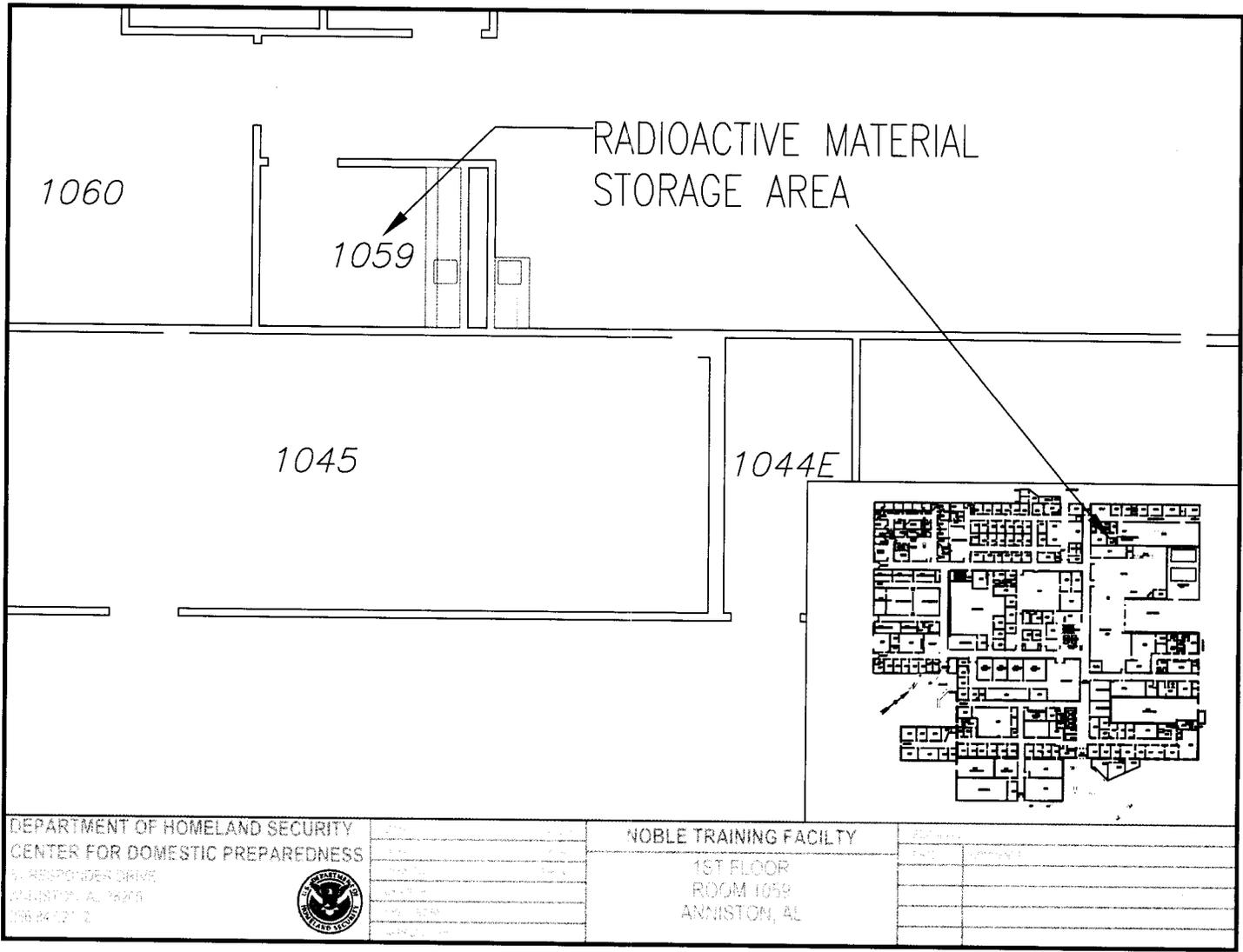
DEPARTMENT OF HOMELAND SECURITY
CENTER FOR DOMESTIC PREPAREDNESS
 61 RESPONDER DRIVE
 ANNISTON, AL 36205
 256.847.2142



DATE:	6/4/2008
SCALE:	1/8" = 1'
VERSION:	CURRENT
DRAWN BY:	B. KENT
CHECKED BY:	
APPROVED BY:	

COBRA TF
TRAINING BUILDING
MEDICAL ROOM
ANNISTON, AL

REVISIONS:	
DATE:	COMMENTS:



This is to acknowledge the receipt of your letter/application dated

9/2/08, and to inform you that the initial processing which includes an administrative review has been performed.

New License Application (03037827)
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 142784.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

: (FOR LAMS USE)
: INFORMATION FROM LMS
: -----
:
:
: Program Code: 03122
: Status Code: 3
: Fee Category: _____
: Exp. Date: 0
: Fee Comments: _____
: Decom Fin Assur Reqd: _
:

BETWEEN:

License Fee Management Branch, ARY
and
Regional Licensing Sections

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED

Applicant/Licensee: DEPARTMENT OF HOMELAND SECURITY
Received Date: 20080908
Docket No: 3037827
Control No.: 142784
License No.: 01-31331-01
Action Type: New Licensee

2. FEE ATTACHED

Amount: /
Check No.: _____

3. COMMENTS

No check received with application

Signed *Rubena Jiroud*
Date *9/11/08*

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /__/))

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:

Amendment _____
Renewal _____
License _____

3. OTHER _____

Signed _____
Date _____