

The Citadel Rifle Range

Policies and Procedures

The Citadel Rifle Range is operated under a MOU with the S.C. National Guard under the direction of the Range Master. The order of use is as follows: National Guard Training, Citadel Rifle Team, Citadel Club Pistol Team, Sanctioned Rifle and Pistol events, ROTC Training, and CMP and Firearms Training activities. All use is subject to approval of the Range Master who is required to be present or his approved representative during any scheduled event.

The Citadel Range is limited to .223 rifle and .45 pistol ammunition. No armor piercing, tracer, magnum loads, or hand loads are allowed in the range. All ammunition must be factory manufactured for the intended firearm. Citadel Rifle and Pistol Teams will use .177 pellets and .22 smallbore ammunition. Never shoot black powder or smoke producing ammo in the range. No shotguns will be fired in the range. It is recommended that .223 firearms use a .22 insert if available. Sustained .223 rapid fire at a single point of aim is not allowed.

The MegaLink Target system requires the use of standard velocity .22 ammunition. (NCAA rule.)

Use of the electronic scoring must be under the supervision of someone trained in the care and use of the equipment. Exercise caution with the wiring and pellet traps. Traps must be emptied when over 50% full of shot pellets to reduce the possibility of back bounces. The recovered pellets are to be stored in the marked lead recycling containers stored in the down range area. The lead must be recycled and the disposal recorded in the range folder.

Safety: Basic firearms safety instruction and a clear understanding of range rules and range safety is required of everyone before using the facilities. Citadel Rifle uses the NRA based **MAT** safety instructions. All firearms should be handled as if they are loaded.

M represents the muzzle of the firearm that must always point in a safe direction. The muzzle should be pointed up until in the firing point and then it must be pointed downrange.

A represents the action. The action must be open with an **Empty Chamber Indicator** inserted until the firearm is in the firing point, pointing in a safe direction, and ready for use.

T represents the trigger. The trigger finger will not touch the trigger until the firearm is safely pointed downrange and ready to fire in a manner that allows the bullet to pass through the target and impact the berm.

Shooters must open their firearms action and insert **ECI** devices before removing firearms from the rifle storage area or traveling cases. The ECI must be inserted when not firing. Position change adjustments to the rifles must be done in a safe manner with the muzzle pointing downrange at all times.

The SCUBA air and CO2 tanks are required to be firmly fastened to a secure structure in a manner that insures that they can not be tipped over. This is an OSHA regulation. The firearm air or CO2 tanks should be filled and handled in a safe and secure manner. Hand tools are never to be used on the tanks and avoid cross threading the tank when filling. Do not force the tank if you have a problem, Stop and secure the tank and advise the Range Master of the situation.

Smallbore ammunition is to be stored in the coaches office until practice or match issue. Pellets will be stored in the coaches office. A sufficient ammo of ammo for practice or a competition may be stored with the shooters firearm.

Competitors must fully follow the rules of the Governing Body of their sport or activity, the NCAA, Citadel Rules and Regulations, and all applicable safety rules of the sport. Basic knowledge of the MegaLink target system is required.

Everyone using the range is responsible for the safe operation of the range and it is their duty to report any unsafe condition or dangerous behavior to the Range Master. Unsafe activity will result in the loss of range privileges. No horseplay is allowed. No cross firing or improper targets are to be fired upon. Accidental discharges or malfunctions are to be reported to the Range Master. Dropped ammo or cartridges that fail to fire must be deposited in the range jar in the control booth for proper disposal. Never put them in the brass bucket or trash cans.

Shooters are not allowed access to the downrange area beyond the red firing line. Brass clean-up is for brass up range of the red line and the brass must be placed in the range brass buckets for recycling.

Shooters are not allowed to eat in the range and only closed water bottles are allowed. No open containers. The range is a lead hazard area and shooters are to wash their hands, arms, and faces when leaving the range. Anyone that enters the downrange area must wear plastic foot protection that is available behind point 12 and the booties are to be returned to the bin before returning to the up-range area. Feet must be wiped on the sticky mat prior to leaving the up-range area.

The sounding of the range alarm or a called cease fire means that shooting stops, actions are opened, and firearms grounded. Do not fire your gun to clear it, stop shooting and advise the range officer that your firearm is still loaded if the round fails to eject when the action is opened. The space bar on the carrier control computer will sound the alarm as well as the range safety light system.

Cell phones and electronic sound producing equipment must be turned off when the firing line enters the prep or ready period.

Eye and ear protection is available in the range. Hearing protection is required during smallbore or centerfire shooting. It is an option during pellet firing. Eye protection is required for pistol and centerfire and it is always recommended for any shooting in the range.

The air handler must be in operation when the range is in use. There is a pellet setting and a live fire setting and they are required to be in use while firing is taking place in the range. Doors are to remain in the closed position while the air handler is in operation. The air handler will shut off if a door is locked open for over 3 minutes.

The air handler and range lighting system is to be in the on position only while the range is in use. Never leave it running if the range will be unoccupied for more than 5 minutes before shooting resumes. The air handler must be on while cleaning downrange with the HEPA vacuum or during any activity that might cause dust to become airborne.

Revised: 11/18/2012

Standard Operating Procedure
for
Cleaning Lead Contaminated
Materials

The Citadel
Inouye Hall
Marksmanship Center

October 2007

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A. Introduction

This document describes procedures to be employed in cleaning the Firing Range (Range or the facility) facility at The Citadel. Testing has indicated that the settled dust can potentially contain dangerous quantities of leaded dust.

Once deposited, leaded dust is difficult to remove effectively. Whenever possible, ongoing and daily cleaning of leaded dust is recommended. Ongoing and daily cleaning is also necessary to minimize exposures.

Cleaning is the process of removing visible debris and dust particles too small to be seen by the naked eye. Removal of ongoing or existing lead hazards or sources in a space will not make the space safe unless excessive levels of leaded dust are also removed. Improper cleaning can increase the cost of a project considerably because additional cleaning and clearance sampling will be necessary. Although visibly clean, a surface may contain high and unacceptable levels of dust particles and require special cleaning procedures. However, adequate cleaning and clearance can be achieved routinely if care and diligence are exercised.

B. Purpose

The purpose of this Standard Operating Procedure (SOP) is to provide a centralized, written document for guidance in the cleaning and related operations and maintenance procedures of leaded dust at The Citadel Firing Range.

C. Responsibility

The Range Master is responsible for the use and scheduling of the Firing Range. The Range Master is also responsible for overseeing the maintenance and cleaning of the Firing Range, and the safety of all occupants using the Range. The Citadel's Physical Plant will assist the Range Master in an ongoing effort to maintain adherence to all applicable health and safety codes, to operate consistent with this SOP, and to conduct or coordinate environmental and industrial hygiene assessments as necessary.

D. Applicability

This SOP is applicable to all individuals performing any type of maintenance in the Firing Range; i.e., custodial operations, cleaning the target traps, changing filters, etc. The recommended Work Practices, Section II, U.S. Department of Health, Education and Welfare, Lead Exposure and Design Consideration for Indoor Firing Ranges, December 1975, shall be adhered to by all individuals utilizing and/or maintaining the Firing Range.

E. Safety

1. All individuals utilizing the Firing Range (per approval of the Range Master) are responsible for safety and shall comply with all safety directives.

2. All maintenance and other Citadel personnel are responsible for their own safety and shall comply with all safety directives.
3. No maintenance or other Citadel personnel will go down range or forward of any firing point for any reason unless the facility is otherwise unoccupied/not in use or if directed to do so by the Range Master (or their appointed representatives).
4. All maintenance and custodial employees (or any other personnel at the direction of the Range Master) shall follow this SOP when performing maintenance and cleaning operations.
5. No dry sweeping (i.e., broom sweeping) of any surfaces allowed in the Firing Range.
6. No smoking, food or drinks will be consumed in the Firing Range.

F. Points of Contact

1. The Citadel Public Safety office: 953-5114
2. Range Master: Wm. C. Smith 607-9892 cell and 953-3129 range
3. Resident Engineer: James Grigg 953-7962
4. Infirmary: 953-6847

G. Emergency Procedures

In case an accident and/or emergency occur at the Firing Range, the following procedures will be followed:

1. Notify Public Safety (Red Phone in Range). (note: do not call 911 from cell phones when on campus).
2. In the case of an incident, include the specific nature of the accident or other emergency.

H. Cleaning Procedures

1. Equipment Needed for Cleaning- The following equipment (or equivalent—as approved by the Range Master or Physical plant) will be utilized to conduct cleaning: high-efficiency particulate air (HEPA) vacuums and attachments (crevice tools), appropriate detergent, waterproof gloves, rags, sponges, mops, buckets, 6-mil plastic bags, debris containers, waste water containers, shovels, squeegees, water-misting sprayers, and 6-mil polyethylene plastic sheeting.

2. Cleaning Procedures after Each Use- Users of the Firing Range are required to clean the area after each use. HEPA vacuums are to be used to pick up all small bore casings. Squeegees and plastic shovels are to be used to pick up all large bore casings. Individuals performing the cleaning are required to wear disposable shoe covers and gloves during the cleaning procedures and promptly wash their hands with soap and water after leaving the Firing Range. Disposable gloves (and any other used, disposable personal protective equipment [PPE]) are to be placed in the labeled lead hazard disposal container located in the Firing Range.

3. Basic Cleaning Methods: Wet Wash and Vacuum Cleaning Techniques- Because leaded dust adheres tenaciously, especially to rough or porous like weathered or worn wood surfaces and masonry surfaces (particularly concrete), workers, including designated University Physical Facilities Operations Center (PFOC) custodial personnel and others so designated (and mutually agreed upon) by the Range Master and EOHS, should be knowledgeable in cleaning methods. The typical cleaning method uses a special vacuum cleaner equipped with a HEPA filter, followed by wet washing with special cleaning agents and rinsing, followed by a final pass with the HEPA vacuum.

a. General HEPA Vacuuming Procedures- HEPA vacuums differ from conventional vacuums in that they contain high-efficiency filters that are capable of trapping extremely small particles. These filters can remove particles of 0.3 microns or greater from air with 99.97 percent efficiency or greater. Vacuuming with conventional vacuum machines is not permitted because much of the fine dust will be exhausted back into the environment where it can settle on surfaces. Considerations for the proper use of a HEPA vacuum are listed below.

i. Wet-Dry HEPA Vacuums- These vacuums are equipped with a special shut-off float switch to protect the electrical motor from water contact.

ii. Selecting an Appropriate Size Unit- HEPA vacuums are available in several sizes, ranging from a small lunch bucket-sized unit to track-mounted systems. Two criteria for size selection are the size of the job and the type of electrical power available. Manufacturer recommendations should be followed.

iii. Operating Instructions- To ensure the proper use of HEPA filtered vacuums carefully follow the manufacturer's operating instructions and, if possible, arrange training sessions with the manufacturer's representative. Although HEPA vacuums have the same suction capacity as ordinary vacuums that are comparably sized, their filters are more efficient. Improper cleaning or changing of HEPA filters may reduce the vacuum's suction capability.

iv. Special Attachments- Because the HEPA vacuum will be used to vacuum surfaces other than floors, operators should buy attachments and appropriate tool kits for use on different surfaces such as brushes of various sizes, crevice tools, and angular tools.

v. HEPA Vacuuming Procedures- Surfaces to be vacuumed during the daily cleaning activities include the floor and horizontal surfaces of the furnishings. Surfaces to be vacuumed during the quarterly cleaning activities include the ceilings, walls, floors, doors, heating/ventilation/air conditioning (HVAC) equipment (heating diffusers, radiators, pipes, vents), fixtures of any kind (light), built-in cabinets, and appliances located in the Firing Range.

vi. Emptying the HEPA Vacuum/Handling of Debris- Used filters and vacuumed debris are potentially hazardous waste and should be handled accordingly (i.e., containerized, stored/secured, transported, labeled/dated, and documented). Therefore, the HEPA filtered vacuums are to be emptied and cleaned during the quarterly cleaning activities.

b. The HEPA/Wet Wash/HEPA Cycle Typical Procedures: Daily, Weekly, and Quarterly Cleaning- The usual cleaning cycle that follows lead hazard control activities is called the HEPA Vacuum/Wet Wash/HEPA Cycle. This is applied to an entire affected area, as follows:

i. Cleaning After Each Use- The Firing Range will be cleaned after each use, as follows:

(a) HEPA vacuums will be used to pick up small bore casings.

(b) Squeegees and plastic shovels will be used to pick up large bore casings.

(c) Disposable gloves will be worn during this procedure.

ii. Weekly Cleaning

(a) Should be conducted by HEPA vacuuming the floors and horizontal surfaces of the furnishings starting at the door and proceeding to the backstop.

(b) Once the surfaces have been HEPA vacuumed, the same surfaces should be wet cleaned with an appropriate detergent and water.

(c) The wet cleaning process should commence at the backstop and proceed to the door.

(d) All cleaned surfaces should be allowed to air dry, completely, prior to any other activity in the Firing Range.

iii. Quarterly Cleaning

(a) Consistent with the daily cleaning procedures, all surfaces should be HEPA vacuumed, wet cleaned with an appropriate detergent and water, and allowed to air dry completely.

(b) Should be begin at the ceiling and work towards the floor, in the direction from the door to backstop.

I. Painting and Sealing of the Floor and Other Surfaces

1. Sealing the Floor- Lead surveys indicate that periodically painted and sealed floors are easier cleaned, are cleaned more effectively, and are more efficiently and effectively maintained over time than those that are not properly finished and sealed. A freshly finished floor should be cleaned with a cleaning solution that is appropriate for that type of surface.

2. Painting and Sealing of Other Surfaces- Surfaces, including walls, ceilings, and woodwork, should be coated with an appropriate primer and repainted. Also, surfaces may be enclosed/covered with vinyl, aluminum coil stock, and other and, therefore, do not have to be painted or sealed. Finally, if the walls are lined with acoustic material to control noise, coating of walls may not be appropriate.

J. Health and Safety and Decontamination Procedures

1. Required Health and Safety Procedures-

a. Lead Awareness Training- The Citadel (Range Master, or Physical Plant personnel—previously trained in regard to lead awareness requirements will provide operations and maintenance (O&M) personnel with awareness-level worker lead safety training. This training, consistent with Occupational Safety and Health Administration Lead Standard (OSHA 1910.1025-Appendix B—see Attachment 1), will include discussion of the following:

- i. Health effects of lead.
- ii. Exposure monitoring.
- iii. Engineering and work practice controls.
- iv. Respiratory protection.
- v. Protective equipment.

- vi. Safe work practices.
- vii. Medical monitoring and medical evaluation.
- viii. Periodic examination and/or biological monitoring.
- ix. Medical removal (from the job assignment).

b. Air Monitoring- Various industrial hygiene studies indicate that during daily cleaning activities, i.e., potentially while performing dry cleaning activities, workers may be exposed to high levels of airborne dust.

i. Upon implementation of this SOP, an initial air monitoring event will be performed, conducted by a qualified outside industrial hygienist or environmental consultant, to establish baseline conditions. These results will determine what kind of protective clothing, equipment and respirators are appropriate if required based on OSHA Lead Standard (see Attachment 1).

ii. Air monitoring will also be completed annually (after every fourth quarterly cleaning event).

iii. In addition, if there are changes in facility conditions (e.g., HVAC equipment or ductwork), operations (including changes in weapons or ammunition), or users (i.e., new law enforcement, athletic, or academic departments or teams [note: not individuals]), EOHS, in coordination with the Range Master, may require additional monitoring.

iv. Finally, if there is any evidence of lead exposure or suspected lead exposure (via biological or environmental monitoring) or if the OSHA Action Level (AL) and/or Permissible Exposure Limit (PEL) (see below and Attachment 1) has been exceeded, additional and more frequent air monitoring, in accordance with the OSHA Lead Standard, will be required.

c. OSHA's Lead Permissible Exposure Limit and Action Level- If, based on air monitoring, cleaning or O&M workers are exposed to lead concentrations above the OSHA AL (30 micrograms per cubic meter of air [30 ug/m³]) or PEL (50 ug/m³), The University will provide participants, with additional training (as needed), PPE consistent with OSHA's Lead Standard and/or directed by EOHS (including gloves, protective clothing, and respirators [i.e., only for medically qualified, professionally fitted, and properly trained personnel—see section **g.** below]) and medical surveillance, as appropriate, for the hazard.

d. PPE- If protective clothing is provided, it must be provided in a clean and dry condition at least weekly (or daily if airborne exposure to lead is greater than 200 ug/m³). Appropriate protective clothing and equipment can include coveralls or similar full-body clothing (or appropriate disposable, protective clothing [Tyvek or equivalent], gloves, hats, shoes or disposable shoe coverlets, and respiratory protection. If participants are exposed to lead below that of the PEL, the minimum PPE will be disposable gloves and shoe coverlets.

i. Responsibility for PPE- The Range Master, in consultation with EOHS, will provide or to coordinate provision of all PPE at no cost to participants. Furthermore, the Range Master is responsible for facility repairs and providing replacement, as necessary, or for the cleaning, laundering, or disposal of all PPE.

ii. Disposal of PPE- All PPE is to be removed prior to exiting the Firing Range. All disposable PPE is to be placed in an appropriate, labeled disposal container located in the Range.

iii. Respirators- The Citadel will provide and require the use of respirators when exposure to lead is not controlled below the PEL by other means (including administrative and engineering controls). The Citadel will be responsible for training, fit testing, and auditing the use of respirators in accordance with the Citadel Respiratory Protection Program. Upon request, The University will provide respirators to individuals requesting them even if lead concentrations in air do not exceed the PEL. While respirators are the least satisfactory means of controlling exposure, with proper medical clearance and training, they are capable of providing the necessary protection if properly chosen, fitted, worn, cleaned, maintained, and replaced at appropriate intervals or as otherwise needed based on the current conditions or circumstances related to their use.

2. Decontamination of Workers, Supplies, and Equipment- Decontamination is necessary to ensure that lead contamination is not removed from the Firing Range. Specific procedures for proper decontamination of equipment, tools, and prior to their removal from lead hazard control containment areas should be implemented.

a. All individuals exiting the Firing Range should step onto the tack mat with both feet prior to leaving the area.

b. Upon exiting the Firing Range all individuals should promptly and thoroughly wash their hands with soap and water.

c. All disposable PPE should be removed and place in the labeled disposal container prior to exiting the area.

d. All vacuums and tools that were used should be wiped down using sponges or rags and detergent solutions prior to removing them from the area.

e. All cleaning should be labeled and used exclusively for the cleaning of the Firing Range.

K. Cleaning Schedule and Summary of Related Health and Safety Considerations

1. Cleaning Schedule-

a. Cleaning After Each Use- The Firing Range will be cleaned after each use, as follows:

- i. HEPA vacuums will be used to pick up small bore casings.
- ii. Squeegees and plastic shovels will be used to pick up large bore casings.
- iii. Disposable gloves will be worn during this procedure.

b. Routine Wet Mopping-

- i. Range floors will be mopped three times per week (optimally, Monday, Wednesday, and Friday); for non-routine circumstances (e.g., scheduling conflicts, holidays, etc.), the Range Master (or designee) may approve for the facility to be mopped less than three times in one week.
- ii The Range Master will be responsible for maintaining the schedule and any related coordination with crews for the routine mopping.
- iii Individuals performing the cleaning are required to wear a minimum of disposable gloves and rubber boots or overshoes.

c. Weekly Cleaning- Cleaning will be conducted, as follows:

- i. Floors and horizontal surfaces of furnishings will be cleaned weekly.
- ii. The Range Master will be responsible for scheduling the weekly cleaning.
- iii. Surfaces will be cleaned using the HEPA vacuum/wet clean method.
- iv. Individuals performing the cleaning are required to wear a minimum of disposable gloves and shoe coverlets (note: although not required, approved HEPA respirators are recommended).

d. Bi-Monthly Replacement of HEPA Filters- HEPA vacuum filters will be replaced every two months, as follows:

- i. Filters will be changed every other month (i.e., six times per year) by the Range Master or Physical Plant.
- ii. Personnel changing the filters will be required to wear proper PPE, including a NIOSH-approved HEPA respirator when changing filters.
- iii. Contaminated filters will be bagged, secured, stored, and transported (by EOHS) for proper disposal.
- iv. New filters will be put in place.
- v. Outer garment and gloves disposed by placing in a proper, labeled, dedicated disposal container located in the Firing Range.

e. Quarterly Cleaning- Firing Range cleaning will be conducted each quarter, as follows:

i. Interior Surfaces

- (a) All interior surfaces in the located in the Firing Range will be cleaned each quarter.
- (b) Employees will be required to wear disposable outer garments and a NIOSH-approved respirator when cleaning.
- (c) Throw-away outer garments will be disposed by placing in a plastic bag and transporting for proper disposal.
- (d) Cleaning will be conducted using the HEPA vacuum/wet clean method.

ii. Target Track Cleaning

- (a) Target tracks shall be cleaned quarterly.
- (b) Employees shall be required to wear disposable outer garments, gloves, and a NIOSH-approved respirator when cleaning the target tracks.
- (c) Cleaning shall be conducted using the HEPA vacuum/wet clean method.
- (d) The HEPA vacuum shall be used to clean the floor once the target tracks are cleaned.

(e) Throw-away outer garments will be disposed by placing in a plastic bag and transporting for proper disposal.

(f) Employees must shower after performing this operation. The head should be thoroughly lathered to remove any lead dust.

iii. Firing Range Floor Re-waxing

(a) The Firing Range floors will be stripped and re-waxed once each quarter if applicable.

(b) Care must be exercised to minimize dust.

2. Summary of Related Health and Safety Considerations

a. Upon implementation of this SOP, an initial/baseline sampling event, including ambient air monitoring and wipe sample collection on representative horizontal and vertical surfaces will be completed in the Range. This will be coordinated by Physical Plant and performed by a qualified, outside industrial hygiene or environmental consulting firm.

b. Subsequent to the sampling event described in section a. above, Physical Plant will coordinate and schedule a survey under actual firing conditions for time-weighted average samples to determine airborne lead exposure during Range operations.

c. Physical Plant will also coordinate/supervise all related activities, in coordination with Range Master, and, in consultation with the outside hygienist or environmental scientist, as needed, review the resulting data, findings, conclusions, and recommendations. Consequently, if necessary, based on these findings and in coordination with the Range Master and Physical Plant will coordinate changes in cleaning and related procedures and amend the SOP accordingly.

d. Physical Plant, in consultation with the Range Master will coordinate blood lead testing for its employees whose job duties include regular maintenance and/or cleaning of the Firing Range. A baseline blood level will be determined for each Physical Plant employee who works in the Range prior to their initial work assignment at the facility. In accordance with the OSHA lead standard, this testing will occur every six (6) months.

e. Due to the potential of for exposure to lead and for the purposes of proper air monitoring and blood lead testing, it is imperative that any department of the Citadel or any others (i.e., Range users) performing cleaning and/or maintenance

in the facility coordinate all such activities with the Physical Plant and the Range Master.

f. If unusual firing conditions exist over and above normal operations (e.g., frequency of use, number of users, ammunition type/caliber), additional testing may be required. Physical plant and the Range Master must be informed of such conditions/operations by the facility users. Unusual range conditions/operations such as these may alter the scheduled cleaning/maintenance and industrial hygiene/environmental testing of the range.

L. Post-Cleaning Inspection and Clearance

The final clearance evaluation should take place at least one (1) hour after the quarterly cleaning event.

1. Inspection and Clearance- This has three purposes:

a. To ensure that the lead hazard control work is complete.

b. To detect the presence of leaded dust.

c. To make sure that all surfaces have been adequately cleaned.

2. Clearance Standard- The regulatory standard is less than 200 micrograms per square foot ($\mu\text{g}/\text{ft}^2$) lead on interior surfaces. These levels are based on wipe sampling. Clearance testing determines whether the premises or areas are clean enough to be reoccupied as a non-lead work area after the completion of a lead hazard control project. A cleaned area should not be reoccupied until compliance with clearance standards has been established. To prevent delays, final cleaning and final testing activities should be coordinated. Physical plant and the Range Master will work together to coordinate on these activities.

M. Periodic Range Backstop O&M Activities

Periodically, as needed, all the shredded rubber in the bullet trap shall be removed and replaced. This will be accomplished on a contractual basis with a properly trained, licensed, and insured hazardous waste company and in compliance with all elements of the U.S. EPA's Resource Conservation and Recovery Act (RCRA), and in accordance with OSHA regulations and consistent with the health and safety provisions of this SOP. These activities, coordinated by the Range Master and in consultation with Physical Plant, may also include personnel who have been properly trained (and biologically monitored) or other equally qualified individuals approved by Resident Engineer.

N. Disposal of Lead-Contaminated Waste

State and federal environmental and health/safety regulations, including RCRA and OSHA, exist that govern the handling, storage, transportation, and disposal of non-hazardous and hazardous

lead-contaminated materials. These regulations and resulting compliance requirements affect both the daily and final cleaning procedures.

O. SOP Audit and Revisions

This Standard Operating Procedure will be audited annually. However, if for any reason any of the following occurs at the Range:

1. The contact information, emergency numbers, or personnel change; or,
2. Facility conditions, operations, or users change (i.e., substantively effecting environmental, health, and/or safety conditions at the facility); or,
3. Monitoring data indicate a change or a possible environmental or health concern; then,

This document will be updated or otherwise amended by Physical Plant as appropriate and as soon as practicable (in coordination, as necessary, with the Range Master and Resident Engineer).

Facility Maintenance Plan

Purpose:

1. To keep the building functioning as intended while providing a safe and healthy environment.
2. To maintain building systems and equipment & protect the facility assets by prolonging the life of systems, equipment and the building.
3. To maximize efficient operation and keep expenses in check while minimizing the building's environmental impact.

Facility Maintenance Plan for:

The Inouye Hall Marksmanship Center

WEEKLY MAINTENANCE

Action	Individual and/or Dept. Responsible	Cost	Estimated Time (Hours:Minutes) to complete
Check/replace light bulbs in range area	Coach		10 Min.
Service Sticky pad sheets	Coach		10 Min.
Service Rest Rooms and clean Hall	Janitorial Service		2 Hours twice a week
Empty office and Hall trash cans	Janitorial Service		20 Min. twice a week
Clean up range area, wipe surfaces, and mop	Coach		1 to 2 Hours twice a week
Hepa Vac range and mop floors *	Coach		2 to 3 hours two to three times a week
Service target heads and paper rolls *	Coach		2 Hours
Empty Lead from pellet traps *	Coach		1 Hour
Clean glass areas of range	Coach		1 Hour

Facility Maintenance Plan for:

The Inouye Hall Marksmanship Center

MONTHLY MAINTENANCE

Action	Individual and/or Dept. Responsible	Cost	Estimated Time (Hours:Minutes) to complete
Buff hall, up range, and office floors	Janitorial Service and Coach		2 Hours twice a month
Wipe surface areas down range *	Coach		2 to 3 Hours twice a month
Inspect baffles for lead dust	Coach		1 Hour twice a month
Clean and inspect Firearms	Coach		3 to 5 hours at least once a month or as needed
Check Firearms Inventory by serial #	Coach		2 to 3 Hours twice a month
Check Ammunition Inventory	Coach		1 Hour twice a month
Check software for upgrades in systems	Coach		10 Min. unless upgrading range systems
Test up range areas for lead	Coach		1 to 2 Hours

Facility Maintenance Plan for:

The Inouye Hall Marksmanship Center

ANNUAL MAINTENANCE

Action	Individual and/or Department Responsible	Cost	Estimated Time (Hrs:Min) To Complete Action	Month job should be performed
Replace first stage air filters	Physical Plant		2 to 4 hours	every other month
Service Air Handler units	Physical Plant		unknown	As needed
Replace range master HEPA filter	Physical Plant		unknown	As needed **
Wipe and clean back stop surface*	Coach		5 to 8 hours	2 times a year
Clean lead dust from range baffles*	Coach		5 to 8 hours	2 to 3 times a year
Remove lead from Back stop*	Coach		60 to 80 Hours	Annual
Repair and replace face rubber on backstop*	Coach		4 to 6 Hours	1 to 2 times a year
Clean and prep floor surface in range*	Coach		4 to 8 hours	Annual
Resurface floor paint down range*	Coach		40 hours	Annual
Replace sticky pads	Coach		na	as needed