



March 19, 2019

Mr. Tom Rowe
Fresno Police Department
6375 W. Central Avenue
Fresno CA 93706

tom.rowe@fresno.gov

**RE: PROPOSAL FOR FIRING RANGE LEAD RECLAMATION AND RANGE MAINTENANCE
CITY OF FRESNO REGIONAL PUBLIC TRAINING FACILITY RANGES**

Dear Mr. Rowe:

Metals Treatment Technologies, LLC (MT2) is pleased to present this proposal for Firing Range Lead Reclamation and Range Maintenance at the City Fresno's Regional Public Training Facility (RPTF) ranges located at 6375 West Central Avenue in Fresno, California. This proposal updates MT2's previously submitted Budgetary Pricing submitted May 27, 2015 based on recent site visit to the RPTF in October 2018.

MT2's project objectives are to provide the Academy with firing range lead maintenance and reclamation services that will support mitigating potential physical, occupational, and environmental hazards associated with high concentrations of lead in the backstop berms at the range. MT2 will accomplish the required tasks in compliance with OSHA, USEPA, State, and NRA recommended environmental Best Management Practices.

VALUE ADDED

By selecting MT2, you will receive added benefits, such as:

- MT2 provides the most comprehensive liability protection for range owners in the industry
- Expertise of the Nation's #1 Firing Range Services Provider to save you time and money
- Specialized equipment & experience that maximizes lead recovery value to you and the project
- MT2's guarantee of meeting Project Specifications such as removing 85-90% of the existing lead

MT2 has demonstrated unmatched credentials and capabilities in performing firing range services including lead separation/recycling, range improvements and range reconstruction services and will provide the Academy additional value as a contractor for the following reasons:

- ✓ **MT2's Liability Defender Compliance & Performance Promise:** Your choice of a lead reclamation contractor could expose your range to EPA hazardous waste fines up to \$10,000 per day and potential criminal charges. A range owner ALWAYS retains responsibility for ALL lead waste and materials derived from their range even if their chosen contractor is chosen entity that improperly handles, improperly transports, or improperly disposes of the lead waste.

MT2 has never received an EPA violation, penalty or fine, and we have never left a project uncompleted. ***Our promise to you:*** MT2 is committed to stand with you and defend your firing range from the liability of lead hazards. We maintain \$10,000,000 environmental and pollution liability coverage to protect range owners from claims or occurrences of lead hazard violations, penalties and cleanup expenses.

- ✓ **Staff Experience and Expertise:** Our personnel have on average 24 years overall environmental experience including performing lead removal and range improvements at over **2,000 ranges nationwide and in California**. This expertise saves time and money for our customers since there will be no learning curve that may be incurred by less experienced firms. MT2 field staff maintain OSHA HAZWOPER certifications including 10-hr, 30-hr, and 40-hr as applicable.



✓ **Lead Removal and Recycling Expertise:** MT2 has performed lead removal and recycling at over 800 law enforcement and other ranges nationwide using a variety of *proprietary lead separation technologies to remove and recycle over 15,000,000 pounds of lead*. We will utilize one of our proprietary lead separation systems. Each system is comprised of one of our CA Air Resources Board registered proprietary screening plants with Tier 4 Final diesel engines to separate lead from soils based on size and one of our proprietary pneumatic separation units (PSUs) to “finish” the separation process and separate lead from like-size materials based on density. In addition, MT2 maintains contracts with lead recyclers nationwide to ensure top dollar is returned for recycled lead.

✓ **Experienced, Professional Contractor:** *MT2 is the nation's recognized leading provider of firing range lead removal, remediation and maintenance services*. We maintain offices and crews nationwide, and with experienced crews ready to respond to fulfill the needs and schedule for your range improvement project.

✓ **MT2 Possesses more Firing Range Environmental Experience than any other Firm:** *including over 200 law enforcement ranges and the nation's largest police range* – NYPD Training range at Rodman's Neck, Bronx, New York. MT2 has completed projects at dozens of ranges for State Departments of Corrections in New York, Colorado, Florida, Ohio, and Arizona. In California, some of our recent Law Enforcement/Club Range Projects include: The San Diego County Sheriff's Office in Otay Mesa and Miramar, Alameda County Sheriff's Office, Santa Clara County Parks and Recreation Department's Sports Shooting Park, San Bernardino Sheriff's Office, San Mateo County Sheriff's Office, Concord Police Association, Stockton Police Department, and others.

No Other Firm Matches Our Experience!

- Over 2,000 firing range projects nationwide
- Recovery of over 15,000,000 lbs of lead
- Successful treatment of over 10,000,000 tons of lead impacted soils
- Largest fleet of specialized equipment available
- Credited over \$5,000,000 to range owners from lead recycling

MT2 offers a **Guaranteed Solution** at a **Guaranteed Price** leading to expedited and cost-effective range maintenance. Our two-fold approach to limiting project risk includes our MT2 personnel who are highly credentialed and experienced; secondly, **MT2 is backed by \$10 MM in General and Pollution Liability Insurance** to provide customers, site owners, and others the best available “peace of mind” in dealing with environmental liabilities of remediation. Upon award, MT2 will provide a certificate of insurance meeting all project requirements.

As the Nation's leading provider of Environmental Range Services, MT2 is available and can be contracted under our GSA Schedule Federal Service Schedule 00CORP Professional Services SIN 899-8 Remediation and Reclamation Services Contract Number 47QRAA18D00CS. Alternatively, MT2 has been regularly **sole sourced** based on our extensive experience, unique, and proprietary lead separation technology. MT2 can provide example language, which has been successfully utilized by other agencies, to contract MT2's services sole source in order to expedite remediation activities. Please contact me at (888) 435-6645 or E-mail: jbarthel@mt2.com to discuss this information and your project in further detail.

Sincerely Yours,

James M Barthel
President & CEO



Proposal

FIRING RANGE LEAD RECLAMATION Regional Public Training Facility Ranges

Prepared for:

**City of Fresno Police Department
6375 West Central Avenue
Fresno, California 93706**

Prepared by:

**Metals Treatment Technologies, LLC
14045 W 66th Ave; Arvada, CO 80004
www.mt2.com 888-435-6645**

March 19, 2019

Note: MT2 is submitting this proposal for lead reclamation at the request of the Customer. Proposed lead reclamation is performed in accordance with Firing Range Best Management Practices as documented in "Best Management Practices for Lead at Outdoor Shooting Ranges" (US EPA, 2005). MT2 recommends consultation with cognizant legal counsel if needed to best understand potential legal liabilities associated with current and potentially changing rules and regulations

MT2, LLC (MT2) has prepared this Proposal to address the specific requirements of the project referenced within this Proposal and contains proprietary and confidential information. This Proposal is the sole property of MT2 and must be returned upon demand. By accepting this Proposal, the recipient agrees to keep confidential the information and concepts contained herein or made in connection with any further investigation of the Company. Any disclosure, copying, distribution or use of the contents of this Proposal for other than the above stated purpose is prohibited. By accepting this Proposal, the recipient agrees not to disclose copy, distribute or use this information for other than its intended purpose, as stated above, in whole or in part without the prior written consent of MT2.

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1.0 FIRING RANGE LEAD MAINTENANCE

MT2's proposes to provide firing range lead maintenance services at the City of Fresno Regional Public Training Facility (RPTF) ranges located at 6375 West Central Avenue in Fresno California. All work will be performed in accordance with applicable Federal, State, and local safety and environmental regulations including US Department of Labor regulations as well as achieving compliance with OSHA, US EPA, State, and NRA recommended firing range environmental Best Management Practices (BMPs).

1.1 PROJECT DESCRIPTION

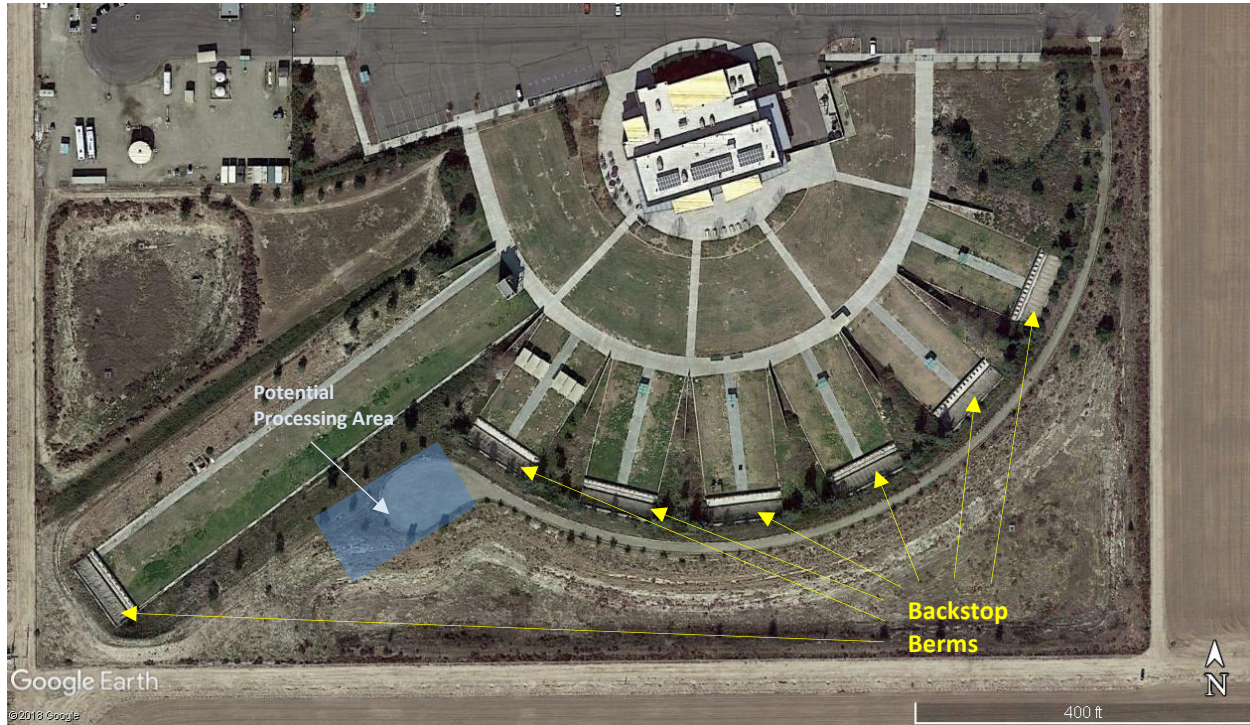
Range usage records indicate that the lead at the RPTF ranges has not been reclaimed since its construction around 2010. Based on typical usage at similar ranges as well as MT2's review of information and pictures provided by the range as well as evaluation of Google Earth images of the site, it is reasonable to expect 25-50 tons of lead (or more) may be recovered and recycled from the 7 backstop berms at this facility. MT2 has estimated soil quantities for processing pending final specifications. MT2 will excavate and process soil from the backstop berms until lead reclamation becomes economically infeasible and/or 80-90% of lead bullets and bullet fragments (measured as weight percent) are removed.

Estimated Project Quantities

Range/Berm	Berm Face Height (ft)	Berm Width (linear ft)	Est. Ave Cut Depth (avg. ft bgs)	Est. Soil Volume (CY)
Range 1 Backstop Berm	20	90	2	133
Range 2 Backstop Berm	20	90	2	133
Range 3 Backstop Berm	20	90	2	133
Range 4 Backstop Berm	20	90	2	133
Range 5 Backstop Berm	20	90	2	133
Range 6 Backstop Berm	20	90	2	133
Range 7 Backstop berm	20	90	2	133
Total Estimated				931

All ranges are of similar construction. Concrete containment with sand emplaced to unknow depth.

The following site map illustrates the features of the RPTF and ranges.



2.0 TECHNICAL APPROACH

		
Berm Excavation	Lead Removal & Recycling	Berm Reconstruction

This technical approach for firing range lead maintenance includes:

- **Berm Excavation:** Excavate soil/sand from the operating backstop berms
- **Lead Reclamation:** Remove (via screening) of the lead bullet fragments from the backstop berm
- **Lead Recycling:** Recycle recovered lead providing Customer a 50% split of the value of the recycled lead
- **Berm Reconstruction:** Re-install processed soils/sand back onto the firing range berms

MT2 can provide the following optional services if requested; Section 3.0 provides pricing:

- **Optional:** Complete an environmental review of the range and prepare a range-specific Environmental Stewardship Plan (ESP) to support future range management and ensure compliance with USEPA BMPs.

FIRING RANGE LEAD MAINTENANCE TASKS WILL INCLUDE THE FOLLOWING: (marked ☒ if applicable)

2.1 MOBILIZATION, SITE SET-UP, AND PLAN PREPARATION

Tasks to be completed by MT2					
<input checked="" type="checkbox"/>	Mobilize personnel and equipment mobilization to the project site				
<input checked="" type="checkbox"/>	Prepare the following project plans				
	<input checked="" type="checkbox"/>	Work Plan	<input checked="" type="checkbox"/>	Health & Safety Plan	<input type="checkbox"/> Waste Management Plan
	<input type="checkbox"/>	SWPPP	<input type="checkbox"/>	Erosion Control Plan	<input checked="" type="checkbox"/> Notification to County for Air Pollution Control
<input checked="" type="checkbox"/>	Complete a site walk-over with Customer representative to identify excavation/processing areas				
<input checked="" type="checkbox"/>	Establish temporary access, site access control, traffic control, and placing appropriate signage				
<input checked="" type="checkbox"/>	Set up of processing area and equipment				
Tasks to be completed by Customer					
<input checked="" type="checkbox"/>	Obtain necessary approvals/permits (with the support of MT2)				
<input checked="" type="checkbox"/>	Ensure MT2 safe access to the range site				
<input checked="" type="checkbox"/>	Complete utility locates				
<input checked="" type="checkbox"/>	Vegetation removal				
<input checked="" type="checkbox"/>	Protect or remove knee walls				
<input checked="" type="checkbox"/>	Remove target stands/systems				

2.2 EXCAVATION, SCREENING, AND RECYCLING

Tasks to be completed by MT2	
<input checked="" type="checkbox"/>	Excavate estimated depth of 1.0-3.0 feet of soil from the backstop berms or deeper if concentrations of bullets appear economically feasible to recover at deeper depths
<input checked="" type="checkbox"/>	Screen 80%-90% or more (weight percent) of the lead bullets/bullet fragments greater than 1/4"– 3/8" from the lead impacted range soils using one of our lead separation systems consisting of a CA Air Resources Board registered screening plant with Tier 4 Final diesel engines to separate lead from soils based on size and "finish" the separation process using one of our proprietary pneumatic separation units (PSU) to separate lead from like-size materials based on density.
<input checked="" type="checkbox"/>	Containerize and securely store recovered lead for shipment
<input checked="" type="checkbox"/>	Coordinate and ship recovered lead to a licensed lead recycler ^{1/}
<input checked="" type="checkbox"/>	Provide Customer with lead transport documentation and Certificate of Recycling

^{1/} MT2 will provide Customer a 50% split of the net value of the recycled lead

Note: MT2's lead reclamation process utilizes a lead separation system with a 1/4" - 3/8" minimal screen mesh size and recovers lead greater in size than the 0.004-inch California Scrap Metal Exemption so that a California Registered Hazardous Waste Transporter using a Uniform Hazardous Waste Manifest is not required for transporting metal being recycled.

2.3 RANGE RESTORATION

Tasks to be completed by MT2	
<input checked="" type="checkbox"/>	Return screened fines to berm of origin ^{1/}
<input checked="" type="checkbox"/>	Replace oversize materials to range at a mutually agreed upon location
<input checked="" type="checkbox"/>	Perform general site cleanup

1/ MT2 will utilize construction equipment to replace processed soils the backstop berms and rough grade these materials to conform to the original configuration of the range. Soil replaced to the backstop berms will be compacted using construction equipment to allow ongoing use; compaction testing will not be required or conducted.

Tasks to be completed by Customer	
<input checked="" type="checkbox"/>	Replace target stands/systems
<input checked="" type="checkbox"/>	Re-seed or re-vegetation of the site

2.4 Final Report

MT2 will develop a range maintenance report to provide the Customer with proper record keeping as recommended by the US EPA and NRA.

2.5 OPTIONAL ENVIRONMENTAL STEWARDSHIP PLAN

As an optional service, MT2 can develop an Environmental Stewardship Plan (ESP) to summarize range conditions and provide BMP recommendations pertaining to range maintenance and operations. This plan will assist the Customer in ensuring compliance with US EPA regulations, as well as shooting range BMPs over the life cycle of the range. It can be completed independently of berm maintenance services proposed above or performed in conjunction with either option.

2.6 PROJECT SCHEDULE

Estimated Schedule: approximately 4-5 days onsite to perform lead maintenance tasks as described above. Additional days maybe required should optional tasks be requested.

The project schedule depends on “dry” conditions prior to and during onsite operations. MT2 will coordinate a mutually-agreed upon schedule with the range and can mobilize within two weeks after receipt of “Notice to Proceed” issued by client. MT2 anticipates beginning this project as early as Fall of 2018, weather permitting.



3.0 FIRM FIXED PRICING FOR SERVICES

MT2 has developed the following pricing for lead maintenance services.

	Lead Firing Range Lead Maintenance Task	QTY	Unit	Price
<input checked="" type="checkbox"/>	Upfront Payment: Plans, Mobilization, Demobilization, Site Setup and Preparation	1	Lump Sum	\$4,900
<input checked="" type="checkbox"/>	Lead Maintenance: Excavation, Lead Recovery, Lead Recycling, Replacement of Screened Soil to Berms, and Berm Reconstruction	Up to 950 CY	Lump Sum	\$70,000
<input checked="" type="checkbox"/>	Estimated Lead Recycling Value to Customer	25-50 tons	\$0.60/lb	(\$15,000 - \$30,000) ^{1/}
<input type="checkbox"/>	Optional: Environmental Stewardship Plan	1	Lump Sum	\$6,500 ^{2/}

^{1/} MT2 does not guarantee the value or quantity of **recycled lead**. The actual value of recycled lead will be determined at the time of recycling. MT2 will provide Customer a 50% split of the net proceeds from lead. The Estimated Lead Recycling Credit is based on a reasonable estimate of the amount of recoverable lead and current lead recycle value per pound. The lead credit will be provided as a credit against the Final Project Invoice. Proceeds from lead reclamation and recycling may be used to compensate MT2 for Optional services requested.

^{2/} Pricing for optional tasks are valid if performed at the time of lead maintenance tasks, no field investigations are included with the ESP preparation

3.1 PRICING ASSUMPTIONS

- ☒ MT2 will coordinate a mutually-agreed upon schedule with the range and can mobilize within two weeks after receipt of "Notice to Proceed" issued by client. Project schedule depends on "dry" conditions prior to and during onsite operations. MT2 will coordinate arrival with the Customer to identify a time when dry conditions exist 1-2 weeks prior to arrival and followed by anticipated dry conditions.
- ☒ Pricing based on work days (0700-1700 M-F) onsite to excavate, screen, recycle lead, and replace soils.
- ☒ SWPPP ☐ is ☒ is not required.
- ☒ MT2 will make required notifications to the South Coast Air Quality Management District (SCAQMD). Pricing and schedule do not include additional Air Quality permitting. If additional permitting is required, MT2 can complete at additional cost (additional permitting may also impact project schedule)
- ☒ MT2 will install erosion control and storm water protection measures such as waddles and hay bales to protect work areas, drainages and the environment
- ☒ Others will remove vegetation (including burning) and remove materials such as: timbers, timber side walls, scrap piles, material piles, fencing, concrete slabs, asphalt, range equipment, and large debris from the lead-impacted soils area as needed.
- ☒ Customer will provide MT2 access to an adequate nearby water source (e.g. hydrant) and MT2 will provide associated items such as permit/meter/hose as needed. MT2 will utilize an MT2 water truck or trailer to provide dust suppression sprinkling as needed during excavation and screening operations.
- ☒ Upon arrival at the site, the Customer and MT2 will complete a site walkover and confer and agree upon the most efficient location of the staged soil piles and Processing Area.



- ☒ MT2 will use State of California Air Resource Board Portable Equipment Registration Program (PERP) registered screening plant to screen soils. MT2 will screen and process lead-containing soils in compliance with PERP operating conditions and handle soils in a manner that reasonably minimizes generation of dust. MT2 will recover and recycle range lead at a Customer-approved licensed recycler that meets State and Federal regulations.
- ☒ Pricing does not include management of live ammunition, only spent rounds. If live ammunition is discovered it will be left onsite for Customer to manage.
- ☒ Due to limited access to backstop berm soils, MT2 may request/use appropriately-sized rubber tire equipment. MT2 will exercise care when working in this area. MT2 will not be responsible for damage to the range, range equipment, or appurtenances should damage occur during processing.
- ☒ MT2 will place recovered lead into 55-gallon drums on pallets in or near the Processing Area. MT2 will load and transport drums to a recycler. A certificate of recycling will be provided to Customer upon completion of recycling.
- ☒ MT2 will work with extreme caution around existing range appurtenances. Due to potential limited access to backstop berm soils imposed by range knee walls, target systems, overhead baffles, bullet catchment systems, and sidewalls, MT2 may use appropriately-sized and/or rubber tire equipment. MT2 will not be responsible for damage to the range, range equipment, or appurtenances should damage occur during processing.
- ☒ MT2 will perform dry decontamination of equipment before demobilization.

3.2 CONTRACT ASSUMPTIONS

- ☒ **MT2 agrees to excavate and screen range soils in order to separate lead bullets for lead reclamation in accordance with USEPA Range Best Management Practices and to replace screened soil back on the range without requirements for obtaining a DTSC California permit for either the screening process or the replacement of the soil back to the range.**
- ☒ MT2 pricing includes: (none of the below)
☐ Prevailing Wage Rates ☐ Bonding ☐ Retainage ☐ Liquidated Damages
- ☒ Customer will provide upfront payment prior to MT2 mobilization.
- ☒ Customer will provide upfront payment prior to MT2 arrival at the site. The balance of payment to MT2 will be due within 30 days of Client receipt of MT2 invoice (Net 30 days). MT2 invoice will be submitted to the Customer along with the Range Maintenance Report and Lead Recycling Certificates.
- ☒ MT2 pricing is subject to MT2 review and approval of final contract terms and conditions.
- ☒ MT2 pricing valid for **90** days.
- ☒ Contractor at its sole discretion may offer Client an opportunity to renew this Agreement for an additional four (4) one (1) year term(s). Client understands and acknowledges that any future contracts or renewals are neither automatic nor implied by this Agreement. The continuing purchase by Client of the Services set forth in this Agreement is subject to Client's needs and to Client's annual appropriation of sufficient funds in Client's fiscal year in which such Services are purchased. In the event Client does not appropriate or budget sufficient funds to perform this Agreement, this Agreement shall be null and void without further action by Client.



4.0 MT2 PROJECT EXPERIENCE

MT2 brings extensive experience in firing range lead removal, contaminated soil stabilization, environmental remediation, permitting, and project management for a broad range of government, commercial, industrial, municipal and engineering clients. Our key project personnel have an average of 24 years of relevant experience. With a staff of engineers, chemists, scientists, technicians, equipment operators, supervisors, project managers and management specialists, MT2 delivers quality work completed safely, on time and within budget. MT2 personnel routinely deliver turnkey deployment, including baseline sampling and characterization, treatment optimization, field operations and management and final report preparation. MT2 has selected the following recent and relevant projects that demonstrate our firing range services capabilities.

Project	Lead Reclamation & Recycling	Soil Treatment	Range Improvement	ESP
San Diego County Sheriff's Office – Otay (CA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Santa Clara County Sports Shooting Park (CA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Alameda County Sheriff's Office (CA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Miramar Sheriff's Department (CA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Concord Police Assoc. (CA)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
San Bernardino Sheriff's Office (CA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
San Mateo County Sheriff's Office (CA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stockton Police Department (CA)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
San Diego County Sheriff's Office–Miramar (CA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NWS Seal Beach (LA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
United Sportsmen's Club (CA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Yolo Sportsmen's Club (CA)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Broomfield Police Department (CO)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Colorado DOC (4 Ranges)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ohio DOC (4 Range Facility)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Florida DOC (12 Ranges)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Buckeye Hills Shooting Park (AZ)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cherry Creek Gun Club (CO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Clark County Shooting Complex (NV)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dallas PD (TX)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
El Paso County Sheriff's Office (CO)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Frontier Sportsmen's Club (CO)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Highlands Range PD (CO)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Markham Park Target Range (FL)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mississippi ELOTA (MS)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pennsylvania Game Commission 47 ranges	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Phoenix Police Department (AZ)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Seattle Police Department (WA)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Southern Arizona LETA (AZ)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



NYPD Rodman's Neck Firing Range Lead Maintenance and Range Maintenance

Client: NYCDEP
Location: Bronx, NY
Date: 2006 - ongoing
Value: \$4,365,000



KEY DATA

- **Problem:** Lead contaminated soil including bullet fragments at the site were above RCRA TCLP concentrations and would require expensive disposal to maintain the firing range
- **Remedy and Result:** MT2 conducted excavation, physical screening of bullet fragments, ECOBOND® treatment, recycling of lead fragments and re-use of soil on-site

ADVANTAGES

- MT2 technical services and ECOBOND® technologies provided a savings of over \$500,000 as compared to alternative methods
- MT2's proprietary lead recovery systems provided maximum lead recovery ; MT2's contracts with recycling companies provided maximum lead value
- MT2's patented ECOBOND® lead contaminated soil treatment technology allowed for beneficial onsite soil reuse
- MT2 met US EPA Best Management Practices for outdoor shooting ranges

MT2 Project Services:

- ☒ Firing Range Lead Maintenance
- ☒ Firing Range Lead Recovery/Recycling
- ☒ Lead Contaminated Soil Treatment

Project Summary:

The City of New York contracted MT2 to implement a multi-year Operations and Maintenance Plan at the New York Police Department (NYPD) outdoor firing range located at Rodman's Neck in the Bronx. The range consists of one continuous two-tiered earthen berm, which is approximately 1,200' x 40'. The berm is separated into six ranges by a series of "fingers" approximately 20 feet high. Over 40,000 officers and recruits train at this range annually. MT2 performed on-site services demonstrating the ability to perform lead recovery and ECOBOND® technology treatment

MT2 Project Tasks:

- ☒ Screened berm materials through a multi-tiered screening device to separate debris, gravel rock and bullet fragments
- ☒ Performed lead treatment utilizing ECOBOND® treatment to TCLP, MEP, SPLP, and pH treatment criteria
- ☒ Recovered lead bullet fragments for recycling
- ☒ Reconstructed firing range for re-use by NYPD
- ☒ Annual and bi-annual soil and groundwater sampling to ensure compliance with Best Management Practices



of lead contaminated soil to background levels to enable re-use of soil on-site; thus providing substantial cost savings.

- ☒ Expediting schedule to meet City's firearms training program

Regulatory

- ☒ NYCDEP
- ☒ US EPA Best Management Practices
- ☒ OSHA

Following the onsite demonstration, MT2 implemented a maintenance program that includes recovery of lead bullets and bullet fragments from impact areas; sampling, analysis and monitoring soil and groundwater conditions; recycling recovered lead; and chemically converting potential leachable lead fines remaining in the soils utilizing MT2's patented ECOBOND® technologies such that the resulting soils are considered non-hazardous and can be replaced back onto berms. **To date, MT2 has recovered approximately 500,000 pounds of lead.**

"MT2's record of performance has demonstrated their expertise implementing environmental services at the NYPD firing range at Rodman's Neck under the current contract to provide environmental monitoring, soil sampling, lead particle groundwater monitoring and environmental remediation of metals contamination in soils and sediments. MT2 has successfully implemented this program and has met and exceeded all project requirements."

Maurice Winter, Project Manager
NYCDEP



Marine Corps Air Station Miramar A-Range Duffy Town Lead Removal and Berm Restoration

Client: MCAS Miramar/Tetra Tech
Location: MCAS Miramar, CA



MT2 Project Services:

- ☒ Assessment & Characterization
- ☒ Firing Range Lead Maintenance
- ☒ Firing Range Lead Recovery/Recycling

Project Summary:

MT2 was contracted to provide outdoor firing range lead maintenance activities for the MCAS A Duffy Town Training Range including cost-effective lead reclamation, recycling, and berm restoration. The agency required maintenance to remove bullet and bullet fragments in order to improve shooter safety and environmental conditions at the range. The MCAS A Duffy Town Range consists of four priority rifle/pistol ranges. MT2 performed a pilot test of the screening process to assess and optimize separation to meet project criteria. Successful performance was confirmed to allow full-scale operations. The project objective was to provide necessary and appropriate maintenance activities for the range following US EPA Best Management Practices for Firing Ranges, to minimize cleanup costs and address future potential liabilities that could negatively impact future use plans for the range. MT2 performed project tasks in compliance with strict State of California and San Diego County air quality requirements, as well as applicable US DOD, US EPA and OSHA regulations.

KEY DATA

- **Problem:** Provide cost-effective lead removal and contaminated soil remediation while minimizing cleanup costs and addressing future potential liabilities
- **Remedy:** Implement MT2's proprietary lead removal processes to achieve 85-95% lead removal and stabilize the contaminated soil to below RCRA standards using ECOBOND®

ADVANTAGES

- MT2 proprietary lead separation equipment and processes provided cost-effective lead reclamation and recycling.
- MT2 recovered ~180,000 lbs of lead; the lead recycling value was greater than the cost of MT2 services

MT2 Project Tasks:

- ☒ Range assessment and specification evaluation
- ☒ Excavation of ~700 CY of lead-impacted berm soils
- ☒ Processing soil to cost-effectively remove 85%-95% of lead bullets/bullet fragments and separate oversize materials to improve shooter safety
- ☒ Recovery and recycling of ~**180,000 lbs** of lead bullets/bullet fragments; **lead recycling value was greater than the cost of MT2 services**
- ☒ Returned processed fines to berm face to restore the berm to its approximate pre-lead removal configuration

Regulatory:

- ☒ US DOD
- ☒ San Diego County Air Quality Control District
- ☒ State of CA Air Resource Board
- ☒ US EPA Best Management Practices
- ☒ OSHA



Alameda County Sheriff's Office Firing Range Lead Reclamation and Maintenance

Client: Alameda County Sheriff's Office
Location: Dublin, CA
Date: 7/17 – 7/17



MT2 Project Services:

- ☒ Firing Range Lead Maintenance
- ☒ Firing Range Lead Recovery/Recycling
- ☒ Lead Contaminated Soil Treatment

Project Summary:

MT2 was contracted to provide cost-effective firing range lead maintenance at the Alameda County Sheriff's Office ranges located in Dublin, CA. MT2's technical approach included the following tasks 1) Plan preparation, mobilization, and site set up and preparation; 2) Excavation of an estimated lead-impacted soils; 3) Physical separation of lead bullet fragments from excavated range soils while employing measures to meet fugitive dust control requirements; 4) loading, transporting, and recycling of 104,336 lbs of recovered lead; and 4) Replacement of screened fines to the range berms.

KEY DATA

- Problem: Alameda County required firing range lead reclamation and range maintenance at multiple facilities in order to meet EPA/NRA BMPs

ADVANTAGES

- MT2's proprietary lead recovery systems provided maximum lead recovery
- MT2's contracts with recycling companies provided maximum lead value
- MT2 met US EPA Best Management Practices for outdoor shooting ranges

MT2 Project Tasks:

- ☒ Removed lead fragments and hazardous material from soil via screening of berm materials to separate debris, gravel rock and bullet fragments
- ☒ Recycled recovered lead bullet fragments
- ☒ Restored treated soils to reconstruct firing range for re-use

Regulatory:

- ☒ States of California
- ☒ US EPA Best Management Practices
- ☒ OSHA