

REGIONAL SANITATION DISTRICT SIM's RANCH STABILIZATION PROJECT

CLEANING AND DISINFECTING BIRD DROPPINGS

REQUIREMENTS

PART 1 -- GENERAL

1.1 DESCRIPTION OF WORK:

The Contractor shall furnish all labor, materials, facilities, equipment, services, employee training and agreements, and waste transport and disposal necessary to perform the work required for removal of bird droppings on House 2 in accordance with these specifications, The Contractor shall perform the safe removal, decontamination and legal disposal of Bird droppings.

The sections of the house with clean-up of bird droppings and possible carcasses shall be removed utilizing PPE safety for the contractor's employees during abatement. Since bird droppings are assumed to be a potential hazardous material, the project requires a contractor who is trained and experienced in handling bird/rodent feces related abatement.

- A. The Contractor shall perform the following work for the Regional Sanitation District Sim's Ranch Stabilization Project, in Elk Grove, CA.
 - 1. Clean, remove and dispose of all contaminated bird droppings on roofing surfaces, lower ground surfaces around the perimeter of House 2 and any other surface associated with the buildings.
 - 2. Clean all exposed surfaces in the roofing system and lower areas of any visible bird droppings before, during and after repair to the roofing and building by HEPA vacuuming and wet wiping methods to ensure all existing and on-going bird droppings are removed.
 - 3. For disposal of bird droppings all waste must be double bagged inside the work area and removed from the work area. Waste bags of bird droppings shall be disposed of as a hazardous infectious waste.

4. All disposable respirator cartridges, tyvek suits, and other items used during abatement activities that cannot be properly decontaminated must be double bagged and disposed of as hazardous infectious containing waste.
 5. Obtain final visual inspection from the resident hygienist. Final visual inspection shall be performed by Sacramento County.
- B. The abatement contractor shall perform the outlined work under the following considerations:
1. Any activities removing bird waste materials shall be performed using HEPA-filtered vacuum equipment. The contractor's workers performing removal of bird waste must be trained in accordance with the CAL/OSHA Hazard Communication Standard.
 2. Workers will be required to wear at a minimum, full face mask air purifying respirators with Ammonia/Methylamine and P100/HEPA filter cartridges, gloves, and blue full body disposable or cloth coveralls.
 3. Work on premises shall be confined to areas designated by the County of Sacramento. Materials and equipment shall be stored within such areas as may be designated by the Owner.
 4. All work shall be performed in adherence to all applicable local, state, and federal regulations and/or guidelines.
 5. Bidders must verify all existing conditions and confirm all quantities prior to the submission of bids.

1.3 QUALIFICATIONS:

Approval of abatement contractor's qualifications is required by Sacramento County.

A. The Contractor shall submit evidence demonstrating that the firm and all employees performing bird feces remediation activities for this **project**. OSHA does not have a standard specific to the hazard of psittacosis (disease caused from avian species droppings). Precautions to protect workers from contracting this disease through inhalation include at minimum the following:

1. CAL/OSHA Hazard Communication Standard

- a. Training on description and signs of the symptoms of psittacosis disease (bacterial), recognize psittacosis in affected avian species and good housekeeping and work practice procedures.
 - b. Instructing workers to immediately report to the employer any indication that a bird may be infected.
 - c. Instructing workers to immediately report to the employer the development of any adverse signs and symptoms consistent with psittacosis.
2. Have possession of written standard and emergency operating procedures and employee protection plans which include specific reference to OSHA medical monitoring and respirator training programs.
 3. Have evidence that the firm is currently registered by the State of California Division of Industrial Relations (DIR) as a Contractor.
 4. Have complete and accurate records of employees' medical examinations as required by 29 CFR 1926.1101 (n). Employees working on the roof must have a **TB Screening** that is no more than 14 days old. This is a required Submittal item.
 5. Have had instruction with regard to safety and health precautions, use and requirements for protective clothing and equipment including respirators.
 6. At least one trained competent person with at least one year of experience in hazardous material abatement projects shall be present within each regulated work area during work activities.

B. Cleanup projects of this nature are dangerous, requiring proper attire and safety equipment to prevent cleaning personnel from contracting life-threatening illnesses. **Table 1** depicts some of the diseases that workers can be exposed to via respiratory, ingestion and direct contact with contaminated materials and surfaces.

Table 1 – Potential Health Hazards

Disease	Pathogen	Classification	Infectious Hazard
Histoplasmosis	<i>Histoplasma capsulatum</i>	Fungal	Bird & Bat Feces
Cryptococcosis	<i>Cryptococcus neoformans</i>	Fungal	Bird Feces
Psittacosis	<i>Chlamydophila psittaci</i>	Bacterial	Bird Feces
Rabies	<i>Rabies virus</i>	Viral	Bat & Rodent Carcasses
Hantavirus pulmonary Syndrome	Hanta virus	Viral	Rodent Feces & Urine
Leptospirosis	<i>Leptospira ssp.</i>	Bacterial	Rodent Feces & Urine
Lymphocytic Choriomeningitis	<i>Lymphocytic choriomeningitis virus</i>	Viral	Rodent Feces & Urine

TRAINING

Employees should be trained and experience in hazardous/infectious material cleaning, removal and disposal procedures, as well as be physically and mentally capable of working in close quarters or confined spaces, while wearing protective clothing and equipment for extended periods of time.

RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE)

Personnel performing clean-up operations of this nature should protect themselves with the following PPE:

- Full face respirator with HEPA filter cartridge
- Tyvek suit or other protective clothing
- Rubber boots
- Rubber gloves

RECOMMENDED TOOLS

- Shovels or other scraping tools
- Tongs for picking up animal carcasses
- Misting devices, such as ULV fogger or airless sprayer
- Mops & buckets
- Trigger sprayers (for applying disinfectants)

RECOMMENDED CLEANING SUPPLIES

- Scrub brushes, sponges, pads or cloths for cleaning surfaces
- Paper towels or wipes
- Black heavy-duty leaf/trash bags
- Biohazard/Infectious materials tape

RECOMMENDED SPORICIDIN PRODUCTS

- Sporidicin® Disinfectant Solution (gallons or 22 oz. Bottle)
- Sporidicin® Disinfectant Towelettes (canister)
- Sporidicin® Antimicrobial Lotion Soap (for use as personnel hand wash)
- Sporidicin® Enzyme Mold Stain Cleaner or Enzymatic Cleaner (may be used as a cost effective cleaning detergent solution)

SITE PREPARATION & ENGINEERING CONTROLS

Proper planning and preparation is essential in order to safely and effectively remediate these type of clean-up projects.

Care must be taken to prevent contamination of clean up personnel and occupants, as well as prevent the spread of contamination inside and outside the structure during the clean-up.

Warning Signs

Highly visible warning signs should be posted at entry ways to prevent unauthorized or unprotected personnel from entering the contaminated clean-up area.

Removal of Carcasses and Nesting Materials

Pest carcasses should be removed using tongs or similar devices to minimize contamination of PPE and placed into double-bagged plastic trash bags. Vacant nests or nesting materials should be carefully removed to prevent contamination from becoming airborne and placed in double-bagged trash bags then sealed with tape. Bagged material should be clearly labeled as infectious materials and disposed of in accordance with local requirements for infectious waste.

REMOVAL OF GROSS FECAL MATTER

To suppress and prevent fungal and bacterial spores from becoming airborne during the removal of heavy contamination, the fecal matter can be lightly misted with Sporidicin® Disinfectant Solution or Sporidicin® Enzyme Mold Cleaner using ULV foggers or airless sprayers. Once contaminants are thoroughly dampened, scoop or scrape the debris up and place into double-bagged trash bags and seal with tape. Re-dampen the fecal matter as needed until all gross filth has been removed.

DISINFECTION OF EQUIPMENT, TOOLS & PERSONAL PROTECTIVE EQUIPMENT (PPE)

All tools, equipment and individual personal protective equipment used in the cleanup of contaminated areas should be cleaned and disinfected using Sporidicin® prior to removal from the contaminated area. Used respirator HEPA filters should be treated as infectious materials and disposed of accordingly (see DISPOSAL OF INFECTIOUS MATERIALS section below).

DISPOSAL OF INFECTIOUS MATERIALS

Soiled cleaning materials, such as paper towels, cloths, sponges and mop heads, should be placed in double-bagged trash bags, sealed with duct tape, labeled and disposed of as infectious materials in accordance with local requirements. Sporidicin® products can be disposed of by

pouring the liquid down the regular sewer drain and discarding the empty container in the regular trash. Follow local regulations.

1.4 SUBMITTALS

The Contractor shall provide a minimum of three (3) copies of the submittal items clearly identified as stated. Only one (1) copy will be returned to the Contractor.

A. Pre-Job Submittals. Provide the following submittals within five (5) days of the pre-construction meeting:

1. Submittal No. 1: Copy of the Contractor's formal written OSHA respirator plan, including a complete description of each respirator type, a fit testing procedure for passive air filtering type respirators. The respiratory protection program must conform to 29 CFR 1910, 134(b)(d)(e)(f). Use "A Guide to Respiratory Protection for the Asbestos Abatement Industry" NIOSH/EPA publication #5600PT586-001 dated September, 1986.
2. Submittal No. 2: A detailed listing of all materials, tools, equipment, (including MSDS) and expendable supplies that will be used during the project. For each listed item, provide (as appropriate) the manufacturer's name, catalog number or model, a description of its function and/or location of use, and actual sample, or photocopy of a manufacturer's brochure.
5. Submittal No. 5: List of all workers scheduled to be assigned to this project and their worker documentation, including but not limited to:
 - a. Proof of training for Hazardous Materials Removal;
 - b. Worker medical records as required by OSHA;
 - c. Work Respiratory Fit-Test for **all** types of respirators to be used; and
9. Submittal No. 9: Proposed waste hauler and copies of applicable licenses, including California State Department of Health Services registration number.
10. Submittal No. 10: Proposed landfill for disposal of waste materials.
12. Submittal No. 12: A copy of the Contractor's Injury Illness Prevention Plan as required by Title 8, CCR, Section 3203.

13. Submittal No. 13: A copy of the Contractor's Hazard Communication Program as required by Title 8, CCR, Section 5194.
- B. Post-job Submittals. Submit three (3) copies of the following post-job submittals to the Owner within thirty (30) days of the completion of ceiling tile abatement work.
1. Submittal No. 1: Copies of revised notifications to regulatory agencies (if any).
 2. Submittal No. 2: Receipts and weight tickets from the landfill operator acknowledging the Contractor's delivery of wastes and including dates, container types and quantities, and tared weights of material delivered, and all appropriate signatures.
 3. Submittal No. 3: Copies of all accident reports submitted during the course of work, if any.
 4. Submittal No. 4: Information on all new workers not covered by the pre-job submittals, if any.
 5. Submittal No. 5: Copies of Contractor's daily job reports.

1.5 STANDARD OPERATING PROCEDURES

Develop, submit for approval, and implement a standard operating procedure for abatement work to ensure maximum protection and safeguard from hazardous material exposure of the workers, the employees, and the environment (also see Section 1.16 entitled "Submittals"). The Standard Operating Procedures shall ensure:

- A. Prevention of unauthorized entry into the work area.
- B. Proper protective clothing and respiratory protection prior to entering the work area.
- C. Safe work practices in the work place including provisions for communications; exclusion of eating, drinking, smoking, or use of procedures or equipment that would in any way reduce the effectiveness of respiratory protection or other engineering controls.
- D. Proper exit procedures from the work area. Do not re-enter building with contaminated PPE.
- E. Removing the bird waste materials in a manner that minimizes release of contaminated materials.

- F. Packing, labeling, loading, transporting, and disposing of contaminated material in a way that minimizes or prevents exposure and contamination.
- G. Emergency evacuation of personnel for medical or safety (fire and smoke) so that exposure will be minimized.
- H. Safety from accidents in the workspace, especially from electrical shocks, slippery surfaces, and entanglements in loose hoses and equipment.
- J. Install warning signs around the work area.

1.6 PROTECTIVE CLOTHING

- A. Provide to all workers, foremen, superintendents, authorized visitors, and inspectors, protective disposable clothing consisting of full body coveralls, head covers, gloves, 18-inch high boot-type covers or reusable footwear, and eye protection in accordance with 29 CFR 1926.1101 (3)(g)(ii)(e).
- B. Provide hard hats and safety shoes as required by job conditions and safety regulations.
- C. Reusable footwear, hardhats, eye and hand protection shall be left in the "Contaminated Equipment Room" until the end of the hazardous material abatement work.
- D. All disposable protective clothing shall be discarded and disposed of as hazardous waste every time the wearer exits from the work area.