1. INTRODUCTION:

In accordance with the U.S. Fish and Wildlife Service (Service) Manual Chapter 561 FW 8, Asbestos Management, this Operations and Maintenance (O&M) Plan is required when an asbestos inspection reveals the presence of friable asbestos containing material (ACM) in a building, and the ACM is in good condition. Although the plan may be appropriate and sufficient for managing asbestos in place and assuring compliance with construction and exposure regulations, in some cases the Plan is not enough and abatement will be necessary.

2. PURPOSE:

The primary objective of this O&M plan is to control building occupant and employee exposure to asbestos fibers. In addition, the procedures in this plan attempt to minimize any potential hazard posed by ACM/presumed ACM (PACM) during cleaning, maintenance, and general operation activities.

This plan applies to employees, tenants, other building occupants, and contractors.

3. DEFINITIONS:

A. Asbestos. Includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophylite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated or altered.

B. Asbestos Containing Material (ACM). Any material or product that contains more than 1% asbestos.

C. Category I Non-friable ACM. Material such as packing, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos.

D. Category II Non-friable ACM. Any material containing more than 1% asbestos that is not category I non-friable ACM, and that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure. Category II ACM includes, but is not limited to:

(1) Asbestos cement siding and shingles,

(2) Transite panel boards, and
(3) Asbestos cement pipe (asbestos cement pipe may not be limited to buildings).

E. Friable ACM. Any material containing more than 1% asbestos that, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure.

F. High-Efficiency Particulate Air (HEPA) Filter. A filter capable of trapping and retaining at least 99.97% of monodispersed particles of 0.3 micrometers or larger in diameter.

G. Presumed Asbestos Containing Material (PACM). Thermal System Insulation (TSI) and surfacing material found in buildings constructed before 1981 and floor tile installed in buildings through 1981 may contain asbestos. Although it is unlikely, some flooring installed after 1981 may contain asbestos. Until sampling demonstrates that the material has 1% or less asbestos, we consider these materials PACM.

H. Regulated Asbestos Containing Material (RACM). RACM includes:

(1) Friable asbestos material;

(2) Category I non-friable ACM that has become friable, or has been subjected to sanding, grinding, cutting, or abrading; and

(3) Category II non-friable ACM that has a high probability of becoming crumbled, pulverized, or reduced to powder during the course of demolition or renovation operations.

I. Vinyl Asbestos Floor Tile. When vinyl floor tile, and in some cases its mastic, contains more than 1% asbestos, it must be handled as ACM.

4. ASBESTOS LOCATIONS:

Actual survey results have confirmed the presence of ACM in buildings and locations listed in the asbestos inventory (see Exhibit 1 to 561 FW 8). The asbestos in these materials does not constitute a health hazard if left undisturbed.

5. EMPLOYEE TRAINING:

All maintenance, custodial, and other employees who may disturb asbestos during their normal job duties must complete a minimum of 2 hours of asbestos awareness training BEFORE they begin duties where there is a potential for contact. This training is taken annually.

Awareness training should include such topics as:

- Background information on asbestos,
- Health effects of asbestos,
- Worker protection programs,
- Locations of ACM and PACM at the facility,
- Recognition of ACM and PACM damage and deterioration,
- The O&M plan for the facility, and
- Proper response to fiber release episodes.

A number of online asbestos awareness training courses provide certificates of completion and meet the requirements of OSHA 29 CFR 1910.1001(j)(7)(iv).

6. NOTIFICATION:

The Project Leader/Facility Manager must:

- Notify the following personnel of the presence, location, and physical condition of the ACM, and stress the need to avoid disturbing the material:
  - Building employees,
  - Tenants who will occupy the areas,
  - Contractors bidding work in the building, and
  - Contractors working in adjacent rooms.

- Distribute written notices, post signs or labels on ACM where employees can see them, and make the O&M plan available to anyone who might work on or disturb the ACM. All warning signs and labels posted on areas containing asbestos must comply with OSHA regulations in 29 CFR 1910.1001(j) (3) and (4).

- Make sure contractors who may come in contact with ACM or PACM are aware of this material by having them review the O&M plan and sign the Contractor Notification Form for Asbestos (see FWS Form 3-2432).

7. MONITORING ACM:

The ACM identified in the inventory is subject to deterioration with age, the effects of building occupancy, and accidental damage. To monitor the condition of the ACM, the Project Leader/Facility Manager ensures that staff visually inspect the material at regular intervals (at least two times per year), and immediately report any ACM damage or deterioration.

The Project Leader/Facility Manager keeps a written record of these periodic inspections. The record must include:

- Date of inspection;
- Inspector;
- Locations inspected, such as floor level, room names, or numbers, etc.;
- Nature of ACM (pipe wrap, transite board, etc.) and friability;
- Whether adequate labeling is still intact;
- Changes of status since last inspection (e.g., new damage, water damage, etc.); and
- Any recommended action(s).
The most recent inspection/risk assessment should be used as the basis for this survey. You may use the Asbestos Inspection Form (FWS Form 3-2430) for this inspection.

8. RECORDKEEPING:

Project Leaders/Facility Managers must ensure that the staff retains all facility asbestos management documents, including:

- Copies of Asbestos Hazard Emergency Response Act (AHERA) inspection and assessment reports;
- Written O&M plan;
- Semiannual ACM/PACM visual inspection records (see FWS Form 3-2430);
- Awareness training records (see FWS Form 3-2431); and
- Changes to location, condition, or quantity of the ACM/PACM.

9. JOB SITE CONTROLS FOR WORK INVOLVING ACM:

Whenever maintenance, custodial, or other employees perform work in areas where ACM or PACM is present, they must use appropriate work practices and protective measures to minimize the potential to disturb the ACM/PACM.

This includes:

- Use of wet methods (such as applying water to ACM with a low pressure sprayer);
- Use of mini-enclosures;
- Area isolation;
- Avoidance of certain activities such as sawing, sanding, or drilling around ACM/PACM; and
- Insert other appropriate site-specific controls.

10. SAFE WORK PRACTICES:

It is important to minimize the disturbance of ACM and the subsequent release of asbestos fibers. You can accomplish this by staying out of physical contact with materials that contain, or are presumed to contain, asbestos.

All personnel at (insert facility name) must observe the following work practices to avoid or minimize fiber release during activities that may affect ACM/PACM:

- Do not drill holes into material containing asbestos;
- Do not hang pictures, signs (except asbestos warning signs), clothing, plants, or any other articles on structures covered with materials containing asbestos;
- Do not sand, saw, or grind floor tiles, hard board panels, or other materials that may contain asbestos;
- Do not damage materials containing asbestos while moving furniture or other objects;
- Do not install curtains, drapes, or dividers in a way that will damage materials containing asbestos;
- **Do not** dust floors, ceilings, moldings, or other surfaces with a dry brush or sweep with a broom in an environment containing asbestos;
- **Do not** use an ordinary vacuum to clean up debris containing asbestos;
- **Do not** remove ceiling tiles below materials containing asbestos without wearing proper respiratory protection, clearing the area of other people, and observing asbestos waste disposal procedures;
- **Do not** remove ventilation system filters in a dry state; and
- **Do not** shake ventilation system filters.

11. **WORKER PROTECTION:**

Service employees must not participate in asbestos abatement activities unless they are in full compliance with State AHERA certification and licensing standards and follow OSHA and EPA requirements and the requirements in Service Manual chapter 561 FW 8. In most instances, worker protection will be described in the employee Job Hazard Analysis (see 240 FW 1).