

DEPARTMENTAL ASBESTOS PLAN

FOR

DEPARTMENT OF ACCOUNTING

AND GENERAL SERVICES

PREPARED BY

CENTRAL SERVICES DIVISION

JULY, 1993

DEPARTMENTAL ASBESTOS MANAGER:

Steven Fernandes, Division Chief, Central Services Div.
PH: 831-6730

ASSISTANT DEPARTMENTAL ASBESTOS MANAGERS:

Joe Earing, Engineer, Public Works Division
PH: 586-0492

Stanley Takamoto, Branch Chief, Hawaii District Office
PH: 933-4441

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PH: 241-3382

David Victor, Branch Chief, Maui District Office
PH: 877-3305

DEPARTMENTAL ASBESTOS PLAN

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DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES

DEPARTMENTAL ASBESTOS PLAN

I. GENERAL

A. Purpose

The purpose of this plan is to develop a program to manage asbestos in the work place so that the exposure potential of employees to airborne asbestos fibers in the workspace is minimized or eliminated.

B. Overview

The Governor's Executive Memorandum No. 91-08 established a policy requiring each State department to develop and implement a departmental asbestos control program. The Central Services Division has been appointed to organize and implement the departmental asbestos plan for the Department of Accounting and General Services. The Departmental Asbestos Plan will be implemented in phases. The various phases for the implementation are as follows and will also double as components of the departmental plan.

- o Organization
- o Training
- o Inspection
- o Notification
- o Management Plan
- o Operation and Maintenance Program
- o Surveillance
- o Record Keeping
- o Abatement

Departmental Asbestos Plan

II. ORGANIZATION

The Departmental Asbestos Plan was developed to cover the various roles that the Department has in building management. The different roles that the Department has are as follows:

- o Building Owner/Occupant/Custodial/Repair
- o Building Owner/Custodial/Repair
- o Custodial/Repair
- o Repairs only

To implement the plan and to encompass the different roles of the Department, the organization was set up with the following section as shown on the organizational chart.

- o Department Asbestos Manager
Oversee the asbestos program for the Department.
- o Program Service
Coordinate training and keep medical and training records.
- o Public Works Division
Coordinate and budget for initial inspections, re-inspections, supplemental inspections and abatement projects.
- o Neighbor Island
Oversee and coordinate asbestos program for the Department on the neighbor islands.
- o Management Documentation
Compile records of response action and incorporate into the asbestos management plan.

Departmental Asbestos Plan

- o Building Manager

Notify occupants of location of asbestos, conduct surveillance, respond to release episodes and coordinate clean up with operation and maintenance section; coordinate clearance for re-entry to area.

- o Operation and Maintenance

Make an assessment of release, determine whether minor or major, contract for design and clean up as required.

The organizational chart and listing of personnel assigned to the various tasks are shown in Appendix A.

III. BUILDING INVENTORY

Because DAGS has different roles in building operations, it follows that the Department has varying responsibilities as it relates to asbestos management. A listing of the buildings that involves DAGS is provided in Appendix B. The responsibility of DAGS for the various buildings is indicated on the list.

IV. TRAINING

Various levels of asbestos containing material training need to be provided to the personnel assigned the different functions set forth in the Department Asbestos Plan. The training programs needed for the implementation of the program will be coordinated and scheduled by the Department of Personnel Services, Training and Safety Division.

A. Awareness Training

All janitorial workers and maintenance workers shall be required to attend a two-hour awareness training. New janitorial and maintenance worker hires shall be required to attend awareness training within six months following first date of hire.

All division coordinators shall be required to attend the two-hour awareness training.

Departmental Asbestos Plan

B. Operations and Maintenance Training

All departmental personnel who may be required to participate in the department's asbestos operations and maintenance program and all trade personnel and trade supervisors shall be provided the two-hours awareness training plus an additional 14 hours O&M training. The 14-hour O&M training shall include the contents as specified in Section 12-145-9 of the Division of Occupational Safety and Health (DOSH) Standards. The O&M training shall include but not limited to the proper methods for handling and disposal of asbestos waste and the proper use of, handling and disposal of personal protective equipment.

C. Inspector/Management Planner Training

The Departmental Asbestos Manager (DAM) and assistant DAMS shall be provided the Inspector/Management planner training.

D. Asbestos Coordinator Training

All building managers shall be provided Asbestos Coordinator Training.

V. INSPECTIONS

A. Initial Inspection

All State buildings under DAGS jurisdiction will be initially inspected for ACBM by a firm (or firms) accredited by the Environmental Protection Agency (EPA). The buildings that are not included in the initial inspection under the Attorney General's contract are to be reported to the DAGS Quality Control Branch.

B. Surveillance Inspection

A surveillance inspection of all buildings under DAGS jurisdiction known to contain ACBM shall be conducted annually.

The surveillance inspection will be performed by the Building Manager and/or Janitor III who have received the two-hour awareness training. The person conducting the surveillance will:

Departmental Asbestos Plan

1. Visually inspect all areas that are identified in the management plan as ACBM or assumed ACBM.
2. Fill out Periodic Surveillance Report and submit to the Building Manager.

The Building Manager will include a completed form in the management plan and will submit a copy to the Management Documentation Section.

C. Reinspections

A reinspection of all State buildings under DAGS jurisdiction known to have ACBM shall be conducted at six-year intervals by a firm accredited by the EPA.

D. Supplemental Inspections

Supplemental inspections shall be conducted as required to verify existence of ACBM prior to removal work when information is not contained in existing inspection reports. When ACBM removal work is required as part of a larger repair or renovation project the inspection cost will be included and funded as part of the project.

VI. NOTIFICATION

The Department of Accounting and General Services has buildings under its inventory that are (1) occupied by its own employees and (2) occupied by other departments. The Departmental Asbestos Plan will have notification procedures for both situations.

A. Location of ACBM

For the general operation of the buildings under DAGS inventory, the Department will inform the following personnel on the location of the ACBM within the building:

1. Building Janitorial Staff
2. DAGS maintenance personnel
3. Service contractors

Departmental Asbestos Plan

Under the situation in which the building spaces are occupied by DAGS employees, the DAM will inform the division coordinators, who will in turn inform their division staff of the location of the ACBM.

Under the situation in which the building spaces are occupied by other departments, the DAM will inform the tenant DAM, who in turn will notify the affected employees in their department of the location of the ACBM.

B. Management Plan

o DAGS Building Occupied by DAGS Employees

The DAM will share a copy of the appropriate section of the management plan with the division coordinators. The division coordinators will inform the division staff of the plan and its location within the office.

o DAGS Buildings Occupied by Other Departments

The DAM will share a copy of the appropriate sections of the management plan with the tenant DAMS, who in turn will notify the affected staff of the plan and its location within the building.

C. Construction/Private/Service Contracts

The agency contracting for the work or service must notify the contractor or service company of the location of ACBM. The agency must inform the contractors or service company that they are not to disturb the ACBM.

D. Warning Labels

Warning labels shall be attached adjacent to friable ACBM located in routine maintenance areas such as machine rooms.

Departmental Asbestos Plan

VII. MANAGEMENT PLANS

The management plan developed by consultants is a document containing the results of the inspection, sampling, analysis, assessments and the recommended response actions to properly manage the ACBM. The management plans for the respective tenant agency are provided in Appendix D.

A. Jurisdiction

DAGS will, for the buildings under its jurisdiction, administer and implement the management plan as applicable and in conjunction with the department's overall asbestos program.

B. Location

The Management Plan shall be kept at a central location in each complex to which it applies so that it will be readily available to occupants when requested. If a building is isolated and not part of a complex, the department shall determine the appropriate location for the Management Plan.

C. Updating

The Management Plan shall be updated to keep it current with ongoing operation and maintenance, surveillance, inspection, reinspection and response action activities.

VIII. OPERATIONS AND MAINTENANCE PROGRAM

The purpose of the operation and maintenance program is to minimize exposure of building occupants to asbestos fibers. The purpose will be accomplished by (1) monitoring the condition of the ACBM; (2) ensuring proper clean up of asbestos fiber release episodes; (3) preventing further release of asbestos fibers; and (4) notifying occupants of asbestos-related activities which could result in a release of fibers.

A. Implementation

The operation and maintenance program will be implemented by the Department of Accounting and General Services. The Department will:

1. Monitor the condition of the ACBM.
2. Control maintenance activities by staff such that ACBM is not disturbed.

Departmental Asbestos Plan

3. Establish a reporting system on suspected release of asbestos fibers.
4. Contract out for work that:
 - a. result in the disturbance of ACBM;
 - b. is required to clean up an asbestos fiber release episode;
 - c. is required to prevent further release of asbestos fibers; and
 - d. will involve an intentional disturbance of ACBM.

B. Monitoring

Monitoring of the condition of the ACBM will be conducted in accordance with the surveillance inspection requirements established in Section V.

C. Fiber Release Episode

A fiber release episode is one that involves:

- o falling of friable ACBM
- o dislodging of friable ACBM
- o disturbance of friable ACBM
- o disturbance of non-friable ACBM that makes it friable

In the event of a fiber release episode, the tenant DAM or division liaison will:

1. Immediately notify the Central Services Division Office at 831-6733 or 831-6734.
2. Vacate and isolate area by closing doors.
3. Restrict entry into the area by posting sign.
4. Inform employees.

Central Services Division Building Manager will make an immediate investigation of the episode and make a determination if the episode is minor or major.

Departmental Asbestos Plan

D. Minor Fiber Release Episode

A minor release episode is one that involves the falling or dislodging of three square or lineal feet or less of friable ACBM. If the episode is determined to be minor, Central Services Division will:

1. Have air samples taken as soon as possible after the release.
2. Hire a licensed certified asbestos abatement contractor to clean the area, repair the damages to prevent further release of fibers, and dispose of the debris.
3. Have air samples taken after the clean-up has been completed to insure clean air conditions of .01 f/cc.
4. Notify tenant DAMS when area has been cleared for re-entry.
5. Provide copy of all laboratory analysis and reports of air samples to the tenant DAMS and CSD Building Manager.
6. Keep records of the episodes and laboratory analysis and shall retain it in files kept by the CSD Building Manager.

E. Major Fiber Release Episode

A major release episode is one that involves an area affecting three square or lineal feet or more of friable ACBM. If the episode is determined to be major, Central Services Division will follow the same procedures for those covering minor fiber release episodes except that the design specifications for clean-up, removal, and disposal requirements shall be prepared by an accredited asbestos designer.

Departmental Asbestos Plan

IX. RECORD KEEPING

Record keeping will be divided into two categories. The first category will involve personnel. These records will pertain to training and medical and will be kept for the various levels of personnel and duties. The second category of records will involve the facilities and will include building inventory, notifications, release episodes, abatement actions, air sampling, and material disposed. For record keeping, the forms provided in Appendix C are to be used.

A. Personnel Records

The Central Services Division will maintain an active list of all its employees accredited in any of the asbestos training courses required by this plan. The list at minimum should include the following information:

- o Name
- o Title/Position
- o Date of Hire
- o Type of Training
- o Date of Training
- o Date of Refresher Training
- o Duration of Training (hours)

Medical records of Central Services Division employees provided medical examinations should be kept by the Central Services Division.

B. Facility Records

Facility records of relevant costs will be kept and used to update the Asbestos Management Plan. The Asbestos Management Plan will be updated and kept at the Central Services Division office for Oahu and at the respective DAGS District Offices for Neighbor Island facilities. An updated copy of the management plan for a respective building will also be kept at the building.

Departmental Asbestos Plan

The records of the relevant events that will be used to update the management plan will include the following:

1. Response actions and preventive measures.
2. Air monitoring and sampling.
3. Periodic surveillance.
4. Reinspection and assessments.
5. Cleaning activities.
6. Small-scale, short-duration operation and maintenance activities.
7. Air clearance report.
8. Fiber Release episodes.
9. Notification to users, custodial and O&M staff.
10. Material disposed.

A copy of these records will be shared with the tenant DAM as applicable. The tenant DAM should use this information to update their Departmental Asbestos Plan and to notify their affected staff.

X. ABATEMENT

The Department will manage, in place, all non-friable ACM. Friable ACM will be managed until asbestos abatement funds are made available. The Department will prioritize the abatement projects for the buildings under its control. The Department will also plan and budget for abatement funds including related costs such as relocation, minor repairs for temporary spaces, utilities and rental. The abatement work will be contracted in accordance with existing standards, regulations and procedures. All reports required for record keeping should be included as part of the contract and shall be in accordance with regulations.

Departmental Asbestos Plan

XI. LEASED FACILITIES

A. Facilities Owned By Others

1. Office Space Leases

- a. The Department of Accounting and General Services, Leasing Services Branch, has the function of providing a centralized office leasing service to user agencies. A copy of each lease agreement executed by DAGS for spaces occupied by a department should be available in that department's administrative offices. Personnel desiring information contained in the agreements should, therefore, refer such queries to the appropriate department.
- b. Whenever feasible or practicable, the Leasing Services Branch should negotiate and include in each existing, new or to-be-renewed or amended office space lease agreement provisions requiring the lessor to inspect the lease space for the existence of asbestos containing building materials (ACBM). The lessor shall be required to provide to the Leasing Services Branch, who will forward to the user agency Departmental Asbestos Manager a copy of the asbestos inspection report and management plan prepared in conformance with the standards specified for State-owned facilities. Provisions of the lease agreement should allow the State to unilaterally terminate the agreement without penalty if the lessor fails to perform according to the lease terms.
- c. Lessors, as well as State departments, shall be responsible for their own activities within the premises (repair, renovation, maintenance custodial work, etc.) so that ACBM are properly managed in accordance with applicable regulations and the policy stated in reference I.3.

Departmental Asbestos Plan

- d. If the Leasing Services Branch is unable to negotiate asbestos inspection and management provisions for lease agreements as specified in paragraph b. above and alternative spaces are unavailable, the department occupying the premises shall be responsible to assess the premises for suspect materials and assume such suspect materials to be ACBM. Suspect materials shall be managed as ACBM as specified in paragraph c. above.
- e. Departments occupying leased spaces shall have the same responsibilities for activities performed by State employees as those in State-owned facilities as specified in reference I.3. If the tenant department is unable to resolve non-compliance problems with the lessor, the DAGS Leasing Services Branch and the Attorney General shall assist the tenant department.

2. Non-Office Space Leases

Asbestos management in non-office spaces the leases of which are not managed by the DAGS Leasing Services Branch shall be the responsibility of the department managing the lease agreement.

3. Hazardous Spaces

Departments shall not lease facilities where the condition of ACBM has been determined to be a hazard for employees.

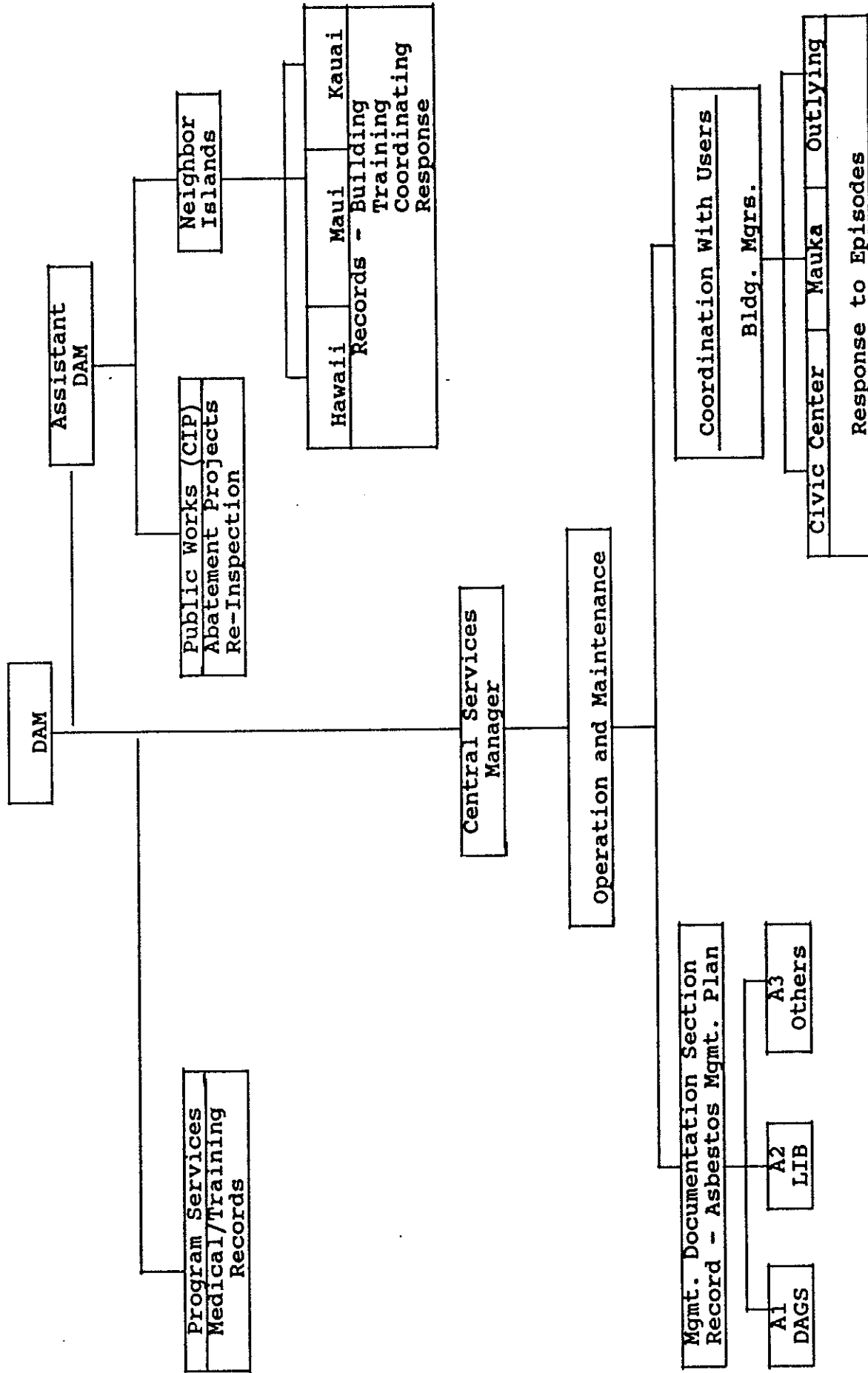
B. State-Owned Facilities

Departments who lease State-owned facilities to others (private individuals or organizations, municipalities or federal agencies, etc.) shall, as a minimum, provide a copy of the asbestos inspection report and management plan to the lessee. Provisions of the lease shall state that the party responsible for any repair, maintenance, alteration, custodial and other activities which may disturb ACBM shall be responsible to manage the ACBM in accordance with applicable regulations and accepted standard practices.

APPENDIX A

**ORGANIZATIONAL CHART
AND
LISTING OF ASBESTOS COORDINATORS**

DEPARTMENT ASBESTOS PLAN
ORGANIZATION CHART



DAGS ASBESTOS CONTROL PROGRAM

Departmental Asbestos Manager (DAM): Steven Fernandes

Support Staff:

Program Services
Medical/Training Records Carl Murai

Management Documentation Section
Record - Asbestos Mgmt. Plan Don Inouye

Assistant DAM:

Public Works Division Joe Earing
Hawaii District Office Stanley Takamoto
Kauai District Office Richard Teragawa
Maui District Office David Victor

Division Coordinators:

Administrative Services Office Steven Chu
Accounting Division Wilbert Sakamoto
Aloha Stadium Kenneth Tong
Archives Division Jolyn Tamura
Audit Division Wayne Chu
Automotive Management Division Stanley Takahashi
Personnel Office Dave Abe
Purchasing & Supply Division Craig Kuraoka
Survey Division Marvin Ting
Public Works Division Mark Stefanov
Systems and Procedures Office Glenn Segawa
Central Services Division James Hisano

Division Coordinators (Cont'd)

Hawaii District Office	Stanley Takamoto
Kauai District Office	Richard Teragawa
Maui District Office	David Victor

Building Managers:

Oahu Area A	Lynette Courtney Noa
Oahu Area B	Richard Arakaki
Oahu Area C	Toshiaki Shimizu
Hawaii District	Stanley Takamoto
Maui District	David Victor
Kauai District	Richard Teragawa

DEPARTMENTAL ASBESTOS PLAN
EMPLOYEE TRAINING

<u>NAME</u>	<u>JOB TITLE</u>	<u>DATE TRAINED</u>	<u>LOCATION</u>	<u>TYPE OF TRAINING</u>	<u>HOURS COMPLETED</u>
ARAKAKI, RICHARD	Building Manager	January, 1993	Honolulu	Asbestos Coordinator	8
CHU, STEVEN	Loss Control Spec.	April, 1992	Honolulu	Asbestos Awareness	4*
CHU, WAYNE	Supervising Auditor	January, 1993	Honolulu	Asbestos Coordinator	8
COURTNEY-NOA, LYNETTE	Building Manager	January, 1993	Honolulu	Asbestos Coordinator	8
EARING, JOE	Engineer	April, 1992	Honolulu	Asbestos Awareness	3*
FERNANDES, STEVEN	Central Svcs. Administrator	June, 1993	Honolulu	Inspector/Management Planner	40
HISANO, JAMES	Central Services Manager	January, 1993	Honolulu	Asbestos Coordinator	8
INOUE, DON	Building Engineer	October, 1992	Honolulu	Inspector/Management Planner	8
KURAOKA, CRAIG	Surplus Property Manager	March, 1993	Honolulu	Asbestos Coordinator	8
MURAI, CARL	Program Management Spec.	May, 1988	Honolulu	Asbestos Awareness	3*
NAKAMURA, SHARON	Personnel Management Spec.	(to take class in Aug or Sept)			
SAKAMOTO, WILBERT	Accounting Administrator	January, 1992	Honolulu	Asbestos Awareness	3*
SEGAWA, GLENN	Systems Analyst	April, 1992	Honolulu	Asbestos Awareness	3*

*Training Certificates were not issued.

<u>NAME</u>	<u>JOB TITLE</u>	<u>DATE TRAINED</u>	<u>LOCATION</u>	<u>TYPE OF TRAINING</u>	<u>HOURS COMPLETED</u>
SHIMIZU, TOSHIAKI	Building Manager	January, 1993	Honolulu	Asbestos Coordinator	8
STEFANOV, MARK	Engineer	Sept./Oct., 1993	Honolulu	Inspector/Planner/Designer	64
TAKAHASHI, STANLEY	Motor Pool Supervisor	January, 1993	Honolulu	Asbestos Coordinator	8
TAKAMOTO, STANLEY	Engineer	May, 1989	San Francisco	Inspector/Management Planner	40
TAMURA, JOLYN	State Archivist	April, 1993	Honolulu	Asbestos Awareness Program	3*
TERAGAWA, RICHARD	Engineer	June, 1990 August, 1991	San Francisco Honolulu	Inspector/Management Planner Refresher	40 8**
TING, MARVIN	Land Surveyor	(to take class in Aug or Sept)			
TONG, KENNETH	Chief Engineer				
VICTOR, DAVID	Engineer				

*Training Certificates were not issued.

**Not Certified

PSI Professional Service Industries, Inc.

Asbestos Inspector *Initial Training Course*

Steven Fernandes

576-38-7290

has successfully completed the 24-hour EPA-Approved Asbestos Inspector Initial Training Course for purposes of accreditation required under section 206 of Title II of the Toxic Substances Control Act (TSCA). Conducted by Professional Service Industries, 510 E. 22nd. St., Lombard, IL, 60148, 800-346-2860/913-749-2381.

Location *Honolulu, Hawaii*

Examination *June 24, 1992*

Course *June 22 - 24, 1992*

Expiration *June 24, 1993*

Director of Training

Margaret Manuwa

7PSI 11451

Certificate Number

PSI Professional Service Industries, Inc.

Asbestos Management Planner Initial Training Course

Steven Fernandes

576-38-7290

has successfully completed the 16-hour EPA-Approved Asbestos Management Planner Initial Training Course for purposes of accreditation required under section 206 of Title II of the Toxic Substances Control Act (TSCA). Conducted by Professional Service Industries, 510 E. 22nd. St., Lombard, IL, 60148, 800-346-2860/913-749-2381

Location Honolulu, Hawaii

Examination June 26, 1992

Course June 25 - 26, 1992

Expiration June 26, 1993

Director of Training



Certificate Number 7PSI 11481 P

Professional Service Industries, Inc.

Asbestos Inspector Refresher Training Course

Don M. Inouye
576-48-9991

has successfully completed a 4-hour EPA-Approved Asbestos Inspector Refresher Training Course for purposes of accreditation required under section 206 of Title II of the Toxic Substances Control Act (TSCA). Conducted by Professional Service Industries, 510 E. 22nd. St., Lombard, IL, 60148, 800-346-2860/913-749-2381.

Location: Honolulu, Hawaii Expiration: October 2, 1993

Course: October 2, 1992

Director of Training: *Margaret Manuque Bani*

PSI Professional Service Industries, Inc.

Asbestos Management Planner Refresher Training Course

Don M. Inouye

576-48-9991

has successfully completed a 4-hour EPA-Approved Asbestos Management Planner Refresher Training Course for purposes of accreditation required under section 206 of Title II of the Toxic Substances Control Act (TSCA). Conducted by Professional Service Industries, 510 E. 22nd. St., Lombard, IL, 60148, 800-346-2860/913-749-2381.

Location: Honolulu, Hawaii

Expiration: October 2, 1993

Course: October 2, 1992

Director of Training

Maynard Manuque Brown

Certificate Number 5PSI 21345 PR



Professional Service Industries, Inc.

Hall-Kimbrell Division

Asbestos Inspector

Initial Training Course

Mark Stefanov
556-82-6422

has successfully completed the EPA-Approved Asbestos Inspector Initial Training Course for purposes of accreditation required under section 206 of Title II of the Toxic Substances Control Act (TSCA). Conducted by PSI/Hall-Kimbrell Division, 4840 W. 15th Street, Lawrence, KS 66049, 800-346-2860/913-749-2381

Location Honolulu, Hawaii Examination October 9, 1991

Course October 7 - 9, 1991 Expiration October 9, 1992

Director of Training *Margaret Meninger*

Certificate Number 7PSI 01723



Professional Service Industries, Inc.

Hall-Kimbrell Division

Asbestos Management Planner

Initial Training Course

Mark Stefanov

556-82-6422

has successfully completed the EPA-Approved Asbestos Management Planner Initial Training Course for purposes of accreditation required under section 206 of Title II of the Toxic Substances Control Act (TSCA). Conducted by PSI/Hall-Kimbrell Division, 4840 W. 15th Street, Lawrence, KS 66049, 800-346-2860/913-749-2381

Location Honolulu, Hawaii

Examination October 11, 1991

Course October 10 - 11, 1991

Expiration October 11, 1992

Director of Training

Certificate Number

7PSI 01728 P



Professional Service Industries, Inc.

Hall-Kimbrell Division

Asbestos Abatement Project Designer

Initial Training Course

Mark Stefanov

556-82-6422

has successfully completed the EPA-Approved Asbestos Project Designer Initial Training Course and passed the Examination for purposes of accreditation required under section 206 of Title II of the Toxic Substances Control Act (TSCA). Conducted by PSI/Hall-Kimbrell Division, 4840 W. 15th Street, Lawrence, KS 66049, 800-346-2860/913-749-2381

Location Honolulu, Hawaii

Examination September 25, 1992

Course September 23 - 25, 1992

Expiration September 25, 1992

Director of Training

Certificate Number

7PSI 01683

P

UNIVERSITY OF CALIFORNIA BERKELEY UNIVERSITY EXTENSION

This is to certify that

Stanley Takamoto

has attended and satisfactorily passed the exam
for the course

Building Inspection and Management Planning for Asbestos
May 1-5, 1989

This certification is valid until:

May 5, 1990

Examination date:

May 3 and 5, 1989

898

Certificate number



Ursula Sutcher

Assistant Dean
University Extension

Dorval D.C.

Program Director
Pacific Asbestos Information Center

UNIVERSITY OF CALIFORNIA BERKELEY UNIVERSITY EXTENSION

This is to certify that

Richard Teragawa

has attended and satisfactorily passed the exam
for the course

Building Inspection and Management Planning for Asbestos
June 11-15, 1990

This certification is valid until:

June 15, 1991

Examination dates:

June 13 and 15, 1990

1314

Certificate number



Vivian Sutcher

Assistant Dean
University Extension

Dorval DL

Program Director
Pacific Asbestos Information Center

Hygienetics Training Institute

This acknowledges that

Richard K Teragawa

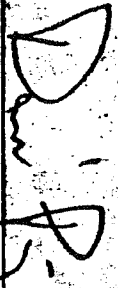
has attended our 4 hour

Asbestos Inspector Annual Review

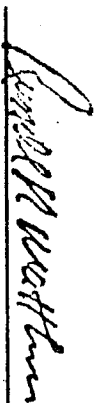
at Hawaii Department of Accounting and General Services

on August 19, 1991 from 8:00 am to 12:00 noon

Training Administrator



Corporate Official



Hygenetics, Inc - 180 Canal Street - Boston, MA 02114

Hygienetics Training Institute

This acknowledges that

Richard K Teragawa

has attended our 4 hour

Asbestos Management Planner Annual Review

at Hawaii Department of Accounting and General Services

on August 19, 1991 from 1:00 pm to 5:00 pm.

Training Administrator

Hygienetics, Inc - 180 Canal Street - Boston, MA 02114

Corporate Official

UNIVERSITY OF CALIFORNIA BERKELEY UNIVERSITY EXTENSION

This is to certify that

David Victor

has attended and satisfactorily passed the exam
for the course

Building Inspection and Management Planning for Asbestos
May 1-5, 1989

This certification is valid until:

May 5, 1990

Examination date:

May 3 and 5, 1989

902

Certificate number

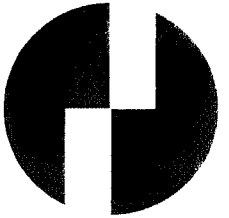


Unice Sutcher

Dorale D.

Assistant Dean
University Extension

Program Director
Pacific Asbestos Information Center



Hall-Kimbrell

Environmental Services, Inc.

Asbestos Inspector

Refresher Training Course

David Victor

575-58-5537

has successfully completed the EPA-Approved Asbestos Inspector Refresher Training Course for purposes of accreditation required under section 206 of Title II of the Toxic Substances Control Act (TSCA). Conducted by Hall-Kimbrell Environmental Services, Inc., 4840 W. 15th Street, Lawrence, KS 66049, 800-346-2860/913-841-8034.

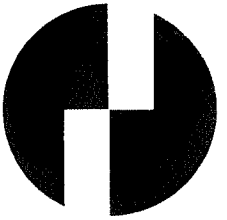
Location Honolulu, Hawaii

Expiration June 8, 1991

Course June 8, 1990

Certificate Number 7HR100741

Director of Training



Hall-Kimbrell
Environmental Services, Inc.

*Asbestos Management Planner
Refresher Training Course*

David Victor

575-58-5537

has successfully completed the EPA-Approved Asbestos Management Planner Refresher Training Course for purposes of accreditation required under section 206 of Title II of the Toxic Substances Control Act (TSCA). Conducted by Hall-Kimbrell Environmental Services, Inc. 4840 W. 15th Street, Lawrence, KS 66049, 800-346-2860/913-841-8034.

Location Honolulu, Hawaii

Expiration June 8, 1991

Course June 8, 1990

Certificate Number 7HRRP00560

Director of Training

Oliver Short

Hygienetics Training Institute

This certifies that

David H Victor

has successfully completed 4 hours
and passed an examination in our

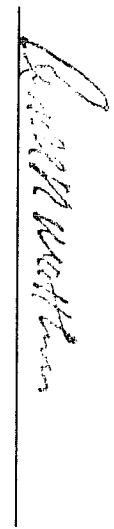
Asbestos Inspector Annual Review

Certificate Number: Bos-91-0780-003

Course Date: August 19, 1991

Expiration Date: August 19, 1992


Training Administrator


Corporate Official

Hygienetics, Inc - 180 Canal Street - Boston, MA 02114

Hygienetics Training Institute

This certifies that

David H Victor

has successfully completed 4 hours
and passed an examination in our

Asbestos Management Planner Annual Review

Certificate Number: Bos-91-0781-004

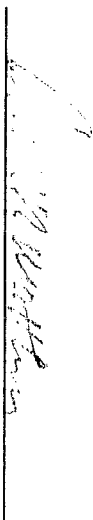
Course Date: August 19, 1991

Expiration Date: August 19, 1992

Training Administrator



Corporate Official



Hygienetics, Inc - 180 Canal Street - Boston, MA 02114



Professional Service Industries, Inc.

Asbestos Inspector

Refresher Training Course

David Victor

575-58-5537

has successfully completed a 4-hour EPA-Approved Asbestos Inspector Refresher Training Course for purposes of accreditation required under section 206 of Title II of the Toxic Substances Control Act (TSCA). Conducted by Professional Service Industries, 510 E. 22nd. St., Lombard, IL, 60148, 800-346-2860/913-749-2381.

Location Honolulu, Hawaii

Expiration October 2, 1993

Course October 2, 1992

Director of Training

Margaret Menninger Brown

Certificate Number

5PSI 21336



Professional Service Industries, Inc.

Asbestos Management Planner

Refresher Training Course

David Victor

575-58-5537

has successfully completed a 4-hour EPA-Approved Asbestos Management Planner Refresher Training Course for purposes of accreditation required under section 206 of Title II of the Toxic Substances Control Act (TSCA). Conducted by Professional Service Industries, 510 E. 22nd. St., Lombard, IL, 60148, 800-346-2860/ 913-749-2381.

Location Honolulu, Hawaii

Expiration October 2, 1993

Course October 2, 1992

Director of Training

Margaret Mearns Brown

Certificate Number

5PSI 21349 PR

OFFICE OF SPECIAL PROGRAMS & COMMUNITY SERVICE

HONOLULU COMMUNITY COLLEGE

University of Hawaii

This is to certify that

RICHARD ARAKAKI

has attended a 8 hour course in

Asbestos Coordinator Training

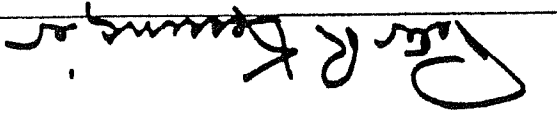
and is hereby awarded this

CERTIFICATE OF ATTENDANCE

given this 12th day
of January, 1993

Kenneth Hall, Instructor

Honolulu
State of Hawaii



Dr. Peter R. Kessinger, Provost

OFFICE OF SPECIAL PROGRAMS & COMMUNITY SERVICE

HONOLULU COMMUNITY COLLEGE

University of Hawaii

This is to certify that

WAYNE CHU

has attended an 8 hour course in

Asbestos Coordinator Training

and is hereby awarded this

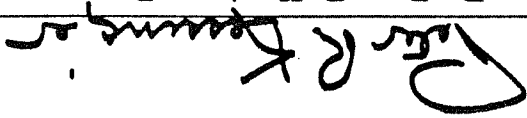
CERTIFICATE OF ATTENDANCE

given this 7th day
of January, 1993

Kenneth Hall, Instructor

Honolulu
State of Hawaii

Dr. Peter R. Kessinger, Provost



OFFICE OF SPECIAL PROGRAMS & COMMUNITY SERVICE

HONOLULU COMMUNITY COLLEGE

University of Hawaii

This is to certify that

LYNETTE COURTNEY-NOA

has attended an 8 hour course in

Asbestos Coordinator Training

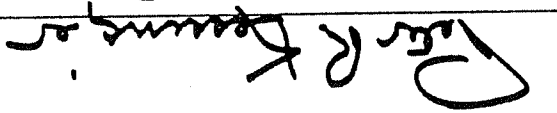
and is hereby awarded this

CERTIFICATE OF ATTENDANCE

given this 7th day
of January, 1993

Kenneth Hall, Instructor

Honolulu
State of Hawaii


Dr. Peter R. Kessinger, Provost

OFFICE OF SPECIAL PROGRAMS & COMMUNITY SERVICE

HONOLULU COMMUNITY COLLEGE

University of Hawaii

This is to certify that

JAMES HISANO

has attended a 8 hour course in

Asbestos Coordinator Training

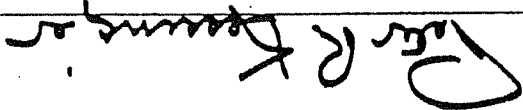
and is hereby awarded this

CERTIFICATE OF ATTENDANCE

given this 12th day
of January, 1993

Kenneth Hall, Instructor

Honolulu
State of Hawaii



Dr. Peter R. Kessinger, Provost

OFFICE OF SPECIAL PROGRAMS & COMMUNITY SERVICE
HONOLULU COMMUNITY COLLEGE
University of Hawaii

This is to certify that
CRAIG KURAOKA

has attended a 8 hour course in
Asbestos Coordinator Training
and is hereby awarded this

CERTIFICATE OF ATTENDANCE

given this 23rd day
of March, 1993

Honolulu
State of Hawaii

Kenneth Hall, Instructor


Dr. Peter R. Kesinger, Provost

OFFICE OF SPECIAL PROGRAMS & COMMUNITY SERVICE

HONOLULU COMMUNITY COLLEGE

University of Hawaii

This is to certify that

TOSHIAKI SHIMIZU

has attended an 8 hour course in

Asbestos Coordinator Training

and is hereby awarded this

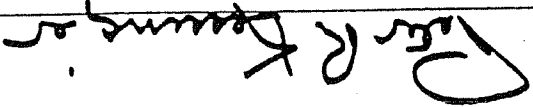
CERTIFICATE OF ATTENDANCE

Honolulu
State of Hawaii

given this 7th day
of January, 1993

Kenneth Hall, Instructor

Dr. Peter R. Kessinger, Provost



OFFICE OF SPECIAL PROGRAMS & COMMUNITY SERVICE

HONOLULU COMMUNITY COLLEGE

University of Hawaii

This is to certify that

STANLEY TAKAHASHI

has attended an 8 hour course in

Asbestos Coordinator Training

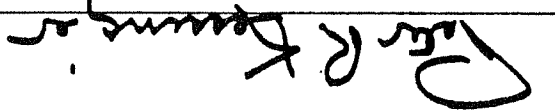
and is hereby awarded this

CERTIFICATE OF ATTENDANCE

given this 7th day
of January, 1993

Kenneth Hall, Instructor

Honolulu
State of Hawaii



Dr. Peter R. Kessinger, Provost

APPENDIX B

BUILDING INVENTORY

DEPARTMENTAL ASBESTOS PLAN
BUILDING INVENTORY

DISTRICT - PUBLIC FACILITY, OAHU, AREA A

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM*</u>	<u>Service Provided By DAGS</u>
M51-00093	Capitol Center Bldg.	DAGS	Yes	R&A/Custodial
M51-00020	DSSH Supplies Storeroom	QMC	Yes	R&A/Custodial
M51-00084	Kalanimoku (SOB #1)	DAGS	Yes	R&A/Custodial
M51-00004	Kekauluohi Bldg. (Archives)	DAGS	Yes	R&A/Custodial
M51-00024	Kinau Hale (DOH)	DAGS	Yes	R&A/Custodial
M51-00038	Liliuokalani Bldg.	DAGS	Yes	R&A/Custodial
M51-00092	Mabel Smyth Auditorium	DAGS	Yes	R&A/Custodial
M51-00077	State Capitol	DAGS	Yes	R&A/Custodial
M51-00091	State Office Tower	DAGS	No	R&A/Custodial
M51-00058	Washington Place	DAGS	Yes	R&A/Custodial

* For location of ACM, see Appendix D - Asbestos Management Plan.

DISTRICT - PUBLIC FACILITY, OAHU, AREA B

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM*</u>	<u>Service Provided By DAGS</u>
M52-00001	Agriculture and Conservation	AGR		R&A/Custodial
M52-00060	Ala Moana Bldg. (DOH)	DOH		R&A/Custodial
M52-00069	Archives Storage (Records Ctr.)	DAGS	Yes	R&A/Custodial
M52-00047	Central Services	DAGS	Yes	R&A/Custodial
M52-00067	Central Services Admin.	DAGS	Yes	R&A/Custodial
L38-00090	Centralized Processing Center (CPC - Pohukaina School)	OLS		R&A
M52-00043	Diamond Head Health Center	DOH		R&A/Custodial
M52-00034	DOE Central Off. (Wahiawa)	DAGS		R&A
M52-00031	DOE Food Services (Kaimuki)	DOE		R&A
M52-00011	Federal and State Surplus	DAGS	No	R&A/Custodial
M52-00005	Furniture Warehouse	DAGS	No	R&A/Custodial
M52-00071	Hawaii State Senior Ctr.	DAGS	Yes	R&A
M52-00087	Highways Div. (Shafter)	DOT		R&A/Custodial
M52-00049	Hoopono Bldg. and Annex	DAGS	Yes	R&A/Custodial
M52-00023	Kam V (Post Office)	DAGS	Yes	R&A/Custodial
M52-00022	Kaneohe Civic Center	DAGS	Yes	R&A/Custodial
M52-00027	Lanakila Health Center	DOH		R&A/Custodial
M52-00080	Leeward Health Center	DOH		R&A/Custodial
M52-00066	O. R. & L. (Kam Day)	DAGS	Yes	R&A/Custodial
M52-00085	Old Ewa District Court (DOH)	DAGS		R&A/Custodial
M52-00003	Plant Quarantine Station	AGR		R&A/Custodial
M52-00054	State Testing Lab	DOT		R&A
	Grounds Maintenance Bldg.			

* For location of ACM, see Appendix D - Asbestos Management Plan.

District - Public Facility,
Oahu, Area B

DISTRICT - PUBLIC FACILITY, OAHU, AREA B (Cont'd)

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM*</u>	<u>Service Provided By DAGS</u>
M52-00013	Vector Control Center	DOH		R&A/Custodial
M52-00012	Wahiawa Child Dev. Ctr.	DOH		R&A/Custodial
M52-00056	Wahiawa Civic Center	DAGS	Yes	R&A/Custodial
M52-00070	Waimanalo Community Serv. Ctr.			R&A
M52-00057	Waipahu Health Center	DOH		R&A/Custodial
M52-00059	Weights and Measures	AGR		R&A/Custodial
M52-00082	Windward Health Center	DOH		R&A/Custodial

* For location of ACM, see Appendix D - Asbestos Management Plan.

DISTRICT - PUBLIC FACILITY, OAHU, AREA C

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM*</u>	<u>Service Provided By DAGS</u>
M53-00051	Aliiaimoku Hale	DOT		R&A/Custodial
M53-00053	Hale Auhau (AG)	DAGS		R&A/Custodial
M53-00083	Kamamalu Bldg. (Hawn Trust)	DAGS	Yes	R&A/Custodial
M53-00024	Kapuaiwa Bldg.	DAGS	No	R&A/Custodial
M53-00025	Keelikolani Bldg.	DAGS	Yes	R&A/Custodial
M53-00052	Kekuanaoa Bldg. (Terr. Bldg.)	DAGS	Yes	R&A/Custodial
M53-00081	Old Federal Bldg.	DAGS		Custodial**
M53-00068	Parking Structure	DAGS	Yes	R&A
M53-00050	Vineyard Street Garage	DAGS		R&A
	Makai Garage	DATS	No	

* For location of ACM, see Appendix D - Asbestos Management Plan.
 ** Custodial Services provided by Lanakila Rehab.

DISTRICT - PUBLIC FACILITY, HAWAII DISTRICT

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM*</u>	<u>Service Provided By DAGS</u>
M55-00222	Hale Oluea Mental Health Ctr.			R&A
M55-00239	Hilo Maint. Facility (Old Hilo Airport)	DAGS	Yes	R&A/Custodial
M55-00232	Hilo State Off. Bldg.	DAGS	Yes	R&A/Custodial
M55-00242	Hilo Welfare-DSSH			R&A
M55-00234	Honokaa District Court	DAGS	Yes	R&A
M55-00203	Honokaa DOH	DAGS	Yes	R&A
M55-00201	Honokaa Health Lab - Office	DAGS	Yes	R&A
M55-00243	Honokaa Maint. Facility	DAGS	Yes	R&A/Custodial
M55-00229	Honokaa State Off. Bldg. #1	DAGS	Yes	R&A/Custodial
M55-00240	Honokaa State Off. Bldg. #2	DAGS	No	R&A/Custodial
M55-00225	Insectory (DOA)			R&A
M55-00231	Keaau District Court			R&A
M55-00244	Keakealani Bldg.	DAGS	No	R&A/Custodial
M55-00221	Keawe Health Center			R&A
M55-00237	Kohala District Court			R&A/Custodial
M55-00235	Kohala State Off. Bldg.	DAGS	Yes	R&A/Custodial
M55-00204	Kona Health Center			R&A
M55-00230	Kona State Off. Bldg. #1	DAGS	Yes	R&A/Custodial
M55-00220	Kona State Off. Bldg. #2	DAGS		R&A/Custodial
M55-00228	Kona State Office Bldg. #3	DAGS	Yes	R&A/Custodial
M55-00202	Mental Health Clinic			R&A

* For location of ACM, see Appendix D - Asbestos Management Plan.

DISTRICT - PUBLIC FACILITY, HAWAII DISTRICT (Cont'd)

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM*</u>	<u>Service Provided By DAGS</u>
M55-00217	Naalehu State Off. Bldg.	DAGS	Yes	R&A/Custodial
M55-00223	Office & Plant Inspec (DOA)			R&A
M55-00205	Waiakea Health Center			R&A
M55-00206	Waiakea Health Lab-Rodent			R&A
M55-00233	Wailoa River Visitor Ctr.			Custodial
M55-00241	Waimea District Court			R&A/Custodial
M55-00207	Waimea State Off. Bldg.	DAGS	Yes	R&A/Custodial

* For location of ACM, see Appendix D - Asbestos Management Plan.

DISTRICT - PUBLIC FACILITY, MAUI DISTRICT

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM*</u>	<u>Service Provided By DAGS</u>
M56-00418	DLIR Bldg. (Molokai)	DAGS	Yes	R&A/Custodial
M56-00401	Irwin Health Ctr. (Molokai)		Yes	R&A
M56-00408	Kahului Lab and Off. (DOA)	DAGS		R&A/Custodial
M56-00421	Lahaina Health Center	DOH		R&A
M56-00409	Molokai State Off. Bldg. (New)	DAGS	No	R&A/Custodial
M56-00417	Molokai Tax Off.	DAGS	Yes	R&A/Custodial
M56-00410	State Annex Bldg. (Old District Court)	DAGS		R&A/Custodial
M56-00415	Vector Control	DOH		R&A/Custodial
M56-00412	Wailuku Health Center	DAGS		R&A/Custodial
M56-00413	Wailuku State Off. Bldg.	DAGS	Yes	R&A/Custodial

* For location of ACM, see Appendix D - Asbestos Management Plan.

DISTRICT - PUBLIC FACILITY, KAUAI DISTRICT

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM*</u>	<u>Service Provided By DAGS</u>
M57-00317	Hanalei Court House			R&A
M57-00303	Hanapepe Health Center			R&A
M57-00309	Koloa Civic Center Bldg.	DAGS	Yes	R&A/Custodial
M57-00320	Lihue Baseyard (C/S)	DAGS	Yes	R&A/Custodial
M57-00308	Lihue Court House	DAGS	Yes	R&A/Custodial
M57-00314	Lihue Health Center	DAGS		R&A/Custodial
M57-00315	Lihue State Off. Bldg.	DAGS	Yes	R&A/Custodial
M57-00301	Plant Industry Facility			R&A/Custodial
M57-00305	Vector Control Bldg.			R&A/Custodial

* For location of ACM, see Appendix D - Asbestos Management Plan.

DISTRICT - LIBRARY, EAST OAHU DISTRICT

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM</u>	<u>Service Provided By DAGS</u>
L31-00029	Aina Haina Library	OLS		R&A
L31-00048	Hawaii Kai Library	OLS		R&A
L31-00063	Kahuku Pub. & Sch. Library	OLS		R&A
L31-00030	Kailua Library	OLS		R&A
L31-00073	Kaimuki Regional Library	OLS		R&A
L31-00032	Kalihi-Palama Library	OLS		R&A
L31-00033	Kaneohe Regional Library	OLS		R&A
L31-00072	Liliha Library	OLS		R&A
L31-00009	Manoa Library	OLS		R&A
L31-00061	McCully-Moilili Library	OLS		R&A
L31-00036	Waikiki-Kapahulu Library	OLS		R&A
L31-00078	Waimanalo Pub. & Sch. Library	OLS		R&A

DISTRICT - LIBRARY, HAWAII STATE

L32-00028	Hawaii State Library	OLS		R&A
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DISTRICT - LIBRARY, WEST OAHU DISTRICT

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM</u>	<u>Service Provided By DAGS</u>
L33-00062	Aiea Library	OLS		R&A
L33-00079	Ewa Beach Pub. & Sch. Lib.	OLS		R&A
L33-00064	Mililani Library	OLS		R&A
L33-00065	Pearl City Regional Lib.	OLS		R&A
L33-00094	Salt Lake/Moanalua Pub. Lib.	OLS		R&A
L33-00075	Wahiawa Library	OLS		R&A
L33-00035	Waialua Library	OLS		R&A
L33-00010	Waianae Library	OLS		R&A
L33-00037	Waipahu Library	OLS		R&A
L34-00014	Library for the Blind and Physically Handicapped	OLS		R&A

DISTRICT - LIBRARY, HAWAII DISTRICT

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM</u>	<u>Service Provided By DAGS</u>
L35-00215	Bond Mem. Library-Kohala	OLS		R&A
L35-00210	Hawaii Regional Library	OLS		R&A
L35-00211	Holualoa Library	OLS		R&A
L35-00212	Honokaa Library	OLS		R&A
L35-00218	Kailua-Kona Library	OLS		R&A
L35-00209	Keaau Pub. & Sch. Librry	OLS		R&A
L35-00214	Kealakekua Library	OLS		R&A
L35-00227	Laupahoehoe Pub. & Sch. Lib.	OLS		R&A
L35-00208	Mt. View Pub. & Sch. Lib.	OLS		R&A
L35-00216	Pahala Pub. & Sch. Lib.	OLS		R&A
L35-00245	Pahoa Pub. & Sch. Lib.	OLS		R&A
L35-00213	Thelma Parker Mem. Lib.	OLS		R&A

DISTRICT - LIBRARY, MAUI DISTRICT

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM</u>	<u>Service Provided By DAGS</u>
L36-00419	Hana Pub. & Sch. Library	OLS		R&A
L36-00402	Kahului Library	OLS		R&A
L36-00403	Lahaina Library	OLS		R&A
L36-00404	Lanai Pub. & Sch. Library	OLS		R&A
L36-00414	Makawao Library	OLS		R&A
L36-00407	Molokai Library	OLS		R&A
L36-00405	Wailuku Public Library	OLS		R&A

DISTRICT - LIBRARY, KAUAI DISTRICT

<u>Facility Code</u>	<u>Facility Name</u>	<u>Owner</u>	<u>ACM</u>	<u>Service Provided By DAGS</u>
L37-00302	Hanapepe Library	OLS		R&A
L37-00306	Kapaa Library	OLS		R&A
L37-00310	Koloa Pub. & Sch. Library	OLS		R&A
L37-00316	Lihue Library	OLS		R&A
L37-00313	Waimea Library	OLS		R&A

APPENDIX C

ASBESTOS RECORD KEEPING FORMS

LIST OF
ASBESTOS RECORD KEEPING FORMS

- A-01 Addendum to Inspection Report and Management Plan
- A-02 Miscellaneous Information
- A-03 Periodic Surveillance Report
- A-04 Fiber Release Report
- A-05 Action Report
- A-06 Asbestos Disposal Form
- A-07 Initial Cleaning
- A-08 Notification Transmittal Form

FIBER RELEASE REPORT

MAJOR EPISODE _____ MINOR EPISODE _____ DATE/TIME _____

DEPARTMENT _____

FACILITY/BLDG./ROOM _____

NAME OF PERSON REPORTING _____

JOB TITLE _____

TYPE OF ACBM EVALUATED: (Check One)

Thermal Ins. _____ Surfacing _____ Misc. _____

PREVIOUS ASSESSMENT CATEGORY: (Check One) Friable _____

Non-friable _____ No Damage _____ Potential Damage _____

Damage _____ Potential Significant Damage _____

Significant Damage _____

DESCRIPTION OF CHANGES OBSERVED: _____

FIBER RELEASE REPORTED TO: _____

DATE: _____ TIME: _____

DESIGNATED PERSON _____ DATE _____
(Signature)

ACTION REPORT

NO. _____

I. DEPT: _____ FACILITY/BLDG/ROOM: _____ TIME/DATE: _____
REPORTED BY: _____ TITLE: _____

II. TYPE OF ASBESTOS: THERMAL SYS INSU SURFACING MISCELLANEOUS

TYPE OF INCIDENT MAJOR MINOR

EPISODE DESCRIPTION: _____

AFFECTED AREA RESTRICTED: YES _____ NO _____

PREVIOUS ASSESSMENT CATEGORY: FRIABLE _____ NON FRIABLE _____

REPORTED TO: 1. COORDINATOR/ADAM: _____ TIME/DATE: _____

2. DAM: _____ TIME/DATE: _____

III. INITIAL CLEAN UP (ATTACH FORM A-04)

COMPANY: _____ SUPERVISOR: _____

NAME OF WORKERS: _____

DATE STARTED: _____ DATE COMPLETED: _____

IV. SCOPE OF ABATEMENT (ATTACH ANY OTHER DOCUMENTS THAT MAY BE NECESSARY, SUCH AS CONTRACTS, ETC.)

REMOVAL _____ ENCAPSULATION _____ ENCLOSED _____

TEMP ABATEMENT _____ FUTURE CIP _____ OTHER _____

V. DISPOSAL - ATTACH DISPOSAL FORM (A-05)

VI. AIR SAMPLING YES _____ NO _____

NAME OF COMPANY: _____ NAME OF AIR SAMPLER: _____

RESULTS OF AIR SAMPLING (ATTACH)

VII. SIGNATURES:

COORDINATOR: _____ DAM: _____

ASBESTOS DISPOSAL FORM

I. DEPT: _____ FACILITY/BLDG/RM: _____
PERSON REPORTING DISPOSING OF MATERIAL: _____
ACTION REPORT (A-01) NO. _____

II. DISPOSED BY STATE: AGENCY: _____

DISPOSED BY CONTRACTOR: NAME: _____

NAME OF HAULER: _____

III. LANDFILL

NAME: _____

ADDRESS: _____

CITY/STATE/ZIP: _____

PHONE: _____

OWNER/OPERATOR'S NAME: _____

ADDRESS: _____

CITY/STATE/ZIP: _____

PHONE: _____

I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE AND THAT THE LAND FILL HAS BEEN APPROVED FOR DISPOSAL OF ASBESTOS. THE DELIVERED MATERIAL WILL BE COVERED WITH SIX (6) INCHES OR FIFTEEN (15) CM OF NON-ASBESTOS MATERIAL WITHIN 24 HOURS.

LANDFILL OPERATOR/DATE

ORIGINAL TO: ACTION REPORT COORDINATOR

COPY TO: DEPT DAM/DISPOSAL AGENCY

INITIAL CLEANING

ACTION REPORT (A-03) NO. _____

AREAS CLEANED:

BLDG/ROOM(S)

METHODS USED:

JOHN WAIHEE
GOVERNOR



Robert P. Takushi
COMPTROLLER

Lloyd I. Unebasami
DEPUTY COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING
AND GENERAL SERVICES
CENTRAL SERVICES DIVISION
729B KAKOI STREET
HONOLULU, HAWAII 96819

- DIVISIONS:
- ACCOUNTING
- ARCHIVES
- AUDIT
- AUTOMOTIVE
- CENTRAL SERVICES
- PUBLIC WORKS
- PURCHASING
- SURVEY

NOTIFICATION TRANSMITTAL FORM

Date: _____

TO:

FROM:

SUBJECT:

The attached records are for inclusion in the Department's Asbestos Management Plan.

Remarks

- | | | |
|---|-------|-------|
| 1. Notification of Location of Asbestos | _____ | _____ |
| 2. Air Monitoring Report | _____ | _____ |
| 3. Fiber Release Report | _____ | _____ |
| 4. Action Report | _____ | _____ |
| 5. Periodic Surveillance Report | _____ | _____ |
| 6. Other | _____ | _____ |

APPENDIX D

PUBLIC WORKS DIVISION PROCEDURES

PUBLIC WORKS DIVISION PROCEDURES

1. State Public Works Engineer's Memo of Nov. 6, 1989 -
Subject: Asbestos Survey Reports
2. State Public Works Engineer's Memo of Nov. 28, 1989 -
Subject: Section 01015 - Contractor Use of Premises
3. Specification Section 01015 - Contractor Use of Premises
4. State Public Works Engineer's Memo of Jan. 18, 1990 -
Subject: Litigation Type Asbestos Surveys
5. Procedures for Requesting and Conducting Litigation Type
Survey to Sample and Test for Asbestos Containing
Materials in State Buildings (including schools) dated
January, 1990
6. State Public Works Engineer's Memo of July 31, 1990 -
Subject: Non-friable ACM Removal Prior to Building
Demolition
7. State Public Works Engineer's memo of Sept. 12, 1990 -
Subject: Asbestos Abatement Recordkeeping & Transfer
Policy
8. Scope of Service; Air Monitoring and Inspection Services
9. Guidelines - Reroofing Over ACM Roofing

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VERNON

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OCT 29 8 23 AM '89

RUSSEL S. HAGATA
COMPTROLLER

James H. Yasud
DEPUTY COMPTROLLER

HAWAII DISTRICT OFFICE
DIV. OF PUBLIC WORKS
D.A.C.S.

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS

LETTER NO. S-1213.9

P. O. BOX 118, HONOLULU, HAWAII 96810

NOV 6 1989

MEMORANDUM

TO: Mr. Kaoru Higaki, Hawaii District Engineer ✓
Mr. Shigeru Sano, Maui District Engineer
Mr. Wilfred Kimura, Kauai District Engineer

FROM: Teuane Tominaga, State Public Works Engineer

SUBJECT: Asbestos Survey Reports

Under DOSH regulations, we are required to inform contractors working on State projects about asbestos that may be present in the facilities in which they are working. We recommend that this be done as soon as possible for projects now under construction in your district.

Attached for information and use is a complete set of asbestos survey reports prepared by Hall-Kimbrell for State school facilities located in your district.

We are also transmitting all available asbestos survey reports of non-school facilities in your district. Some of the non-school facilities in your district have not been surveyed as yet. For all projects that have not been surveyed for asbestos, we recommend that contractors be advised to work with caution. The contractors should notify us immediately if any suspected material is found so that we can verify whether it contains asbestos or not.

We suggest copies of the applicable asbestos survey reports be reproduced and furnished to the appropriate contractors as soon as possible.

TEUANE TOMINAGA

Attach.

Comptroller
 State P.W. Engr.
 P.W. Secty.
 Staff Serv.
 Planning Br.
 Proj. Mgmt. Br.
 Design Br.
 Inspec. Br.
 Contracts
 Fiscal Off.
 Pmt. Off.
 Pre-Audit
 1/20/89

S-1290.9

NOV 28 1989

MEMORANDUM

TO: Mr. Jerry Nishida, Chief, Project Management Branch
 Mr. Ralph Ichiyama, Chief, Design Branch


FROM: Teuane Tominaga, State Public Works Engineer

SUBJECT: Section 01015 - Contractor Use of Premises

The subject section (copy attached), which gives the Contractor notification of asbestos in accordance with the OSHA Requirements, shall be incorporated in all Public Works projects hereafter.

Note that Paragraph C requires the Contractor to ask us for asbestos survey reports for any buildings other than those designated for the projects if he expects to work in them. This will preclude our having to initially supply him with reports for all the buildings on the particular site. However, be sure to include the legend that goes with the reports which was given you earlier.

Please implement this section in your projects immediately.


 TEUANE TOMINAGA

Attachment

SECTION 01015 - CONTRACTOR USE OF PREMISES

PART 1 - GENERAL

1.01 GENERAL CONDITIONS

- A. The Contractor shall review the attached asbestos survey reports and insure that he fully understands their contents as to whether and where there may be asbestos containing materials (ACM) in the building(s) in which he will be working.
- B. The Contractor shall inform his employees, subcontractors and all other persons engaged in the project of the presence (as applicable) of asbestos in the existing buildings at the job site in accordance with the requirements of Chapter 110, Article 12-110-2(f)(1)(B) of the Occupational Safety and Health Standards, State of Hawaii.
- C. In the event the Contractor, his subcontractor(s) and/or other persons he engages in the project must work in any building or buildings on the site other than the one(s) designated in the project, he shall request copies of the asbestos survey report(s) for such building or buildings from the Public Works Inspection Branch and use them to notify his people as indicated above.

JAN 18 1990

MEMORANDUM

TO: Branch Chiefs
District Engineers

FROM: Teuane Tominaga, State Public Works Engineer

SUBJECT: Litigation Type Asbestos Surveys

Attached is a document detailing the procedures to be followed in requesting and conducting the subject surveys for all State buildings.

You are requested to follow the directives therein as stipulated and/or as necessary in your area of operations.

Please call either Ron Morikawa or Ed Arakawa if you have any questions about the document.



TEUANE TOMINAGA

RM:gsj
Attach.

PROCEDURES FOR REQUESTING AND CONDUCTING LITIGATION TYPE SURVEY TO SAMPLE AND TEST FOR ASBESTOS CONTAINING MATERIALS IN STATE BUILDINGS (INCLUDING SCHOOLS) (JANUARY 1990)

A. Initial Review for Asbestos Containing Materials (ACM)

1. Before initiating a particular project which affects any existing state building, the branch responsible for the project design shall check whether a litigation type survey is being done or exists for the facility and the particular area which will be affected by the project. (It should be noted that the scope of the present surveys did not include building exteriors and building interior areas not accessible to observation without the use of tools and the destruction of non-suspect surface material. However, the scope did include the sampling and testing of all friable and non-friable visible suspect interior building material)
2. The Branch responsible for the project design shall also conduct a visual inspection of any existing state building (or a privately owned building, in the case of leased office space) to determine whether the area affected by the project has materials that could be ACM. Whenever possible, as-built drawings and/or specifications shall also be reviewed for ACM when the project will disturb areas not accessible to visual observation.
 - a. If a litigation type survey does exist, the information contained therein shall be used to validate the visual observations and to design the removal or encapsulation of any ACM found to be present. If materials suspected to be ACM are visually observed, but are not noted in the survey as ACM, the branch responsible for the project design shall notify Quality Control by pointing out the areas in question in writing. Quality Control will inform the Asbestos Unit (Department of the Attorney General) in writing of the discrepancies, as well as obtain validation as to whether or not such materials are ACM.
 - b. If no litigation type survey exists for the area and/or if during the visual inspection materials suspected to be ACM are observed, and/or if examination of the as-built drawings and/or specifications reveals suspect ACM, the branch responsible for the project design shall request that a litigation type survey be conducted as outlined in B. below._

B. Request to Conduct Litigation Type Asbestos Survey under Hall-Kimbrell's Master Contract with DAGS. NOTE: Litigation-type surveys are not required if the estimated cost of asbestos abatement is less than \$2000; however, this does not preclude the necessity of sampling and testing suspect material that would be disturbed during renovations.

1. The Asbestos Unit has indicated that all of the surveys that were scheduled by the AG's office for 1988 (Calendar Year 1989) have been conducted (albeit the reports are still in the process of being compiled and published). Therefore, if the desired survey is in a building which was not surveyed in 1989, the branch responsible for the project design will negotiate a fee with Hall-Kimbrell Environmental Services, Inc. on the basis that the survey will be conducted in complete compliance with the existing master contract for litigation type asbestos survey. NOTE: The survey shall be of the ENTIRE building unless the user agency is unable or unwilling to fund that cost. In that event, the scope shall be limited to only those areas which are to be affected by the project planned. After the fee is negotiated, the branch responsible for the project design shall complete the form REQUEST TO CONDUCT LITIGATION TYPE ASBESTOS SURVEY (UNDER HALL-KIMBRELL'S MASTER CONTRACT) (Copy attached). The information may be hand written if done neatly in printed letters. The original of the completed form shall be sent to the State Public Works Engineer for fee approval. Upon approval, the original shall be returned to the branch responsible for the project design.

2. One copy of the approved form shall be sent by the branch responsible for the project design to Staff Services for preparation of a purchase order for the specific litigation type asbestos survey. One copy of the approved form, together with the purchase order, shall be sent to Quality Control by Staff Services. Quality Control shall file the documents in a centralized record file and use the information to track the dollar amount of services being provided by Hall-Kimbrell under their master contract, which has an initial ceiling of \$100,000. (Note: The master contract has no certified funds. The negotiated fees must be paid out of individual project funds.)

3. The purchase order for the litigation type survey shall be administered by the branch responsible for the project design. Upon completion of the survey, seven (7) copies of the survey report shall be obtained and distributed as follows:

- 2 copies - Quality Control
- 3 copies - User (D.E. for Neighbor Islands)
- 1 copy - DAGS - Project Management
- 1 copy - DAGS - Planning Branch
- 1 copy - Renovation Consultant
- 1 copy - Asbestos Consultant

C. Situation Where Material Suspected to be ACM is Discovered During the Construction of a Project.

1. If materials suspected of being ACM are discovered during construction, the branch or district office administering the construction contract shall apprise the branch responsible for the project design of the findings, including a written description of or marked-up plan showing where the material was found. The branch responsible for the project design shall notify Quality Control of the findings and/or follow up as follows:
 - a. If a litigation type survey does exist and if the materials suspected to be ACM are in visible and/or readily accessible areas and are not noted in the survey as ACM, Quality Control will follow up as necessary to obtain validation as to whether or not such materials are ACM and notify the branch or district administering the construction contract. Quality Control will also give a copy of the validation report to the branch responsible for the project design.
 - b. If it is determined that no litigation type survey exists for the area which will be affected by the project being constructed, the branch responsible for the project design shall proceed to request and conduct a litigation type survey as outlined in item B. Wherever possible, the process shall be expedited (such as by verbal negotiation of fee, hand-carrying of request form for approval, giving Hall-Kimbrell the Purchase Order number and requesting that they conduct the survey as the P.O. is routed for approvals, etc.) in order not to unduly delay the ongoing construction project.

3 State P.W. Engr.
 P.W. Secty
 Staff Serv.
 Planning Br.
 Proj. Mgmt. Br.
 Design Br.
 Inspec. Br.
 4 Quality Control
 Leasing Br.
 Contracts
 Fiscal Off.
 1 ER. M. ...

QC-61.0

JUL 31 1990

MEMORANDUM

TO: All Branch Chiefs and District Engineers
FROM: Teuane Tominaga
SUBJECT: Non-Friable ACM Removal Prior to Building Demolition

It has been our practice to remove all asbestos containing material (ACM) from buildings before they are demolished. However, the EPA recently clarified their requirements for removal of ACM in existing buildings (see the attached EPA memo dated February 23, 1990) by stating that nonfriable ACBM in good condition need not be removed from a building before it is demolished. Floor tile, roofing material, packing and gaskets (normally considered to be nonfriable material) must be inspected to determine if the ACM is in good condition. If the inspection indicates the ACM is peeling, cracking, or crumbling (friable), the ACM must be removed before the structure is demolished.

Accordingly, the policy as stated above shall be followed for all future projects. It shall also apply to projects now under construction if change orders can be implemented in a timely manner without causing claims from the contractor. Demolition as used herein means total demolition where the structure cannot be reinhabited.

In order to determine whether a structure may be demolished without removing the nonfriable ACM, a certified asbestos surveyor shall be employed to verify the condition of the ACM and to certify that the ACM is nonfriable.

For new demolition projects, PM or Design Branch shall be responsible to have the existing nonfriable ACM inspected.

For projects under construction on Oahu, the Inspection Branch shall be responsible to have the nonfriable ACM inspected.

All Branch Chiefs
Page 2

For projects under construction on the neighbor Islands, PM or Design Branch shall be responsible to have the nonfriable ACM inspected.

EXCEPTION: ACM must be removed if demolition is to be performed by burning or by dynamite.

If there are questions regarding the above, please contact Ron Morikawa or Ed Arakawa at 8-3928.



Teuane Tominaga

Attachment

JOHN WAIHEE
GOVERNOR



RUSSEL S. MAGAT
COMPTROLLER

James H. Yasuda

DEPUTY COMPTROLLER

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
DIVISION OF PUBLIC WORKS

LETTER NO. QC-108.0

P. O. BOX 115, HONOLULU, HAWAII 96810

SEP 12 1990

MEMORANDUM

TO: Design Branch ✓
Project Management Branch ✓
Inspection Branch ✓
Staff Services Branch ✓
Quality Control Branch ✓
All District Engineers ✓ *Mauia, Kauai & Hawaii*

FROM: Teuane Tominaga, State Public Works Engineer

SUBJECT: Asbestos Abatement Recordkeeping & Transfer Policy

A. The Department of Education is required by law to maintain records of all asbestos abatement projects completed after July 9, 1989. My memo of April 9, 1990, which specified that records for projects completed after October 1989 needed to be transferred to the DOE, is obsolete and shall be superseded by this memorandum.

B. The State Department of Health (DOH), acting as the EPA'S enforcement agency, recently inspected 12 schools and audited their asbestos records. They found that the required records were missing from their asbestos management plans. The DOH would like to get compliance on recordkeeping so that enforcement action (fines) need not be imposed. Since DAGS generates the abatement documents, it is our responsibility to assure that the required documents are sent to the DOE.

C. For your information, the DOH plans to inspect 30 schools annually. Their inspection schedule is shown in attachment "A".

D. All documents to be mailed to DOE shall be sent to the Facilities and Support Branch, who will in turn make their distribution to the affected school principals and school district superintendents. They will need three (3) sets of the below listed documents for every single-district, single-school asbestos abatement project. If a project affects more than one school and/or one school district, however, an additional set for each additional school and one for each additional school district shall be sent to the DOE.

1. Plans
2. Specifications
3. Addenda
4. Designer's name & accreditation number
5. Visitor's Log
6. Abatement Contractor's certification number
7. Air Monitoring Reports
8. Contractor's Notification Form to DOH
9. Asbestos Disposal Forms
10. Change Orders
11. Certificate of Completion

E. The following procedures shall be followed to insure that the required number of sets of asbestos abatement documents are transferred to the DOE in a timely manner:

1. ON-GOING & FUTURE ABATEMENT PROJECTS

a. DESIGN PHASE

The Branch responsible for the design (Design Branch or Project Management Branch) shall be responsible to follow-up on the following:

- i. Insure that the responsible asbestos abatement designer's name and accreditation number is shown on the plans and specifications
- ii. Insure that the designer includes Items C-5, 6, 7, 8, & 9 from above in the specifications as contractor submittal requirements.
- iii. Insure that the appropriate number of sets of the final plans, specifications and addenda as determined per paragraph C above is shown on the distribution list (DPW

Form 114-c) provided to the Staff Services Branch. A copy of the distribution list shall be furnished to the Quality Control Branch.

b. CONSTRUCTION PHASE

- i. (For Neighbor Island projects, PM or Design Branch shall pursue this action; for Oahu projects Inspection Branch shall pursue this action):

Negotiate and insure that the Construction Management (CM) Consultant's scope of work includes the task of retrieving and binding the required number of sets of documents. The attached scope of work revised in August 1990 for Air Monitoring and Inspectional Services (Attachment B) shall be used to negotiate Construction Management (CM) Contracts. If existing contracts do not include this requirement, a change order shall be negotiated with the CM Consultant to perform this task.

- ii. The Inspection Branch for Oahu projects or the District Engineer for neighbor island projects shall review the Construction Management Consultant's submittal package for completeness before releasing final payments to the Contractor and the Consultant.

- iii. The Inspection Branch for Oahu projects or the District Engineer for neighbor island projects shall send the abatement records provided by the CM Consultant to the DOE with a transmittal letter indicating the DAGS Job Title and Job Number (See Attachment C for sample letter) and what documents are being transmitted. A copy of the transmittal letter shall be provided to the Quality Control Branch.

2. Completed Asbestos Abatement Projects

Documents for asbestos abatement projects completed after July 9, 1989 also need to be retrieved and sent to the DOE. The documents required are the same as those listed under paragraph C. Attachment "D" (3 pages) gives the list of abatement projects completed after July 9, 1989.

Responsibility for providing the listed documents to the DOE shall be as indicated below:

a. Items C-1, 2 & 3

If extra plans and specs are requested by the DOE and they are available, the Staff Services Branch shall be responsible to provide them. It is suggested that the DOE be contacted before the effort is expended in this regard.

b. Items C-4 through C-11

1. Oahu Projects

The Inspection Branch shall be responsible to retrieve the required documents from the project files and send them to the DOE with a letter of transmittal indicating what documents are attached. If any of the required documents are missing from a given project file, the design consultant, CM consultant or the abatement contractor shall be contacted to furnish the missing documents. If missing documents are not retrievable for some reason, an explanation to this effect shall be included in the letter of transmittal.

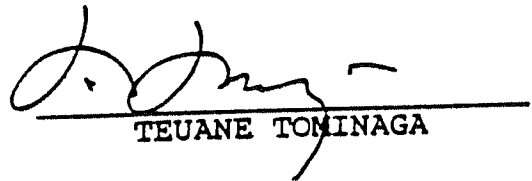
c. Neighbor Island Projects

The District Engineer shall be responsible to retrieve the documents from the projects files and sends them to the DOE. If records are missing the design consultant, CM consultant or the abatement contractor shall be contacted to provide the missing documents. If missing records are not retrievable for some reason, an explanation to this effect shall be included in letter of transmittal to the DOE.

If the project file is stored at the Attorney General's Asbestos Unit Office, the Quality Control Branch shall assist the District Engineer in retrieving the records.

F. Brand New Buildings

The DOE will obtain occupancy clearance for new facilities from the DOH by submitting a half-size plot plan and the asbestos prohibition clause contained in the project specifications. The Project Management Branch shall assure that preparation of the half-size plot plans are included in the design consultant's contract and that an appropriate number of copies of the reduced plan are sent to the DOE as stipulated in paragraph C above.


TEUANE TOMINAGA

Attachments

SCOPE OF SERVICES

AIR MONITORING AND INSPECTION SERVICES

Project: _____
Date _____
Job No. _____

SECTION 1 - DEFINITIONS

Unless otherwise explained within the context:

"ACM" means asbestos-containing materials.

"Air monitoring specialist" means a member of the construction management team who enters the work area to set up the air monitoring device and then collects the various air samples to be sent to the laboratory for analysis.

"Building representative(s)" means the person or persons designated by the users of the building to act on their behalf.

"Contractor" means the construction firm engaged to remove, encapsulate and/or dispose of the ACM.

"Construction manager" means the consultant's employee or his consulting subcontractor responsible for ensuring that the work of the contractor is conducted according to the contract documents and in compliance with applicable laws, regulations, ordinances, etc.

"Construction management team" means the consultant's personnel or his consulting subcontractor who is involved in inspecting the work of the contractor and in air monitoring, sampling, testing before, during and after the asbestos abatement project.

"Consultant" means the firm contracted to inspect the work of the contractor during removal, encapsulation and disposal of the ACM and is capable or has a subcontractor to perform air monitoring, sampling and testing before, during and after the asbestos removal and/or encapsulation. The consultant may be the construction manager or said construction manager may be a subcontractor to the consultant.

"Industrial hygienist" means a Certified Industrial Hygienist (CIH) certified by the American Board of Industrial Hygiene who shall direct all air monitoring and project supervision.

"Project designer" means the person or firm who prepared the plans and specifications to remove, encapsulate and dispose of the ACM.

"Project manager" means the State employee responsible for administering the construction contract and ensuring that the work of the contractor is conducted according to the contract documents and in compliance with applicable laws, regulations, ordinances, etc.

"Consulting subcontractor" means firm acting in cooperation with the "consultant" to perform air monitoring and testing work during and after the asbestos removal and/or encapsulation work; or construction manager for the consultant.

Because of the serious health threat that exposure to asbestos fibers poses, the Federal government, as well as the State government, has enacted laws controlling the removal of ACM. Federal and State agencies administering these laws in turn have promulgated numerous regulations. Since asbestos removal or abatement is considered a hazardous activity and since there is so much risk of potential public harm, it is imperative that asbestos-containing materials (ACM), when removed from State buildings, are removed safely in accordance not with only the project plans and specifications, but also in strict compliance with all applicable State and Federal laws and regulations. Asbestos abatement projects can deteriorate rather rapidly, with regard to the quality of work performed by the Contractor if the Contractor is left unsupervised. It is, therefore, essential that a team of competent personnel provide constant inspection at every aspect of the abatement project. This is the objective of the consultant's construction management team.

The construction management team shall provide inspection to include on-site examination of the abatement work to ensure that the work is being performed in accordance with the plans and specifications, federal and state regulations. Daily communication with the building users is mandatory as is periodic clarification and instructions from the project designer.

SECTION 2 - CONSTRUCTION INSPECTION

2.1 Pre-Construction Conference

This conference shall be held prior to construction and shall be conducted by the State project manager

assisted by the consultant's construction manager. Present also shall be the contractor, project designer, user agency and/or building representative(s), industrial hygienist, and air monitoring personnel. This meeting is intended to:

- A. Review final schedule for project
- B. Verify legal requirements and special conditions
- C. Verify compliance with pre-construction requirement
- D. Obtain copies of all mandatory notifications
- E. Inspect sample respiratory equipment and other abatement equipment
- F. Review procedures and responsibilities
- G. Clarify the scope of work and its impact on the users of the building.

2.2 Photographic Record of Project

The on-site construction manager shall record the asbestos abatement project with representative photos. All photos shall become the property of the State and are to be accompanied by a detailed log.

2.3 Project Log

The construction manager at each site shall maintain daily field reports detailing all key activities during abatement. The project designer shall receive summary of project activities, progress, etc. These records shall be available for review by the state project coordinator through the consultant's construction manager. The contents of the daily field reports shall be incorporated with other project data into a final project report (see Section 4.4).

2.4 Visual Inspection of All Containment Areas

The on-site construction manager shall be responsible for regular inspection of all containment areas. Inspections shall be conducted during the actual work performance of the contractor to document the work practices employed by the contractor and prior to air testing in each area to verify that all materials scheduled for abatement were removed and the area was properly cleaned.

2.5 Issuance of Change Orders

If changes are necessary once construction begins, the consultant shall review request for change and make a recommendation for approval. Any appropriate change order will be issued subject to and after approval by the State.

SECTION 3 - AIR MONITORING DURING THE PROJECT

Air monitoring during the removal, encapsulation, enclosure, and clean-up operations of an asbestos abatement project is required by OSHA regulation 29 CFR 1926.58 and EPA 40 CFR Part 763, Subpart G, Worker Protection. It is vital to protect the health, safety and interests of the State, the building occupants, and the contractor's abatement workers as well as the consultant's employees at the project site. The consultant's on-site air monitoring specialists and industrial hygienists shall perform the following activities associated with this portion of the project:

- On-site environmental and personnel air monitoring as required by EPA, OSHA, and the project specifications (see methodology below).
- Laboratory analysis by PCM analysis using NIOSH 7400 method. NOTE: For AHERA projects, TEM analysis will be required for final clearance.
- Monitoring of decontamination procedures at site entry/exit.
- Monitoring of containment maintenance by visual and instrumental inspection.
- Interface with project inspectors, building representatives, representatives of regulatory agencies, and project designers during site visits.
- Ensure that proper respiratory protection is utilized by all persons at the project site.
- Relay to the State project coordinator any discrepancies in contractor's action with provisions of project specifications.
- Act quickly in case of emergencies with appropriate response.

Air quality records are one indication of the professional manner in which the removal is proceeding, whether there are accidental leaks or faulty seals in barriers, whether the outside environment is being contaminated and, most of all, how clean the room finally is when ready for re-occupancy.

3.1 Sampling Design

The following is a typical sampling design per containment area during actual construction. The number of samples and volume quantities may vary, depending on each project's specifications.

A. Background Samples

Background baseline samples shall be taken prior to abatement to establish pre-abatement airborne fiber concentration levels. Three high volume continuous flow samples shall be taken per estimated containment area. All work area samples shall be analyzed by the NIOSH 7400 method. All personal samples shall be analyzed in accordance with OSHA 29 CFR 1926.58. The reference TWA (time weighted average) shall be established one day prior to the masking and sealing operations.

B. Work Area Samples

Low volume samples of 480 liters each shall be taken in the work area. Ambient air samples shall be taken in the work area for comparison to barrier samples in an effort to ensure that containment systems are secure and that the persons entering the work area are wearing proper respiratory protection. If monitoring inside and outside the asbestos abatement work area shows airborne concentrations have reached the predetermined specified TWA, the consultant shall stop all work, notify the State immediately, have the contractor correct the condition(s) causing the increase and ensure that the contractor obtains the State's approval prior to restarting the removal work.

C. Barrier Samples

Monitoring outside the temporary barriers determines if leakage is occurring outside the work areas due to loss of negative pressure or faulty seals. Two high volume samples shall be taken per eight-hour day per barrier.

D. Outside Environmental Samples

Each removal area shall be sealed so that airborne fibers cannot escape into occupied areas. Air is forcibly drawn from the removal area by a negative

air machine, filtered and exhausted to the outside environment. High volume samples shall be taken at the negative air unit exhaust to ensure compliance with the levels required by the project specifications and/or any applicable regulations. One sample per eight-hour day per containment area shall be taken.

E. Final Clearance Samples

After air in containment has been exchanged by High Efficiency Particulate Absolute (HEPA) filtration at least 72 times, (air clearance) samples shall be taken to determine if air is cleaned below the specified rate. If not, the area must be cleaned again and a second set of clearance samples run. When the fiber count is below the specified level, a final set of samples shall be collected for analysis by transmission electron microscopy or phase contrast microscopy depending on the size of the abatement area. If these tests reveal that the air has been cleaned to the acceptable standards, the area may be opened for re-occupancy.

3.2 Laboratory Analysis

The consultant's industrial hygienist shall maintain testing facilities in the vicinity of the project site. An industrial hygiene monitoring setup with high-volume and low-volume pumps, calibrators and all filtering needs, in addition to a fully-equipped laboratory for rapid sample analyses to the field, shall be included in this facility. This is vital because it increases the efficiency of the contractor and allows immediate readings of air samples, rather than mailing them to a laboratory, which sometimes delays the release of containment areas.

3.3 TEM Analysis

Samples requiring TEM analysis shall be sent to an approved and certified laboratory which shall be qualified to provide this type of analysis. A short turnaround time is required for receipt of the results. This will affect the project's cost because the shorter the turnaround time imposed on the laboratory, the greater the charge for the analysis. The consultant's

TEM lab shall be fully equipped and qualified to complete TEM analysis on all three levels of protocols and shall utilize the level directly related to the information sought:

Level I - the most rapid procedure for screening many samples. However, results should not be used in legal proceedings.

Level II - elemental analysis for regulatory action in addition to all Level I specifications.

Level III - confirmation analysis of controversial samples, required for most legal proceedings.

Of the three levels, use Level II. It analyzes the samples to specifications desired for regulatory action.

3.4 Daily Testing Records

At the conclusion of every day's testing, the consultant's industrial hygienist shall provide copies of all air monitoring records of each containment area to the State, the contractor, and the consultant's project manager.

3.5 Constant Project Observation

As stated above, probably one of the most important aspects of combining the portfolio of construction manager and industrial hygienist is that the professional on site is thoroughly familiar with the intricacies and requirements of the project. This allows the State's project manager and the consultant's construction manager to keep a constant check on the project's progress. In this instance, the on-site professional is also charged with maintaining constant project observation. If any problems occur, the consultant's construction manager and the State's project manager are notified immediately.

SECTION 4 - POST-ABATEMENT SITE CLEARANCE

At the conclusion of each asbestos abatement project, several inspections shall be conducted to evaluate the contractor's complete adherence with the contract. During the final inspections, the consultant's construction manager shall document all omissions and discrepancies. These records shall become part of the final document package.

4.1 Project Completion Punch List

All areas should be documented during the walk-through portion of the pre-bid conference and checked again at the end of construction. The project completion punch list is an itemized list of materials that were broken or damaged during construction and which the contractor is responsible for replacing or remediating it.

4.2 Certificates of Completion

A final project inspection ensures that all work specified in the contract was completed to the satisfaction of the State and the consultant's project manager. The consultant's construction manager will then recommend that final settlement be published for the contract and final payment made to the contractor.

4.3 Coordination with EPA, OSHA and Other Agencies

Throughout the entire project, the consultant's construction management team will maintain required contact with the EPA and OSHA.

4.4 Preparation of Final Project Report

The consultant shall assemble data to prepare and submit four (4) sets to _____ branch (*unit*) the following data in a bound report:

- A. Provide designated project designer's name and accreditation number.
- B. Visitors' log showing all persons entering the abatement site.
- C. Certification of the abatement contractor's employees.
- D. All air monitoring reports.
- E. Contractor's notification form to EPA Region 9 and the Department of Health.
- F. All asbestos disposal form(s).
- G. All change orders.
- H. Certificate of completion signed by the consultant's project manager and the certified industrial hygienist.

PROJECT REQUIREMENTS:

A. GENERAL DESCRIPTION: _____

B. DETAILED DESCRIPTION: _____

GUIDELINES

REROOFING OVER ACM ROOFING

- A. GENERAL--The following guidelines apply only to projects where new roofing material is to be placed over an existing asbestos containing material (ACM) built-up roofing where only "minor disturbance" to the ACM will occur. A determination of whether the disturbance is "minor" is job specific, and the scope of the proposed job needs to be discussed in detail with DOH for concurrence. All plans involving disturbance of existing ACM roofing shall be coordinated through the Chief, Environmental Management Division, Department of Health for concurrence. Typically, a "minor disturbance" can include such tasks as cutting along and removing metal gravel stops and/or edge flashings, cutting and removing of fish mouths, cutting blisters, and cutting and removing small amounts of ACM around roof drains and vents. The regulators need to know quantity and type of ACM disturbance before they can discuss asbestos questions.
- B. EXCLUSION--Reroofing projects involving the removal of existing ACM roofing are excluded from these guidelines and must be designed and managed as asbestos abatement projects.
- C. MINOR DISTURBANCE GUIDELINES--Minor disturbance of ACM (with DOH concurrence) may be considered as a non-asbestos project and the following guidelines will apply:
1. ASBESTOS HAZARD NOTIFICATION--The Contractor needs to be informed about the presence of asbestos and a copy of the asbestos survey report needs to be included in the specifications.
 2. AHERA EXCLUSION--Exterior built-up ACM roofing removal is excluded from AHERA. Therefore, an accredited abatement designer is not required but the designer should be familiar with asbestos health concerns. In cases where the roofing membrane may also be the interior building surface (such as corrugated transite roofing), AHERA will govern and an accredited designer will be required.

Appendix E