

Asbestos Operations and Maintenance Program
Will Rogers Elementary School
2401 14th Street
Santa Monica, CA 90405

Santa Monica Malibu Unified School District
1651 16th St. | Santa Monica, California 90404

May 3, 2023 | Project No. 212089001



Geophysics | Engineering Geology | Laboratory Testing | Industrial Hygiene | Occupational Safety | Air Quality | GIS

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Mr. Glen Infuso
Director
Santa Monica Malibu Unified School District
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A handwritten signature in blue ink, appearing to read "David M. Kelly", followed by a long horizontal line.

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A handwritten signature in blue ink, appearing to read "Stephen J. Waide", written in a cursive style.

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1 INTRODUCTION

In accordance with the Santa Monica Malibu Unified School District's (District's) authorization, Ninyo & Moore has prepared this Operations and Maintenance (O&M) Program for known and suspect asbestos-containing materials (ACM) at the Will Rogers Elementary School located at 2401 14th Street, Santa Monica, California (site; Figures 1 and 2).

The identified ACM planned to remain in place on the structures and managed by this O&M Program are described in the Table 1 below.

Table 1 – Asbestos Containing Materials		
Material	Location	Quantity
Building A		
White Board mastic*	Classrooms & Restrooms	4 EA
Building B		
Mirror mastic*	Restroom mirrors	2 EA
Building C		
Mirror mastic*	Restroom Mirrors	2EA
Building D		
Mirror mastic*	Restrooms mirrors	2 EA
White board mastic*	Classrooms walls	10 EA
Tack board mastic	Classrooms walls	15 EA
Building E		
Mirror mastic*	Restroom mirrors	2 EA
White board mastic*	Classrooms walls	10 EA
Tack board mastic*	Classrooms walls	15 EA
Building F		
None detected		
Building G		
Mirror mastic*	Restroom mirrors	2 EA
White board mastic*	Classrooms walls	10 EA
Tack board mastic*	Classrooms walls	14 EA
Building H		
Mirror mastic*	Restrooms mirrors	1 EA
White board mastic*	Classrooms walls	10 EA
Tack board mastic*	Classrooms walls	10 EA
Building I		
White board mastic*	Classrooms walls	10 EA
Tack board mastic*	Classrooms walls	10 EA
Building J		
None detected		
Building K		
None detected		
Notes: EA- each & - and * material is assumed to be an ACM		

This document has been prepared to assist in preventing potential exposures to asbestos and is designed to be implemented and maintained with the assistance of a California Division of Occupational Safety and Health Certified Asbestos Consultant (CAC). It should be noted that this O&M Program is interactive in nature, and may be modified during implementation and operation.

2 THE PURPOSE AND ELEMENTS OF THE PROGRAM

The purpose of the Asbestos O&M Program is to minimize exposure of building occupants (e.g., students, teachers, administrative personnel, maintenance personnel, visitors, contractors, and utility company personnel) to asbestos fibers from known and suspect ACM in the school buildings. This program is designed to maintain ACM in good condition, minimize future asbestos fiber release by controlling access to ACM, and to facilitate proper work practices around ACMs. The mere presence of ACM in a building does not mean that the health of building occupants is endangered. Asbestos fibers present a health hazard when they become airborne after being released from the material they are bound within. ACM in good condition, which are not damaged or disturbed, are unlikely to release asbestos fibers in the air. For this reason, this program has been designed to minimize the potential for future disturbance of ACM.

ACMs are classified by the United States Environmental Protection Agency (EPA) into one of three categories based on being friable or non-friable. The definition of a friable ACM is any material containing more than one percent asbestos that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. The EPA's National Emission Standard for Hazardous Air Pollutants (NESHAP) (NESHAP, 40 Code of Federal Regulation Part 61, subpart M) regulation has different material categories for ACMs. Each identified suspect homogeneous material is placed in one of the following EPA categories:

- **Category I Non-friable** - NESHAP defines a Category I non-friable ACM as packing, gaskets, resilient floor covering (except sheet flooring products which are considered friable), and asphalt roofing products which contain more than one percent asbestos.
- **Category II Non-friable** - NESHAP defines a Category II non-friable ACM as any material, except for Category I non-friable ACM, which contains more than one percent asbestos and cannot be reduced to a powder by hand pressure when dry.
- **Regulated Asbestos Containing Material** - is (a) friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

As a rule, the degree of hazard that exists in a particular building depends on a number of factors, one of the most important being the nature of the asbestos products present. ACMs such as asbestos-cement pipe and shingles, rolled roofing felts, asphalt roof shingles, and vinyl floor tiles in which the asbestos fibers are firmly bonded or encased in another material generally pose very little hazard after installation; however, the sanding, grinding, or cutting of these materials, may release asbestos fibers. Those types of materials are classified as Category I Non-Friable. Examples of Category II Non-Friable materials include plaster, and wall base-boards. Those

materials pose the lowest hazard, as the release of the asbestos fibers would require destruction of the material by, for example, burning or dissolving of the material with a solvent.

Asbestos fibers are more readily released from friable materials like spray-applied fireproofing or plaster. Friable materials are considered regulated asbestos containing materials (RACM) by the EPA, and can potentially become a hazard if they are not kept in an intact (good) condition. Friable materials can represent a serious potential health hazard in buildings. This does not mean, however, that friable materials containing asbestos pose a serious enough hazard to justify immediate corrective action.

The seven elements of the O&M Program are:

1. The Notification System to inform workers, tenants and building occupants where ACM are present, and how and why to avoid disturbing the ACM. Persons affected should be properly informed in writing.
2. The Surveillance Program to provide for regular ACM surveillance to note, assess and document any changes in the condition of the ACM.
3. The Work Control and Permit System to control activities which might disturb ACM.
4. The Work Practices Program to avoid or minimize fiber release during activities affecting the ACM.
5. The Record Keeping System to provide for documentation of O&M activities.
6. The Worker Protection Program to provide for medical and respiratory protection, as applicable.
7. The Training Program to provide for designation of an Asbestos Program Manager, as well as training for the manager and maintenance foreman.

3 ASBESTOS CHARACTERISTICS AND HEALTH EFFECTS

3.1 Characteristics of Asbestos

Asbestos is a naturally occurring mineral. It is distinguished from other minerals by the fact that its crystals form into long, thin fibrous bundles composed of minute hollow fibers. Deposits of asbestos are found throughout the world. Asbestos minerals are divided into two groups: 1) serpentine, which has a sheet or layered structure, and 2) amphibole, which has a chain-like crystal structure. Chrysotile, the only mineral in the serpentine group, is the most commonly used type of asbestos and accounts for approximately 95 percent of the asbestos found in buildings in the United States. Chrysotile is commonly known as “white asbestos,” so named for its natural color. Five types of asbestos are found in the amphibole group. Amosite, the second most likely type to be found in buildings, is often referred to as “brown asbestos” and its resistance to acid and heat is very high. Crocidolite, “blue asbestos,” is also an amphibole and is also very resistant

to acid and to the effects of outdoor exposure. Crocidolite was utilized in high temperature insulation applications. The remaining three types of asbestos in the amphibole group are: anthophyllite, tremolite, and actinolite. These are extremely rare, and of little commercial value.

3.2 Use of Asbestos

Asbestos has been used in literally hundreds of products. EPA and others distinguish between friable and non-friable forms of ACM. Friable ACM can be “crumbled or reduced to powder by hand pressure.” Other things being equal, friable ACM are thought to release fibers into the air more readily. However, many types of non-friable ACM can also release fibers if disturbed. Asbestos gained wide spread use because it is plentiful, readily available, low in cost and because of its unique properties – it does not burn, it is strong, it conducts heat and electricity poorly, and it is impervious to chemical corrosion.

One of the most common uses for asbestos was as a fireproofing material. Chrysotile was the commonly used asbestos constituent, comprising up to 95 percent of the fireproofing mixture, and was used in conjunction with materials such as vermiculite, sand, cellulose fibers, gypsum and a binder such as calcium carbonate. These materials are soft and may be fluffy in appearance and to the touch. They vary in color from white to dark gray; occasionally they have been painted or encapsulated with a clear or color sealant.

Asbestos is added to a variety of building materials to enhance strength. It is found in concrete and concrete-like products. Asbestos cement products generally contain Portland cement, aggregate, and chrysotile fibers. Asbestos cement products are used as siding and roofing shingles; as wallboard; as corrugated and flats sheets for roofing, cladding, and partitions or decorative panels; and as pipes for a variety of applications above and below ground. Asbestos has also been added to asphalt, vinyl and other materials to make products like roofing felts, exterior siding, floor tile, joint compounds and adhesives.

Fibers in asbestos cement, asphalt and vinyl are usually firmly bound in the cement and will be released if the material is mechanically damaged, for example by drilling, cutting, or sanding. Roofing shingles and siding may also show slow deterioration due to weathering. Studies have also shown that dry buffing of bare vinyl-asbestos floor tile during routine maintenance will release unacceptable quantities of airborne fibers.

As an insulator, asbestos received wide spread use for thermal insulation and condensation control. It was usually spray applied, trowel applied, or manually installed after prefabrication.

Asbestos can also be component of acoustical plaster. The material was applied by trowel or by spraying on ceilings and sometimes walls. Similarly, as a decorative product, asbestos was mixed with other materials and sprayed on ceilings and walls to produce a soft, textured appearance.

The following tables summarize typical ACM uses:

Table 2 – Ceiling, Walls, and Insulation		
Product	How Fibers Are Released	Comments
Sprayed-on or troweled on insulation (on ceilings, walls, and steelwork)	Water damage, deterioration, contact damage	In use from 1935 to 1978. EPA banned nearly all uses in 1978.
Acoustical		
Fireproofing		
Decoration		
Condensation prevention		
Fire doors	Drilling, demolition	
Caulking putties	Sanding, scraping	
Vinyl wall covering	Sanding, scraping, tearing	
Insulation under/around heat sources such as stoves and fireplaces (asbestos containing cement sheets or paper)	Sanding, scraping, cutting	
Patching or taping compound	Sanding, scraping	In use from 1945 to 1977. Banned use in 1977, but in 1980 many industrial joint-taping compounds still contained asbestos.
Some types of fireproof wallboard	Cutting, contact damage	Typically 1930-1950
Insulation “sandwiched” between plaster walls and behind ceilings and blown in or loose insulation	Disturbing during renovation or demolition. If located in air stream, may be disturbed by air-flow, releasing fibers throughout building.	Typically 1930-1950
Electrical insulation (around wiring)	Damage, fraying, or other deterioration	Usually in panel boards or heating appliances.
Some textured paints (small amounts)	Sanding	Typically on roofs
HVAC duct insulation and flexible/expansion joints	Cutting, fraying, or other deterioration	

Table 3 – Flooring		
Product	How Fibers Are Released	Comments
Vinyl tiles (binding agent)	Routine maintenance of large areas using power buffing machines	In use since 1950
Asphalt tiles (binding agent)	Removal, sanding	In use since 1920
Floor tile mastics	Dry-scraping, cutting	In use since 1920
Vinyl sheet flooring backing	Removal, sanding	In use since 1950

Table 4 – Roofing and Siding		
Product	How Fibers Are Released	Comments
Roofing and siding (binding agent is asphalt)	Replacing, repairing, demolishing	In use since early 1900s.
Shingles	Replacing, repairing, demolishing	In use since early 1900s.
Sheets	Replacing, repairing, demolishing	In use since early 1900s.
Roofing felt	Replacing, repairing, demolishing	In use since early 1900s.
Roofing mastics	Replacing, repairing, demolishing	In use since early 1900s.

3.3 Asbestos and Health

Several types of disease can result from exposure to asbestos. Some workers who had done shipyard work with asbestos for only a few weeks during World War II developed asbestos-related disease in the 1960s. Workers in the construction, renovation, and demolition trades who encounter asbestos on the job are among the higher risk groups. Family members of asbestos workers have contracted disease from exposure to asbestos fibers on the worker's clothing. Authorities believe there is no safe level of exposure, although the higher the exposure to asbestos, the higher the risk of disease.

Material containing friable asbestos is especially hazardous because asbestos fibers are easily released into the air by impact and deterioration, or even by air flow across the material. Some asbestos is bound with other materials in products such as roofing shingles or vinyl-asbestos floor tiles. In these products, asbestos fiber is not released so easily. However, fibers in bound asbestos may be released when the material is cut, drilled, scraped, or sanded or when it is badly deteriorated.

Exposure to asbestos occurs when asbestos fibers of various sizes are released into the air and are inhaled. The smaller fibers can remain in the air for long periods of time. These fibers are so small that they are only visible with a microscope. In fact, it takes 600 asbestos fibers bundled together to equal the thickness of a human hair. Some of the large fiber bundles may lodge in the nose, but the smaller ones travel through the upper airways and become embedded in the lungs. The body has no effective mechanism for removing these fibers.

Exposure to asbestos may cause several types of diseases, including the following:

3.3.1 Asbestosis

Asbestosis occurs when asbestos fibers become lodged in the lungs, irritating the lung tissues and inflaming the small air tubes and sacs in the lungs. As the inflammation heals, permanent scar tissue (called fibrosis) remains. The scarring will cause shortness of breath, which grows worse over time, even after exposure ceases. Eventually, it may be impossible for the victim to inhale enough air, and heart failure may result. There is no cure for asbestosis.

What we know about the relationship between exposure to asbestos and asbestosis has been learned from studies of people who were heavily exposed. Usually, asbestosis is found in people who have been exposed to asbestos over a long period of time. The disease is much less likely to occur if proper precautions are taken.

3.3.2 Lung Cancer

Lung cancer is five times more common in people exposed to asbestos than in individuals who have not been exposed. Early symptoms are coughing, chest pains, and coughing up blood. Smoking greatly increases the risk of developing lung cancer from exposure to asbestos. A smoker who is heavily exposed to asbestos is 30 to 90 times more likely to develop lung cancer than a nonsmoker. However, as with asbestosis, proper precautions can help to reduce the risk of contracting asbestos-related lung cancer. There is usually no cure for this disease, but if the cancer is detected early, it may be surgically treated.

3.3.3 Mesothelioma

Mesothelioma is an extremely rare and deadly form of cancer that is almost always caused by exposure to asbestos. It is an “asbestos cancer,” and may result from relatively light exposure to asbestos.

This cancer occurs in the lining of the chest and abdomen. Early symptoms are shortness of breath or pain in the chest or abdomen. Mesothelioma would be expected to occur in only one out of 100,000 people not exposed to asbestos, but one study found that ten of 124 deaths of asbestos insulation workers were caused by mesothelioma. There is no cure for this disease, and most of the victims die within the first year of diagnosis.

3.3.4 Other Cancers

Exposure to asbestos is also thought to result in cancers of the gastrointestinal tract. These diseases may be caused by the victim swallowing some of the longer asbestos fibers that have been caught in the upper air passages or by fibers traveling through the body.

The likelihood of developing asbestos-related diseases depends on the amount to which one is exposed, the length of time, and the number of exposures. The greater the total exposure, the greater probability of illness.

Usually, asbestos-related disease will not show up for 15 to 40 years after exposure. The typically long period between exposure and noticeable disease is one of the greatest problems in convincing people of the danger of asbestos exposure.

4 ASBESTOS PROGRAM RESPONSIBILITIES

4.1 Asbestos Program Manager Responsibilities

The responsibility of implementing and maintaining the O&M Program should be undertaken by an Asbestos Program Manager. This position may be held by a building engineer, superintendent,

or manager. The Asbestos Program Manager is not required to have any special qualifications, as the plan is written to require work on the ACM be done only by asbestos contractors, and there are assumed to be no ACM which might be especially difficult to manage.

Responsibilities of the Asbestos Program Manager include, but are not limited to, the following:

- Notifying building tenants regarding the presence (or possible presence) of ACM at the site and the implementation of an O&M Program;
- Responding to inquiries from employees, building occupants, and contractors regarding ACMs at the site;
- Ensuring that outside contractors who may come in contact with asbestos in the buildings are provided with information regarding the location of ACM;
- Ensuring that all custodial and maintenance personnel are properly trained;
- Ensuring warning labels are properly posted;
- Coordinating periodic surveillance and re-inspection activities;
- Coordinating asbestos removal, repair, and maintenance operations as required;
- Ensuring that no additional asbestos-containing building materials are inadvertently installed in the buildings;
- Maintaining records relating to all asbestos activities including training, periodic surveillance, air monitoring, and response actions; and,
- Arranging for inspections by qualified personnel of suspect ACM not previously identified. Because of the preliminary nature of some of the asbestos survey activities, the Asbestos Program Manager should not assume that all ACM have been identified in the buildings.

4.2 Building Occupant/Responsibilities

Building occupants are also responsible for complying with the elements of the O&M Program. Building occupants should ensure that they do not disturb ACM and should notify their contractors who work in the buildings that an asbestos O&M Program is in place. Questions from contractors regarding ACM should be directed to the Asbestos Program Manager.

In the event building occupants, contractors, maintenance, or service personnel encounter any material they suspect may contain asbestos which will be disturbed, they should immediately stop their activity and notify the Asbestos Program Manager for further instructions. The Asbestos Program Manager will be responsible for determining whether the suspect material contains asbestos, and what further actions are required before work can be continued.

5 THE NOTIFICATION SYSTEM

The client may wish to consult with an attorney who has experience in dealing with asbestos issues in order to comply with all applicable laws and regulations regarding disclosures. This O&M Program document is not and cannot be legal advice. The applicable laws and regulations may have additional requirements beyond those addressed by this O&M Program, and there may be changes in applicable laws and/or regulations following implementation of this program. However, some of the laws and/or regulations applicable at the time of preparation of this O&M Program document are:

- EPA NESHAP, implemented locally by the local Air Quality Management District (e.g., South Coast Air Quality Management District [SCAQMD]). The EPA's rules concerning the application, removal, and disposal of ACMs, as well as manufacturing, spraying and fabricating of ACMs, were issued under the asbestos NESHAP. The asbestos NESHAP regulation governs asbestos demolition and renovation projects in all facilities. In order to comply, a building owner or operator must have the facility, or affected portion of the facility, inspected for asbestos prior to conducting a renovation or demolition. Further, the NESHAP rule requires owners or operators to have ACMs removed before a building is demolished, and may require its removal before a renovation. For renovation projects where friable ACMs will be disturbed, the NESHAP rule requires appropriate work practices or procedures for the control of emissions. EPA must be notified before a building is demolished or renovated.
- SCAQMD requirements (Rule 1403) for demolitions and renovations which follow EPA and NESHAP guidelines;
- The California Business and Professions Code regarding certification and training of asbestos professionals;
- The California Code of Regulations (CCR), Title 8, regarding asbestos practices;
- California Proposition 65 (CCR, Title 22, Chapter 3, Article 6, Section 12601), regarding notifications;
- California AB 3713 (CCR, Title 22, Chapter 10.4, Section 25915), regarding notifications; and (but not limited to);
- Occupational Safety and Health Administration (OSHA) Regulations: There are several important OSHA regulations that are designed to protect workers. They are summarized here, as guidance. OSHA has specific requirements concerning worker protection and procedures used to control ACMs specified in 29 Code of Federal Regulations 1926.1101.
 - For most operations and maintenance activities in building areas where only non-friable ACM are present or where friable ACM are in good condition, applicable OSHA permissible exposure limits are not likely to be exceeded. However, it is possible that some O&M activities will disturb ACM to such an extent that the OSHA limits are exceeded, unless good work practices are followed.
 - The OSHA standards require employers to address a number of items which are triggered by exposure of employees to asbestos fibers. Exposure is discussed in terms of fibers per cubic centimeter (f/cc) of air. A cc is a volume approximately equivalent to that of a sugar cube. Two main provisions of the regulation fall into the general category of "Permissible Exposure Limits (PELs)" to airborne asbestos fibers. They are:

- ◆ Eight-hour Time-Weighted Average limit (TWA) – 0.1 f/cc of air based on an eight-hour TWA sampling period. This is the maximum level of airborne asbestos, on average, that any employee may be exposed to over an eight-hour period (normal work shift).
- ◆ Excursion limit – 1.0 f/cc as averaged over a sampling period of 30 minutes.
- These levels trigger mandatory requirements, which include the use of respirators and protective clothing, the establishment of “regulated areas,” the posting of danger signs as well as the use of engineering controls and specific work practices.

California CACs and licensed asbestos abatement contractors are familiar with the applicable laws and regulations and should be utilized as required and as outlined in the following sections of this O&M Program.

Labeling of all ACM within building is not possible, nor is it typically required under an O&M Program. However, if labeling should be desired at some future date, labels should be prepared as indicated below. Friable materials which are in a state where asbestos may be readily released, regardless of location, and most ACM located in routine maintenance areas (i.e., mechanical rooms, attics, etc.) should be labeled. The warning labels should be posted on or near ACM. The warning labels should be readily visible and read as follows:

**DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD.
AUTHORIZED PERSONNEL ONLY.**

The following notification shall be given to all existing building occupants, new occupants, present maintenance and management personnel, newly hired or new to the complex maintenance and management personnel, and contractors or utility company personnel who need to work on the buildings. The signed forms shall be maintained in the permanent asbestos program files by the Asbestos Program Manager.

ASBESTOS NOTIFICATION

Asbestos containing materials (ACM) may be present in the building due to the building construction date. ACM only present a health hazard (cancer and lung disease) when asbestos fibers (not visible to the naked eye) are inhaled or swallowed. The mere presence of ACM does not represent a health hazard.

DO NOT disturb the ACM! This includes screwing objects into an ACM, rubbing or pushing objects against the ACM and cutting, sawing, sanding, or breaking the ACM.

Please report any disturbance or damage of the ACM, any dust or debris that might have come from the ACM, any change in the condition of the ACM or any improper action with ACMs to the Asbestos Program Manager.

Maintenance and other personnel are taking special precautions during their work to properly clean up any asbestos debris (if present) and to guard against disturbing ACM. All ACM are inspected periodically and additional measures have been and will be taken if needed to protect the health of building occupants.

I have read and understand the above:

Date: _____

Name: _____ Signature: _____

Note: This notification is included within Appendix A.

6 THE SURVEILLANCE PROGRAM

There are three types of surveillance. The first is that which is done by the Asbestos Program Manager or assigned trained personnel (6-month assessment), the second that which is done by a CAC (Three-year Asbestos Hazard Emergency Response Act [AHERA] re-inspection) and the third is that which is done by maintenance personnel during the course of their other work at the building.

The Asbestos Program Manager or assigned trained personnel should inspect all ACM every six months in accordance with the Asbestos Hazard Emergency Response Act (Code of Federal Regulations, 763 Subpart E). A log form or adequately backed-up computer file noting the ACM, the location within the building of ACM, and the date of the last inspection shall be maintained and updated accordingly or as changes are made or discovered by the Asbestos Program Manager. This Asbestos O&M Program document should be updated with information about ACM identified through sampling and laboratory analysis.

A CAC may initially be retained to assist with implementation of this O&M Program. A CAC may also subsequently be hired to reassess the condition of the ACM and to make any recommendations for immediate actions or changes to the O&M Program.

The Asbestos Program Manager shall inform the maintenance personnel that they are to promptly report any damage, deterioration or disturbance of building materials and suspected ACM which they see during the course of their normal duties. Newly hired personnel shall be asked to read

and sign the above notification form and shall be briefed by the Asbestos Program Manager on the program and their duties and responsibilities with regard to the ACM.

7 THE WORK CONTROLS AND PERMIT SYSTEM

The work control and permit system is designed to avoid inadvertent and/or improper disturbance of ACM during the course of any maintenance or repair work on the site. This represents a fundamental change in the way that such work is done at the site. However, one goal of the system is to avoid introducing substantial delays or high added costs to the operation and maintenance of the site.

It should be noted that the SCAQMD rules regarding disturbance or removal of ACM lists several requirements for work involving disturbance/removal of ACM greater than specific threshold quantities, and provide for fines for violations.

In most cases, a semi-formal permit system is appropriate. However, the Asbestos Program Manager, must first be contacted whenever any maintenance or repair work occurs. This may be a significant change from present practice, but it is important that all persons on the management and maintenance staff understand that this is now required. It would be appropriate to write this requirement into the job descriptions and the performance reviews of the employees.

Whenever maintenance personnel plan a maintenance or repair project, they must first contact the Asbestos Program Manager to indicate the location and nature of the work to be performed. If any substantial change occurs in the work once it is underway, the Asbestos Program Manager should again be contacted. This also applies to work to be done by outside contractors or utility company personnel.

After the maintenance person(s) indicate to the Asbestos Program Manager the type and location of the work, the Asbestos Program Manager shall review this plan to determine if ACM are present in the area where the work will occur:

- If there are no ACM the Asbestos Program Manager shall convey that information to the maintenance or repair person(s) and the work may proceed. If it is unknown if asbestos is present, sampling of building materials to be disturbed and laboratory analysis for asbestos should occur prior to disturbance.
- If there are ACM, but it is not anticipated that the ACM will be disturbed, the Asbestos Program Manager shall inform the maintenance or repair person(s) of the presence of the ACM and the importance of not disturbing it.
- If there are ACM and it is anticipated that they will be disturbed, the Asbestos Program Manager shall contact one or more licensed asbestos contractors to obtain prices for their services to assist in the work, such as utilizing High Efficiency Particulate Air-vacuum

equipped tools and/or other asbestos control measures including the construction of negative pressure enclosures. For substantial work, an environmental consulting company with CACs should be hired to develop specifications/work plan documents, assist with the evaluation of bids, oversee (monitor) the work activities of a licensed asbestos contractor, perform air monitoring, and air clearances for re-occupancy. An abatement closeout report should be prepared summarizing the abatement activities. All records from any such work should be placed in the permanent asbestos record files.

The job descriptions of the maintenance persons and the Asbestos Program Manager shall be updated to reflect their responsibilities in dealing with ACM issues.

8 THE WORK PRACTICES PROGRAM

Based upon the types of ACM and the cost of medical surveillance, respiratory protection programs, and insurance, it is recommended that most work with ACM be performed by licensed asbestos contractors. It is important that the Asbestos Program Manager, maintenance people, outside contractors or utility personnel who will work on the buildings understand that they are not to work with or disturb ACM. OSHA regulations require a respiratory protection program (and therefore a medical surveillance program) and protective clothing whenever workers are exposed or are likely to be exposed to asbestos fibers above the current PEL on an 8-hour time-weighted average or the current 30-minute Excursion Limit. The training and record keeping necessary to allow for work with asbestos by maintenance personnel would be an ongoing and significant expense, which is not necessary due to the anticipated infrequent need to disturb the limited amount of ACM present.

As long as ACM remain in a building there is potential for a fiber release episode. Fiber release episodes can occur during maintenance and renovation projects, or from the disturbance of materials by untrained personnel. Tenants, custodians, outside contractors and/or maintenance workers should immediately report any evidence of possible fiber release to the Asbestos Program Manager. Even minor fiber release episodes of friable materials must be treated seriously and proper procedures should be followed. Upon discovery of the fiber release, access to the area should be restricted, and the Asbestos Program Manager should be contacted immediately. Under no circumstances should building tenants, maintenance or custodial personnel, or outside contractors cleanup asbestos-containing debris. Conventional cleaning, such as sweeping with dry brooms, dusting with dry cloths, and vacuuming with standard vacuum cleaners may simply suspend asbestos fibers in the air. Cleaning of asbestos-containing debris should be conducted by properly trained and licensed personnel who are equipped with proper respiratory protection.

9 THE RECORD KEEPING SYSTEM

As this O&M Program has been designed to avoid having personnel on the operations or maintenance staff disturb asbestos, no records of medical monitoring, personnel air monitoring, or training should be necessary.

All records of work done on the ACM, updates to this O&M Program, asbestos survey reports, and periodic inspection reports, shall be kept permanently in files maintained at the office of the Asbestos Program Manager. All asbestos abatement activities (Abatement Closeout Reports) shall be kept permanently in files maintained at the office of the Asbestos Program Manager.

The maintenance of these records shall be added to the job descriptions of the Asbestos Program Manager, and new persons hired or promoted to fill this position shall be made aware in writing of their responsibility to perform these duties. Such updates of job descriptions and other duties shall be performed by the site manager and/or the Asbestos Program Manager.

Ninyo & Moore has included four forms adapted from an EPA publication. In order to provide examples of the types of forms (paper and/or electronic) the forms are presented in Appendix B.

10 THE WORKER PROTECTION PROGRAM

As this O&M Program has been designed to avoid having personnel on the operations or maintenance staff disturb asbestos, the worker protection program shall consist of following the procedures outlined by this O&M Program. No respiratory protection component of the worker protection program is required beyond following the procedures outlined by this O&M Program, which avoids having personnel disturb asbestos.

11 THE TRAINING PROGRAM

The Asbestos Program Manager and maintenance personnel shall be required to receive general awareness training on asbestos, during implementation of this O&M Program, and newly hired or assigned personnel shall be required to receive the same or similar training. This training involves a taking a two-hour training class. General awareness training includes the following:

- Information regarding asbestos and its various uses and forms
- Information on the health effects associated with asbestos exposure
- Location of asbestos containing building materials at each school building in which the employee works
- Name and phone number of the Asbestos Program Manager and location of the Management Plan Documents

- Recognition of damage, deterioration, and delamination of ACM
- Proper response to fiber release episodes
- Requirements of the OSHA standard in regards to housekeeping

New or promoted employees in these positions shall receive such training within two weeks in the positions, or, preferably, before they assume the position.

The Asbestos Program Manager is considered a competent person and under OSHA regulatory requirements, additional training is required in Asbestos Operations and Maintenance training. This training involves a full two-day course. This course includes the following:

- Descriptions of the proper methods of handling ACM
- Information on the use of respiratory equipment and other personal protective measures
- Provisions of AHERA, NESHAP, EPA Worker Protection Rule, and the OSHA Asbestos in the Construction Industry Standard
- Hands-on training in the use of respiratory protection, other person protective measures, and good work practices

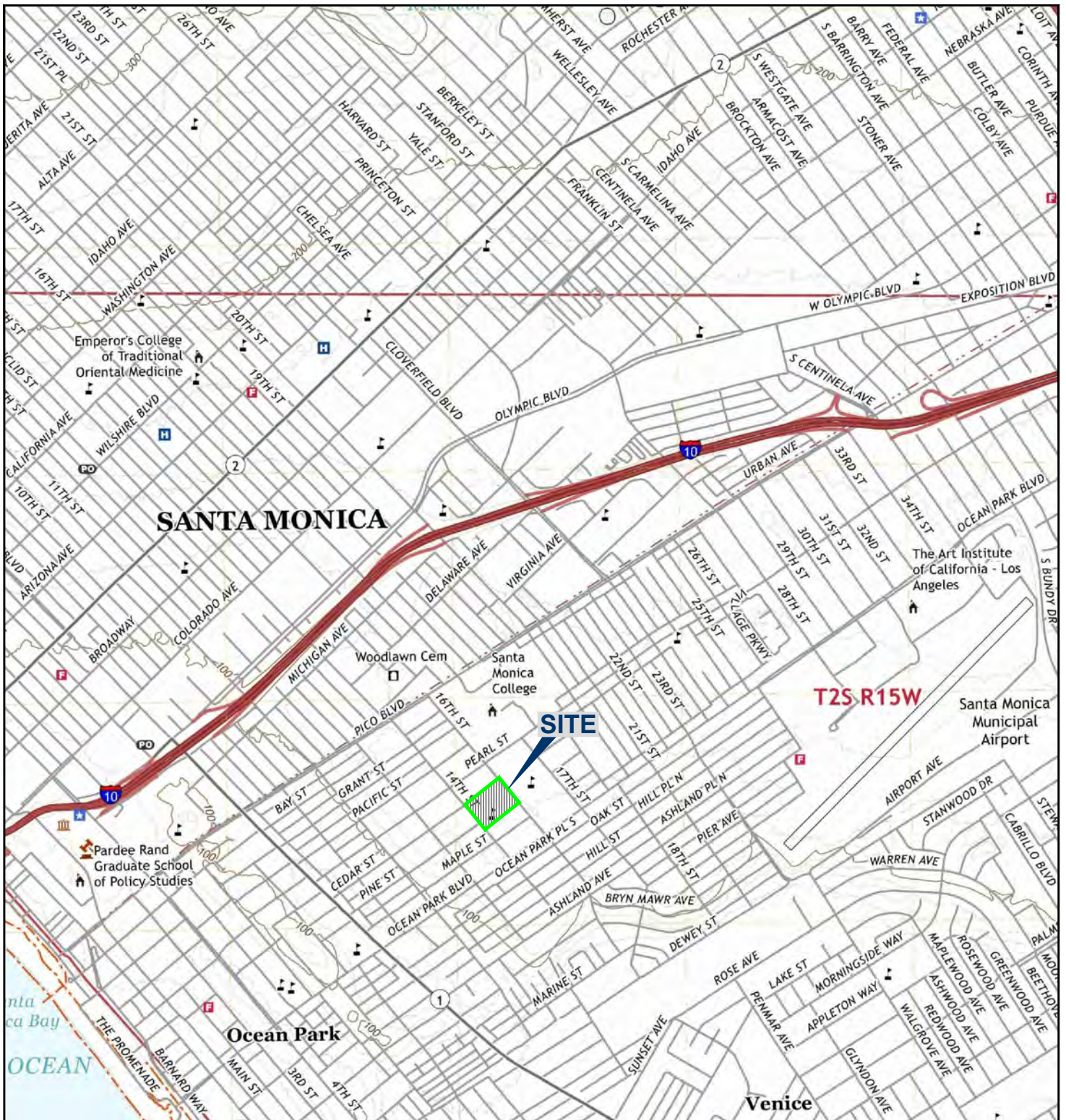
12 ASBESTOS CONSULTANT DOCUMENTATION

This O&M Program was prepared by Mr. Nicholas Marinello, a California Division of Occupational Safety and Health Certified Asbestos Consultant. Mr. Marinello certification documentation is provided in Appendix C.



FIGURES

1_212089001_SL.dwg 01/11/2023 (Will Rodgers) GK



NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE. | REFERENCE: USGS, 2018.

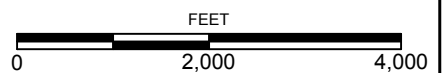
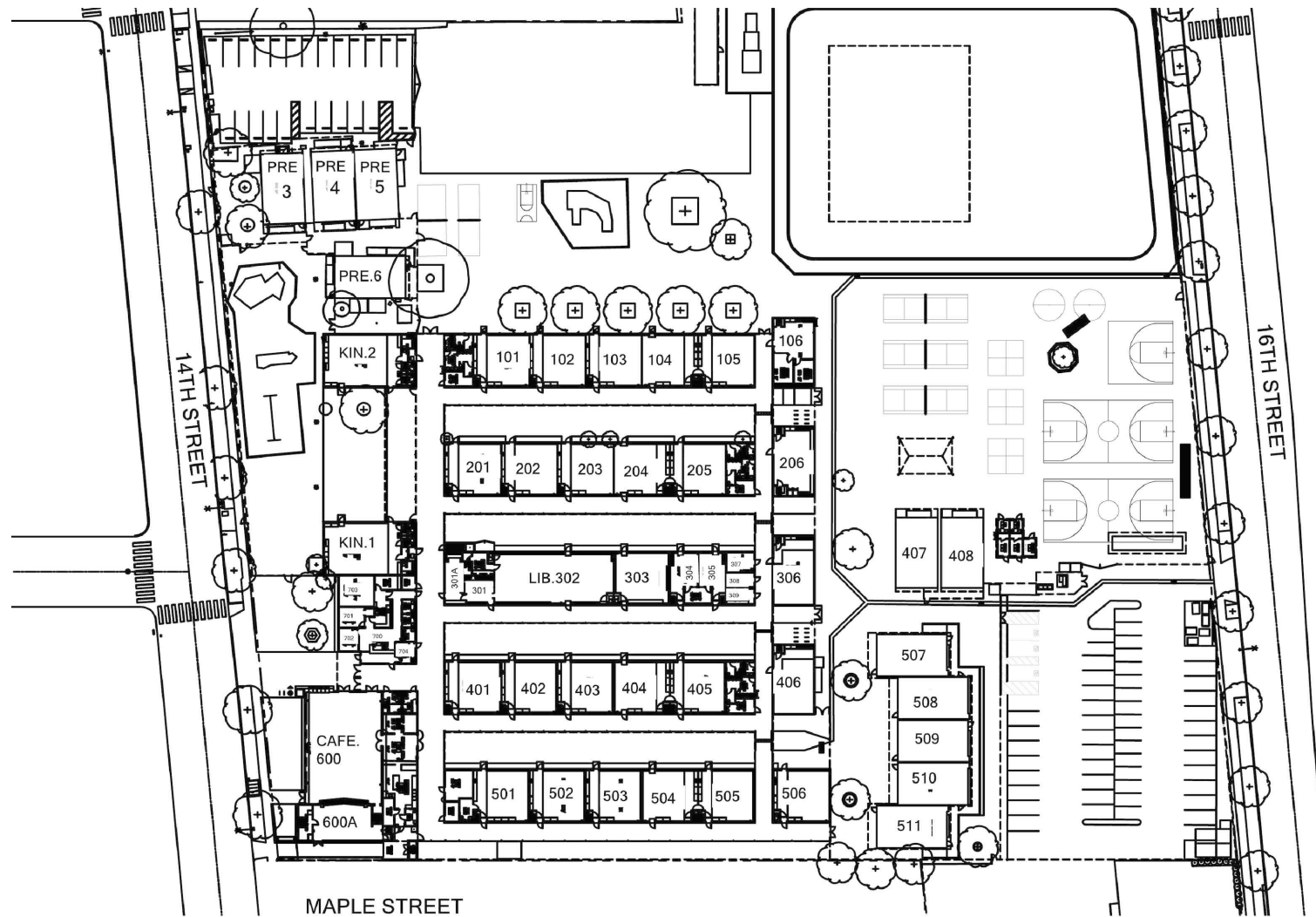


FIGURE 1

Ninyo & Moore
Geotechnical & Environmental Sciences Consultants

SITE LOCATION

WILL RODGERS ELEMENTARY SCHOOL
2401 14TH STREET
SANTA MONICA, CALIFORNIA
212089001 | 5/23



NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE. | REFERENCE:

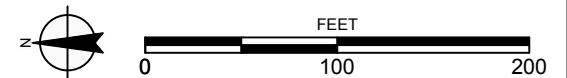


FIGURE 2



APPENDIX A

Asbestos Notification Form

ASBESTOS NOTIFICATION

Asbestos containing materials (ACM) may be present in the building due to the building construction date. ACM only present a health hazard (cancer and lung disease) when asbestos fibers (not visible to the naked eye) are inhaled or swallowed. The mere presence of ACM does not represent a health hazard.

DO NOT disturb the ACM! This includes screwing objects into an ACM, rubbing or pushing objects against the ACM and cutting, sawing, sanding, or breaking the ACM.

Please report any disturbance or damage of the ACM, any dust or debris that might have come from the ACM, any change in the condition of the ACM or any improper action with ACMs to the Asbestos Program Manager.

Maintenance and other personnel are taking special precautions during their work to properly clean up any asbestos debris (if present) and to guard against disturbing ACM. All ACM are inspected periodically and additional measures have been and will be taken if needed to protect the health of building occupants.

I have read and understand the above:

Date: _____

Name: _____

Signature: _____



APPENDIX B

Sample Record Keeping Forms

6-month Re-inspection of Asbestos-Containing Materials form

Location of asbestos-containing material (address, building, room, or general description):

Type of Asbestos-Containing Material(s):

1. Sprayed- or troweled-on ceilings or walls
2. Sprayed- or troweled-on structural members
3. Insulation on pipes, tanks, or boiler
4. Other (describe):

Abatement Status:

1. The material has been encapsulated ____ enclosed ____, neither ____, removed ____

Assessment:

1. Evidence of physical damage: _____

2. Evidence of water damage: _____

3. Evidence of delamination or other damage: _____

4. Degree of accessibility of the material: _____

5. Degree of activity near the material: _____

6. Location in an air plenum, air shaft, or airstream: _____

7. Other observations (including the condition of the encapsulant or enclosure, if any): _____

Recommended Action: _____

Signed: _____ Date: _____
(Evaluator)

Job Request Form for Maintenance Work

Name: _____ Date: _____

Telephone No. _____ Job Request No : _____

Requested starting date: _____ Anticipated finish date: _____

Address, building, and room number(s) (or description of area) where work is to be performed:

Description of work:

Description of any asbestos-containing material that might be affected, if known (include location and type):

Name and telephone number of requestor: _____

Name and telephone number of supervisor: _____

Submit this application to: _____

(The Asbestos Program Manager)

NOTE: An application must be submitted for all maintenance work whether or not asbestos-containing material might be affected. An authorization must then be received before any work can proceed.

____ Granted Job Request No.

____ With conditions

____ Denied

*Conditions: _____

Maintenance Work Authorization Form

AUTHORIZATION

Authorization is given to proceed with the following maintenance work:

PRESENCE OF ASBESTOS-CONTAINING MATERIALS

_____ Asbestos-containing materials are not present in the vicinity of the maintenance work.

_____ Asbestos-containing materials are present, but their disturbance is not anticipated; however, if conditions change, the Asbestos Program Manager will re-evaluate the work request prior to proceeding.

_____ Asbestos-containing materials are present, and may be disturbed.

Work Practices if Asbestos-Containing Materials Are Present

The following work practices shall be employed to avoid or minimize disturbing asbestos:

Personal Protection if Asbestos-Containing Materials Are Present

The following equipment/clothes shall be used/worn during the work to protect workers:

(manuals on personal protection can be referenced)

Special Practices and/or Equipment Required:

Signed: _____ Date: _____
(Asbestos Program Manager)

Evaluation of Work Affecting Asbestos-Containing Materials

This evaluation covers the following maintenance work:

Location of work (address, building, room number(s), or general description):

Date(s) of work: _____

Description of work: _____

Work approval form number: _____

Evaluation of work practices employed to minimize disturbance of asbestos: _____

Evaluation of work practices employed to contain released fibers and to clean up the work area:

Evaluation of equipment and procedures used to protect workers:

Personal air monitoring results; (in-house worker or contract?)

Worker name _____ Results _____

Worker name _____ Results _____

Handling or storage of ACM waste _____

Signed: _____ Date: _____
(Asbestos Program Manager)



APPENDIX C

Asbestos Consultant Documentation

DEPARTMENT OF INDUSTRIAL RELATIONS

Division of Occupational Safety and Health

Asbestos Certification & Training Unit

1750 Howe Avenue, Suite 460

Sacramento, CA 95811

(916) 574-2993 Office Fax (916) 574-2994 dir.ca.gov/dosh/asbestos.html actu@dir.ca.gov

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473

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March 28, 2023

David M Kelly
26015 Okuma Road
Manifee CA 92584

Dear Certified Asbestos Consultant or Technician:

Congratulations, you have passed your certification examination!

Enclosed is your certification card. **To maintain your certification, please abide by the rules printed on the back of the certification card.**

Your certification is valid for a period of one year. If you wish to renew your certification, you must apply for renewal at least 60 days before the expiration date shown on your card in accordance with Title 8, California Code of Regulations, Division 1, Chapter 3.2, Article 2.6, Section 341.15(h) (1).

Please keep and do not send copies of your required AHERA refresher renewal certificates to the Division until you apply for renewal of your certification.

Please submit via U.S. Postal Service or other carrier, of any changes in your mailing or work address within 15 days of the change.

Sincerely,

Kevin Graulich
Principal Safety Engineer

Attachment: Certification Card

cc: File





475 Goddard, Suite 200 | Irvine, California 92618 | p. 949.753.7070

ARIZONA | CALIFORNIA | COLORADO | NEVADA | TEXAS | UTAH

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