



CITY OF BEVERLY HILLS

MEMORANDUM

TO: Planning Commission

FROM: Viviana Franco, Consultant for City of Beverly Hills Hazard Mitigation Plan, Pamela Mottice-Muller, Director of Emergency Management

DATE: July 8th, 2010

SUBJECT: Hazard Mitigation Plan Renewal

ATTACHMENTS: A. City of Beverly Hills Mitigation Strategies
B. Office of Emergency Management Mitigation Activities

INTRODUCTION

The Federal Emergency Management Agency (FEMA) requires all local jurisdictions to submit an approved Hazard Mitigation Plan in order to maintain eligibility for federal Hazard Mitigation Grant funding. The City of Beverly Hills' staff is in the process of updating that strategic document for submission to the City Council.

Mitigation is defined by FEMA as **a preventive measure or action taken to reduce or eliminate long term risk to human life and property from a hazardous event.** The proposed plan details the City's commitment to reduce risk by developing mitigation strategies that are structured to decrease the potential loss of life, property and economic infrastructure when a disaster occurs.

This report provides an update on the progress of the renewal draft plan and an overview of the main components of the plan. The remaining mitigation strategies are currently being developed and will be approved by the staff Steering Committee by the end of June 2010. In addition, we are formally requesting Commissioners to provide comments and input on the plan and mitigation strategies.

BACKGROUND

In October 2004, City Council approved the City of Beverly Hills Hazard Mitigation Action Plan. The Plan's mission was to promote sound public policy and programs designed to protect the public, critical facilities, infrastructure, private and public property and the environment from natural and manmade hazards. This was achieved by developing a plan with implementation strategies to guide the City towards creating and maintaining a safer more sustainable community. The development of the plan was a collaborative staff and community effort. As stipulated in the original plan, the plan is to be **renewed every five (5) years.** Currently we are working with several departments to update information in the plan and most importantly include new mitigation strategies to renew the plan with FEMA.

MISSION STATEMENT AND PLAN GOALS

The City of Beverly Hills Hazard Mitigation Plan is to promote sound public policy designed to protect citizens, critical facilities, infrastructure, private and public property and the environment from natural and manmade hazards. This will be achieved by developing and implementing this plan that will guide the City towards creating and building a safer more sustainable community.

To Protect Life, Property, Environment

- Implement activities that assist in protecting lives by making homes, businesses, infrastructure, critical facilities, and other property more resistant to hazards.
- Reduce losses and repetitive damages for chronic hazard events while promoting insurance coverage for catastrophic hazards.
- Encourage preventative measures for existing and new development in areas vulnerable to hazards.

Public Awareness

- Develop and implement education and outreach programs to increase public awareness of the risks associated with hazards.
- Develop and implement education and outreach programs to increase public awareness of the mitigation measures associated with hazards.
- Provide information on tools, partnership opportunities, and funding resources to assist in implementing mitigation activities.

Partnerships and Implementation

- Strengthen communication and coordinate participation among and within public agencies, citizens, non-profit organizations, business, and industry to gain a vested interest in implementation.
- Encourage leadership within public and private sector organizations to prioritize and implement local, county, and regional hazard mitigation activities.
- Assist in the development of the Seismic Safety Element of the General Plan.

Emergency Management

- Establish policy to ensure mitigation projects for critical facilities, services, and infrastructure.
- Update current ordinances, make recommendations for City guidelines, codes, and permitting process and establish new ordinances that support mitigation.
- Strengthen emergency operations by increasing collaboration and coordination among departments, public agencies, non-profit organizations, business, and industry.
- Coordinate and integrate natural hazard mitigation activities, where appropriate, with emergency operations plans and procedures.

RISK ASSESSMENT

When completing the original plan in 2004, the Committee utilized a number of resources in assessing which hazards are most likely to occur within the City of Beverly Hills and which events would have the highest probability to cause significant impacts. After considering the

City's event history, the probability of a local occurrence, and the magnitude of each hazard to the City, the Steering Committee and Project Coordinators chose to incorporate the following hazards into the Mitigation Plan and remain the same for the 2010 update:

1. Earthquake
2. Terrorism
3. Fire (including Wildland and Structural Fire)
4. Earth Movement (Landslide/Debris Flow)
5. Flood (including Reservoir Failure)
6. Windstorm

COMMUNITY PROCESS

Public participation is a key component of strategic planning process. Citizen participation offers the residential and business community the opportunity for consideration of their input and concerns as the plan is drafted. The Federal Emergency Management Agency rules require public input during the development of local hazard mitigation plans.

The City of Beverly Hills' Hazard Mitigation Plan includes input from a cross section of local resident and business communities. The Committee determined that it was more efficient and sufficiently representative to enlist the expertise of existing City Commissioners, homeowner group officers and business leaders. The public will be offered opportunities to provide input on the plan via the web and at key public locations. The draft plan has been a collaborative effort with valuable input from all departments and the community.

MITIGATION STRATEGIES

Draft hazard mitigation strategies are attached. These strategies will be the blueprint for decreasing the potential community losses identified in the draft plan. These strategies are based on existing City programs and resources and the City's ability to expand on and improve these existing tools. Mitigation strategies have already been identified for each hazard. Please provide any comment, input or additions. Please advise if you have additional suggestions for mitigation strategy.

CONCLUSION

A first draft of the Plan will go public via the City's website no later than July 2nd, 2010. The Plan will go to City Council for approval on August 17th, 2010. Please review the draft plan either online via the City's Office of Emergency Management webpage. Therefore, at this time, Staff requests Commissioners to submit input, comments, and questions to be included in the plan no later than August 7th, 2010.

**Attachment A. City of Beverly Hills Mitigation Strategies
2010 Mitigation Strategies Overview Chart**

| Hazard | Mitigation Strategy | Responsible Department | Timeline | Plan Goals Addressed | | | |
|------------|---|--|----------|--|------------------|---------------------------------|----------------------|
| | | | | To Protect Life, Property, Environment | Public Awareness | Partnerships and Implementation | Emergency Management |
| Earthquake | 1 Reinforce Existing Buildings. Continue to require upgrade of unreinforced masonry (URM) buildings to address any structural and nonstructural seismic deficiency of existing buildings | Community Development | 2010 | X | X | | |
| Earthquake | 2 Assistance Programs. Develop assistance programs for senior citizens who own single-family homes to seismically retrofit their homes per current safety standards. Assistance programs should include maintaining lists of approved contractors, outreach to senior citizens and education efforts. | Community Development | 2015 | X | | | X |
| Earthquake | 3 Seismic data collection sampling stations. Work with CalTech to establish more seismic data collection sampling stations inside Beverly Hills. This will significantly improve the accuracy and details of the shakemap (ground acceleration data) which eventually allows better analysis (Virtual Beverly Hills damage assessment), planning and emergency response. | | | | | | |
| Earthquake | 4 Code Update. Review and update existing city codes to reflect recommendations set forth by the FireWise assessment and Joint Wild land Interface Task Force. | Information Technology | 2012 | X | X | X | X |
| Fire | 5. Zone 9 (Closed water Pressure Zone) Hillside Fire Protection. Increase water pressure and access to water in case of an emergency in Zone 9 for conflagrations in the vicinity of Coldwater Canyon and areas contiguous to the City and the City of Los Angeles' Franklin Canyon Reservoir. It will also improve distribution of water supply and reduce energy costs at the Monte Cielo pump station for domestic service into Zone 9. | Community Development, Fire | 2014 | X | X | X | X |
| Fire | 6 Wood Roof Public Education DVD. Educate Residents on the potential fire hazard regarding Wood Roofs. | Public Works, Fire | 2015 | X | X | X | X |
| Fire | Firewise/Waterwise Mitigation Demonstration Garden. Educate the community on what type of plants are both firewise and waterwise. | Fire, Building & Safety | 2011 | X | X | X | X |
| Fire | | Fire, Public Works, Community Services | 2013 | X | X | X | X |

| Hazard | | Mitigation Strategy | Responsible Department | Timeline | Plan Goals Addressed | | |
|-----------|----|---|--|----------|----------------------|---|---|
| Fire | 8 | Vegetation Management Public Education. Develop public education material to the residents regarding Vegetation Management around their homes | Fire | 2013 | X | X | X |
| Fire | 9 | New Development Impacts. Review and revise the Zoning Code to reflect the general plan's policies for permitted uses and development standards. In addition, regulations to address the following areas must be included in the Zoning Code | Community Development | 2015 | X | X | X |
| Fire | 10 | Fire Department Access. Design private and public access drives and roadways to preserve and maintain Fire Department access to properties. | Community Development, Fire | 2014 | X | X | X |
| Fire | 11 | Evacuation Route. Develop and Educate Residents on a Citywide evacuation route during a disaster | Police, OEM, Fire | 2013 | X | X | X |
| Fire | 12 | Firewise Community Board. Evaluate and implement recommendations made by the Firewise Communities Program. | Fire, OEM | 2015 | X | X | X |
| Terrorism | 13 | Critical Infrastructure Assessment. Conduct an analysis and assessment of critical infrastructure areas and how each area interfaces with both cyber and physical components if attacked or compromised. Identify the cascade affect, if any, impacting operations should an attack or compromise occur. | Police | 2011 | X | X | X |
| Terrorism | 14 | Network Intrusion Prevention System. Obtain high level security system to prevent cyber terrorist attack on City systems and databases. | Information Technology, Emergency Management | 2011 | X | X | X |
| Flood | 15 | Facility Use or Storage of Hazardous Materials. Require that all new facilities storing, using, or otherwise involved with substantial quantities of on-site hazardous materials within flood zones comply with standards of elevation, anchoring, and flood proofing, and that hazardous materials be stored in watertight containers. | Community Development | 2014 | X | X | X |
| Flood | 16 | Reservoirs Assessment. Update the City's Urban Water Master Plan (UWMP) and related capital improvement programs, including monitoring its water reservoirs. Adopt state-of-the-art water monitoring systems to remotely monitor the City's water usage, leaks, and ruptures. Continue to implement existing flood mitigation activities and programs. | Public Works | | X | | X |
| Flood | 17 | Flood Mitigation Design. Require that new development incorporate sufficient measures to mitigate flood hazards, including the design of onsite drainage systems linking with citywide storm drainage, gradation of the site so that runoff does not impact adjacent properties or structures on the site, and elevation of the structures above any flooding elevation. Research and implement new technologies to prevent trash and debris from entering storm water drains. | Community Development, Public Works | 2015 | X | X | X |
| Flood | 18 | Study and Potentially Update Flood Ordinance. Revise code based on new actions and new mitigation efforts. | Community Development, Public Works | 2012 | X | X | X |

| Hazard | | Mitigation Strategy | Responsible Department | Timeline | Plan Goals Addressed | | |
|--------------|----|--|-------------------------------------|----------|----------------------|---|---|
| Landslide | 19 | View Preservation Regulations. Review view preservation regulations for the Trousedale and Hillside areas, focused on landscaping and plant material issues. | Community Development | 2013 | X | X | X |
| Landslide | 20 | Geotechnical Investigation. Conduct additional geotechnical investigation to update the landslide hazard maps in the City of Beverly Hills to improve knowledge of landslide hazard areas and understanding of vulnerability and risk to life and property in hazard-prone areas. | Community Development, Public Works | 2013 | X | | X |
| Windstorm | 21 | Street Tree Master Plan Phase III. Continue the use of the STMP as a mechanism eliminating structurally defective trees thus eliminating potential damages to lives or property. | Community Services | 2015 | X | | X |
| Multi-Hazard | 22 | CERT Program Redevelopment. Study cost effective ways to offer CERT program to the community | Fire, Emergency Management | 2011 | X | X | X |
| Multi-Hazard | 23 | Emergency Management Exercises. Conduct periodic fire emergency management exercises with City personnel and surrounding jurisdictions. | Emergency Management | Ongoing | X | | X |
| Multi-Hazard | 24 | Building and Fire Code Updates. Continue to update the City's building and fire codes once every three years, or whenever the State updates the California building and fire codes, to reflect the highest and best available standards for seismic design and performance of buildings and to conform to State requirements. | Community Development, Fire | 2014 | X | | X |
| Multi-Hazard | 25 | Interjurisdictional Coordination. Continue to coordinate with and support the Los Angeles County Certified Unified Program Agency (CUPA), the Los Angeles County Fire Department, and their Health & Hazardous Materials Division (HHMD) in carrying out inspections, emergency response, enforcement, and site mitigation oversight of hazardous materials and waste | Fire | | X | X | X |
| Multi-Hazard | 26 | Joint Effort in Emergency Disaster Management. Ensure that emergency disaster management is the mutual responsibility of all City Departments and a variety of stakeholders, including the Citizen Corp Program, Beverly Hills Unified School District, private schools, local residents, and the business community. | OEM | | X | X | X |
| Multi-Hazard | 27 | Disaster Notification/Information Outreach. Educate community on how to seek information during a disaster - examples: website, Telephone Notification System (TNS), Twitter, local access cable channel, hotline number | OEM | 2011 | X | X | X |

**Attachment B
Earthquake Mitigation Strategies**

EARTHQUAKE

| | | | |
|--------------------------|---|---|---------------------------|
| Hazard | Earthquake | | |
| Project Name | Reinforce Existing Buildings | | |
| Strategy | Continue to require upgrade of unreinforced masonry (URM) buildings to address any structural and nonstructural seismic deficiency of existing buildings. (GP Policy S 5.3) | | |
| | Encourage property owners to reinforce and strengthen "at risk" buildings, including: | | |
| | <ul style="list-style-type: none"> • Buildings with tuck-under parking that constitutes a "soft-story"; | | |
| | <ul style="list-style-type: none"> • Wood buildings with short cripple studs under the first floor; | | |
| | <ul style="list-style-type: none"> • Wood buildings constructed without positive connection from the foundation to the structure; | | |
| | <ul style="list-style-type: none"> • All pre-1981 on-ductile concrete frame buildings or "soft-story" buildings three stories or more in height; and | | |
| | Tilt-up concrete wall buildings. (GP Program 2.4) | | |
| Action Items | Continue implementation of the Hazardous Building Abatement Ordinance | | |
| Coordinating Department | Community Development | | |
| Ideas for Implementation | Develop and implement a program for property owners to reinforce and strengthen other "at risk" buildings in the City to minimize loss of life and property damage in the event of seismic or geologic hazards. (GP Policy S 5.4) | | |
| Timeline/Completion Date | 2014 | | |
| Total Cost | \$45,000 | | |
| Funding Source(s) | General Fund | | |
| Constraints | Funding | | |
| Plan Goals Addressed | | | |
| X | Public Awareness | X | Protect Life and Property |
| | Partnerships and Implementation | X | Emergency Management |

| | | | |
|--------------|---|--|--|
| Hazard | Earthquake | | |
| Project Name | Assistance Programs | | |
| Strategy | Develop assistance programs for senior citizens who own single-family homes to seismically retrofit their homes per current safety standards. | | |

| | | | |
|--------------------------|---|---|---------------------------|
| Action Items | Continue to provide a full range of public services including, building permitting and safety, public safety (fire and police response and prevention), emergency preparedness and disaster response and recovery, hazardous waste response/services, solid waste collection and recycling programs, community services (parks, libraries, and recreational facilities and programs), infrastructure maintenance, human services as well as cultural resources programs within the community. (GP Program 6.1) Maintain lists of approved contractors, outreach to senior citizens and education efforts. (GP Policy S 5.6) | | |
| Coordinating Department | Community Development | | |
| Ideas for | | | |
| Implementation | Program continuation | | |
| Timeline/Completion Date | 2015 | | |
| Total Cost | \$30,000 | | |
| Funding Source(s) | General Fund, enterprise funds, grants | | |
| Constraints | Funding | | |
| Plan Goals Addressed | | | |
| | Public Awareness | X | Protect Life and Property |
| | Partnerships and Implementation | X | Emergency Management |

| | | | |
|--------------------------|---|--|--|
| Hazard | Earthquake | | |
| Project Name | Seismic Data Collection Sampling Stations | | |
| Strategy | Work with CalTech to establish more seismic data collection sampling stations inside Beverly Hills. This will significantly improve the accuracy and details of the shakemap (ground acceleration data) which eventually allows better analysis (Virtual Beverly Hills damage assessment), planning and emergency response. | | |
| Action Items | Project will be launched only if funding is secured by EOC. Once the sampling stations are established, Caltech will generate detailed shakemaps which will be integrated by IT into the VBH/ UNITE application. | | |
| Coordinating Department | IT | | |
| Ideas for Implementation | IT has identified the need but do not have plans to fund this project. Caltech has offered for free installation of equipments, once the equipments are purchased. The information can also improve the accuracy of data for adjacent cities. | | |
| Timeline/Completion Date | 2012 | | |
| Total Cost | \$100,000 | | |
| Funding Source(s) | Funding source has not been identified. Project will be launched | | |

| | | | |
|----------------------|------------------------------------|---------|---------------------------|
| | only if funding is secured by EOC. | | |
| Constraints | | Funding | |
| Plan Goals Addressed | | | |
| X | Public Awareness | X | Protect Life and Property |
| X | Partnerships and Implementation | X | Emergency Management |

A detailed Commission packet is available for review in the Library and Planning Department.



In accordance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please call the Planning Department at 310-285-1141. Please notify the Planning Department at least seventy-two hours prior to the meeting so that reasonable arrangements can be made to ensure accessibility. Council Chambers / Meeting Rooms are equipped with audio equipment for the hearing impaired, and are wheelchair accessible.

**CITY OF BEVERLY HILLS
455 N. Rexford Drive
Beverly Hills, California 90210
Council Chambers Room 280-A**

**PLANNING COMMISSION MEETING
JULY 8, 2010
1:30 PM**

AGENDA

OPEN MEETING

ROLL CALL

APPROVAL OF AGENDA

COMMUNICATIONS FROM THE AUDIENCE

NEW BUSINESS

1. ADOPTION OF MINUTES

Adoption of Planning Commission Minutes for the meetings of March 11, March 25, April 8, April 22, May 13, May 27, 2010, and June 10, 2010.

GUIDE FOR PERSONS INTENDING TO SPEAK

This guide has been prepared as an aid so that you will be able to express your opinions briefly and clearly before the Commission and thus increase the effectiveness of your presentation. **Remarks are limited to 3 minutes unless extended by the Commission.**

1. State your Name and Address.
2. Organization you represent if any.
3. Your Statement should include all pertinent facts within your knowledge. It is important to discuss only those matters relating to the hearing and to tie your discussion of the facts directly to the decision you wish the Commission to reach.

Written Testimony

In order to have written material included in the Planning Commissioner's mailed Agenda Packet, **12** copies of the material must be delivered to the Planning office no later than 11 calendar days before the date of the Planning Commission Hearing. Written material (**12** copies) that is presented to the Planning Commission after this date and up to 1:00 p.m. the day of the Planning Commission Hearing, will be included in the Commissioners Agenda folder, but may not be reviewed by individual Commissioners due to the amount of material that the Commissioners have to review for the Agenda.

DISCUSSION ITEMS

2. Hazard Mitigation Plan

Presentation by Pamela Mottice-Muller, Director of Emergency Management, regarding renewal of the City's Hazard Mitigation Plan. The Plan is required for compliance with Federal Emergency Management Agency (FEMA) standards to receive Grant Funding. Commission comments will be evaluated in the development of the final plan, which will be presented to the City Council for adoption at a future meeting.

OLD BUSINESS

3. 9360 Wilshire Boulevard/Thompson Hotel (Applicant: Mitch Dawson)

Adoption of a resolution recommending City Council approval of a Zone Text Amendment to Sections 10-3-2868 of the Beverly Hills Municipal Code regarding the seating capacity of restaurants in hotels outside the Business Triangle, and conditionally approving a Conditional Use Permit that restricts hotel operations, a Development Plan Review permit that allows outdoor dining and a rooftop gymnasium, an Extended Hours Permit and modification of an existing variance. **This item is continued from the June 10, 2010 Meeting and the Public Hearing is closed.**

PLANNING COMMISSION / BOARD OF ZONING ADJUSTMENTS / PLANNING AGENCY PUBLIC HEARINGS

4. 9936 Durant Drive (Applicant: Murray Fischer)

Request for a Development Plan Review, Density Bonus Permit, R-4 Permit, Tentative Tract Map and certification of an Environmental Impact Report for a the construction of a new 14-unit condominium project. (Senior Planner: Rita Naziri). **This item is continued from the May 27, 2010 Meeting and the Public Hearing remains open.**

5. 121 San Vicente Boulevard (Applicant: Ken Stockton)

Request for a Development Plan Review Permit and a Variance from parking regulations (to allow tandem parking) to permit the construction of a new three-story, 45-foot in height Commercial building containing approximately 40,750 square feet of floor area over a four-level, subterranean parking garage with 185 parking spaces. (Senior Planner: Rita Naziri) **This item is continued from the May 27, 2010 Meeting and the Public Hearing remains open.**

6. **9400 Olympic Boulevard** (Applicant: Mitch Dawson)
Request for a modification of an existing Conditional Use Permit and Extended Hours Permit to: 1) reduce the amount of off-site parking required; 2) allow the hotel to charge competitive valet parking rates (valet is currently for patrons of hotel and restaurant); and 3) to allow alcohol to be served until 1 AM.

DISCUSSION ITEMS

7. **Housing Element**
Discussion and direction to staff regarding Draft Programs of the update to the City's Housing Element. (Associate Planner: Peter Noonan).
This item is continued from the June 24, 2010 Meeting

PROJECT PREVIEW

8. Nessah Temple

SUBCOMMITTEE REPORTS

Consideration and/or establishment of new policy or project-related Planning Commission subcommittees and reports from existing subcommittees:

- a. 9936 Durant Drive (Furie/Yukelson)
- b. 9230 Wilshire Boulevard - Lexus Dealership (Bosse/Furie)
- c. Hillside / Trousdale - View Preservation (Cole/Corman)
- d. Other contemplated subcommittees

COMMUNICATIONS FROM THE COMMISSION

COMMUNICATIONS FROM THE CITY PLANNER

- 9 **Upcoming Meeting Schedule**

10. **Active Case List**

ADJOURNMENT

Decisions of the Planning Commission may be appealed to the City Council within fourteen (14) days of the Planning Commission action by filing a written appeal with the City Clerk. Appeal forms are available in the City Clerk's office. Decisions involving subdivision maps must be appealed within ten (10) days of the Planning Commission Action. (Note: Appeal Fee Required.)

DRAFT

APPENDIX A4

RESIDENTIAL VOLUNTARY MEASURES

DIVISION A4.5 – ENVIRONMENTAL QUALITY

SECTION A4.501

GENERAL (Reserved)

SECTION A4.502

DEFINITIONS

MERV. Filter minimum efficiency reporting value, based on ASHRAE 52.2-1999.

NO ADDED FORMALDEHYDE RESIN (NAF). Resin formulated with no added formaldehyde as part of the cross linking structure for making hardwood plywood, particle board or medium density fiberboard. No added formaldehyde resins include, but are not limited to, resins made from soy, polyvinyl acetate, or methylene diisocyanate.

ULTRA-LOW EMITTING FORMALDEHYDE RESINS (ULEF). Resins formulated such that average formaldehyde emissions are consistently below the Phase 2 emission standards in Section 93120.2, as provided in Section 93120.3(d) of Title 17, California Code of Regulations.

SECTION A4.503

FIREPLACES (Reserved)

SECTION A4.504

POLLUTANT CONTROL

A4.504.1 Early compliance with formaldehyde limits. Meet the formaldehyde limits contained in Table 4.504.5 before the mandatory compliance date, or use composite wood products made with either California Air Resources Board approved no-added formaldehyde (NAF) resins or ultra-low emitting formaldehyde (ULEF) resins.

Note: Documentation must be provided that verifies that finish materials are certified to meet the pollutant emission limits.

A4.504.2 Resilient flooring systems. Resilient flooring systems installed in the building shall meet the percentages specified in this section and comply with the VOC-emission limits defined in the Collaborative for High Performance Schools (CHPS) Low-emitting Materials List or certified under the Resilient Floor Covering Institute (RCFI) FloorScore program.

Tier 1. At least 80% of the total area of resilient flooring installed shall comply.

Tier 2. At least 90% of the total area of resilient flooring installed shall comply.

Notes:

1. Information regarding CHPS Low-emitting Materials List may be found at www.chpsregistry.com/live or <http://www.chps.net/dev/Drupal/node/381>.
2. Information regarding RCFI certified products may be found at http://www.rfci.com/int_FS-ProdCert.htm.
3. Documentation must be provided that verifies that finish materials are certified to meet the pollutant emission limits in this section.

A4.504.3 Thermal insulation. Thermal insulation installed in the building shall meet the following requirements:

Tier 1. Install thermal insulation in compliance with the VOC-emission limits defined in Collaborative for High Performance Schools (CHPS) Low-emitting Materials List.

Tier 2. Install insulation which contains No-Added Formaldehyde (NAF) and is in compliance with the VOC-emission limits defined in Collaborative for High Performance Schools (CHPS) Low-emitting Materials List.

Notes:

1. CHPS Low-emitting Materials List may be found at www.chps.net/manual/lem_table.htm.
2. Documentation must be provided that verifies the materials are certified to meet the pollutant emission limits in this section.

DRAFT

SECTION A4.505 INTERIOR MOISTURE CONTROL (Reserved)

SECTION A4.506 INDOOR AIR QUALITY AND EXHAUST

A4.506.1 Filters. Filters with a higher value than MERV 6 are installed on central air or ventilation systems. Pressure drop across the filter shall not exceed .1 inches water column.

A4.506.2 Direct vent appliances. Direct-vent heating and cooling equipment is utilized if the equipment will be located in the conditioned space or install the space heating and water heating equipment in an isolated mechanical room.

SECTION A4.507 ENVIRONMENTAL COMFORT (Reserved)

SECTION A4.508 OUTDOOR AIR QUALITY (Reserved)

SECTION A4.509 INNOVATIVE CONCEPTS AND LOCAL ENVIRONMENTAL CONDITIONS

A4.509.1 Innovative concepts and local environmental conditions. The provisions of this code are not intended to prevent the use of any alternate material, appliance, installation, device, arrangement, method, design or method of construction not specifically prescribed by this code. This code does not limit the authority of city, county, or city and county government to make necessary changes to the provisions contained in this code pursuant to Section 101.7.1.

DRAFT

APPENDIX A4 RESIDENTIAL VOLUNTARY MEASURES DIVISION A4.6 – TIER I AND TIER 2

SECTION A4.601 GENERAL

A4.601.1 Scope. The measures contained in this appendix are not mandatory unless adopted by a city, county, or city and county as specified in Section 101.7. The provisions of this section outline means of achieving enhanced construction or reach levels by incorporating additional green building measures. In order to meet one of the tier levels designers, builders, or property owners are required to incorporate additional green building measures necessary to meet the threshold of each level.

A4.601.2 Prerequisite measures. Tier 1 and Tier 2 thresholds require compliance with the mandatory provisions of this code and incorporation of the required prerequisite measures listed in Section A4.601.4.2 for Tier 1 and A4.601.5.2 for Tier 2. Prerequisite measures are also identified in the Residential Application Checklist in Section A4.602.

As specified in Section 101.7, additional prerequisite measures may be included by the enforcing agency to address specific local environmental conditions and may be listed in the Innovative Concepts and Local Environmental Conditions portions of the checklist.

A4.601.3 Elective measures. In addition to the required measures, Tier 1 and Tier 2 buildings must incorporate at least the number of elective measures specified in Sections A4.601.4.2 and A4.601.5.2.

A4.601.4 Tier 1. To achieve Tier 1, status a project must comply with the following:

A4.601.4.1 Mandatory measures for Tier 1. The project shall meet or exceed all of the mandatory measures in Chapter 4, Divisions 4.1 through 4.5 and Chapter 7 as applicable.

A4.601.4.2 Prerequisite and elective measures for Tier 1. In addition to the mandatory measures, compliance with the following prerequisite and elective measures from Appendix A4 is also required to achieve Tier 1 status:

1. From Division A4.1, Planning and Design.
 - 1.1 Comply with the topsoil protection requirements in Section A4.106.2.3.
 - 1.2 Comply with the 20% permeable paving requirements in Section A4.106.4.
 - 1.3 Comply with the cool roof requirements in Section A4.106.5.
 - 1.4 Comply with at least two elective measures selected from Division A4.1.
2. From Division A4.2, Energy Efficiency.
 - 1.1 Exceed the California Energy Code requirements, based on the 2008 Energy Efficiency Standards by 15%.
 - 1.2 Comply with at least four elective measures selected from Division A4.2.
3. From Division A4.3, Water Efficiency and Conservation.
 - 1.1 Comply with the reduced flow rate for kitchen sink faucets in Section A4.303.1
 - 1.2 Comply with the Tier 1 potable water use reduction for landscape irrigation design in Section A4.304.4.
 - 1.3 Comply with at least one elective measure selected from Division A4.3.
4. From Division A4.4, Material Conservation and Resource Efficiency.
 - 1.1 Comply with the 20% cement reduction requirements in Section A4.403.2.
 - 1.2 Comply with the 10% recycled content requirements in Section A4.405.3.
 - 1.3 Comply with the 65% reduction in construction waste in Section A4.408.1.
 - 1.4 Comply with at least two elective measures selected from Division A4.4.
5. From Division A4.5, Environmental Quality.
 - 1.1 Comply with the 80% resilient flooring systems requirements in Section A4.504.2.
 - 1.2 Comply with the thermal insulation requirements for Tier 1 in Section A4.504.3.
 - 1.3 Comply with at least one elective measure selected from Division A4.3.

Note: The Residential Occupancies Application Checklist contained in Section A4.602 may be used to show which elective measures are selected.

DRAFT

A4.601.5 Tier 2. To achieve Tier 2, status a project must comply with the following:

Note: The measures necessary to achieve Tier 2 status are very stringent. Cities, counties and cities and counties considering adoption of Tier 2 as mandatory should carefully consider the stringency of each measure and ensure that the measures are achievable in their location.

A4.601.5.1 Mandatory measures for Tier 2. The project shall meet or exceed all of the mandatory measures in Chapter 4, Divisions 4.1 through 4.5 and Chapter 7 as applicable.

A4.601.5.2 Prerequisite and elective measures for Tier 2. In addition to the mandatory measures, compliance with the following prerequisite and elective measures from Appendix A4 is also required to achieve Tier 2 status.

1. From Division A4.1, Planning and Design.
 - 1.1 Comply with the topsoil protection requirements for Tier 1 and Tier 2 in Section A4.106.2.3.
 - 1.2 Comply with the 30% permeable paving requirements in Section A4.106.4.
 - 1.3 Comply with the cool roof requirements in Section A4.106.5.
 - 1.4 Comply with at least four elective measures selected from Division A4.1.
2. From Division A4.2, Energy Efficiency.
 - 1.1 Exceed the California Energy Code requirements, based on the 2008 Energy Efficiency Standards by 30%.
 - 1.2 Comply with at least six elective measures selected from Division A4.2.
3. From Division A4.3, Water Efficiency and Conservation.
 - 1.1 Comply with the Tier 1 reduced flow rate for kitchen sink faucets in Section A4.303.1.
 - 1.2 Comply with the Tier 2 dishwasher requirements in Section A4.303.1.
 - 1.3 Comply with the Tier 2 potable water use reduction for landscape irrigation design in Section A4.304.4.
 - 1.4 Comply with at least two elective measures selected from Division A4.3.
4. From Division A4.4, Material Conservation and Resource Efficiency.
 - 1.1 Comply with the 25% cement reduction requirements in Section A4.403.2.
 - 1.2 Comply with the 15% recycled content requirements in Section A4.405.3.
 - 1.3 Comply with the 75% reduction in construction waste in Section A4.408.1.
 - 1.4 Comply with at least four elective measures selected from Division A4.4.
5. From Division A4.5, Environmental Quality.
 - 1.1 Comply with the 90% resilient flooring systems requirements in Section A4.504.2.
 - 1.2 Comply with the thermal insulation requirements for Tier 1 and Tier 2 in Section A4.504.3.
 - 1.3 Comply with at least one elective measure selected from Division A4.3.

Note: The Residential Occupancies Application Checklist contained in Section A4.602 may be used to show which elective measures are selected.