

DECEMBER 22, 2008

**APPLICANT RESPONSES AND ADDITIONAL INFORMATION TO MPWMD
REQUEST LETTER DATED NOVEMBER 20, 2008**

**SUBJECT: CONSIDER APPLICATION TO AMEND CALIFORNIA AMERICAN
WATER DISTRIBUTION SYSTEM TO SERVE MONTEREY BAY
SHORES ECORESORT; APPLICATION #20080915MBS-L4; APN 011-
501-014; SAND CITY.**

1. Greywater Reuse Technology: The Monterey County Health Department has been provided significant amount of information regarding the Monterey Bay Shores Ecoresort ("MBSE") water conservation system strategies, and in particular, graywater reuse technology. The Ordinance that governs Graywater Systems is covered by Appendix G of the 2007 California Plumbing Code. All graywater reuse technology that is specified for the MBSE meets or exceeds the standards of the County ordinance. It also meets the International Association of Plumbing and Mechanical Officials (IAPMO) which administers and certifies plumbing products, upon which the California Code of Plumbing is based. IAPMO R&T Lab does independent testing, research and technical services in plumbing and mechanical systems. They have tested and certified the Brac System for graywater reuse proposed for the MBSE (on December 8, 2008, Being Water presented the District Board and Staff with the Brac Systems graywater reuse technology also used on the MBSE project).

We also provided the County Health Department with an example of an approved Brac System in Marine County which has been approved for use in the County with the Brac System, as well as other literature and compliance letters. Mr. Roger Vanhorn, District Specialist, Monterey County Health Department, will provide Ms. Henrietta Stern, Project Manager, MPWMD under a separate cover with the letter requested by the District which concurs with the graywater reuse technology proposed for the MBSE. See Attachment A. For purposes of reference, we are including as Attachment B the Appendix G, 2007 California Plumbing Code, the governing Ordinance in the County for graywater systems. All systems and technology for reuse technology comply or exceed the standards of the aforementioned Ordinance. The MBSE will produce about 13 acre feet per year (AFY) of graywater. Of that, 8.09 AFY will be used for irrigation and laundry. Attachment C includes reference material from Rana Creek provided to the County Health Department which includes: cover letter, water process flow diagram summary and the water process flow diagram for the MBSE (this represents only a partial list of the material submitted).

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Note that irrespective of the performance of the graywater reuse technology and other water conservation measures implemented by the MBSE, MBSE has excess water and a significant buffer to service the project under all possible scenarios. The Water Distribution Permit provides **150%** of estimated water consumption.

2. Compare water use in similar mixed use resorts (if available): A number of resorts were contacted, including the Hyatt Regency, Spanish Bay and Monterey Plaza, in order to ascertain the water usage. It was impossible to get acre-footage use or even averages of use per room or guest, let alone the specific details. Because each resort is unique in that each has different amenities, such as spas, golf courses, conference centers, gyms, different bathrooms, back of the house functions, kitchens or restaurants, and multiple meters, it was impossible to obtain any specific uses from any of the resorts. The same question was put to Cal-Am, which indicated that, while not citing specific customers, they find that the use for large mixed use or full service hotels/spas can vary significantly, depending on many factors and uses in each resort. It was noted that there are no standard metrics because each facility has different amenities and programs. We were advised that the MPWMD use factors employed in determining the water consumption serve as a good projection and guide for water consumption. Those numbers were also calculated using occupancy factors and led to quantitatively similar use numbers.

MBSE will use less water because of the following factors:

- Efficiency of water use systems incorporated into the design
- Conservation of water
- Complete stormwater treatment and management
- Capturing rain water for non-potable uses (laundry, irrigation and landscaping)
- Graywater recycling

It should be noted that the water use estimates for the MBSE are conservative as evidenced by the use *factors* for non-residential and residential uses based on the MPWMD Group I, III and Residential Fixture counts.

3. Water Use Estimates: The water use estimates were recalculated based on the revised set of use factors provided by the MPWMD staff for non-residential and residential uses based on the MPWMD Group I, III and Residential Fixture count. In order to include irrigated areas, Maximum Applied Water Allowance (MAWA)
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calculations were made by Rana Creek to estimate the MAWA acre-feet/year numbers for a Zone 2 ETo (coastal mixed fog area) compatible with the MBSE site. Calculations were intended to be conservative so as to provide a higher use estimate. In order to properly estimate the Visitor Serving Residential units that are in a rental pool, the Applicant had discussions with staff on the proper methodology to allocate use to the renters/guests and owners. Following consultation with MPWMD staff, it was agreed that a reasonable assumption of use of the 88 Visitor Serving units was to allocate 22 units as owner occupied, and 66 units as two-room hotel usage. It was further agreed to use 100% occupancy for the units. By comparison, the Certified Local Coastal Plan for Sand City requires that only a 80% occupancy level be used in determining water consumption. A 100% occupancy assumption yields a more conservative estimate. The revised calculations and estimates were submitted to Ms. Gabby Ayala, MPWMD, for review. Ms Ayala responded to the Applicant on December 3, 2008 noting that " At this time, the District concurs with the December 2, 2008 water demand projections for the Ecoresort". The estimates of usage for the MBSE, which includes an irrigation buffer of 1.2 acre-feet, totals 62.99 acre-feet per year. Annual irrigation water use of non-potable water results in 8.09 acre-feet/year. The MBSE produces in excess of 13 acre-feet/year of gray recycled water, or about 5 acre-feet excess of gray water use for irrigation which can be used to recharge the Seaside Basin aquifer. The estimated water consumption of 62.99 acre-feet per year is significantly less than the Application which seeks up to 95 acre-feet per year (AFY), in fact 34% less! Even if all recycle use water systems were to fail and the 8.09 AFY irrigation was to use potable water, an unlikely event, the Applicant would still have 24 AFY as excess buffer.

Attachment D attached hereto as an exhibit to this response, includes the following items:

Water Consumption Estimates Table: using MPWMD water use factors-62.99 AFY (2 pages)

Water consumption Chart Expected versus other metrics

Non-Residential Water Use Factors (MPWMD)

Maximum Applied Water Allowance (MAWA) calculations

Residential Use Fixture Count (MPWMD form) - for Visitor Serving Residential

Residential Use Fixture Count (MPWMD form) – for 2 Bedroom units

Residential Use Fixture Count (MPWMD form) – for 3 Bedroom units

Water consumption Calculations based on Alternative MPWMD Occupancy Factors (63.81AFY)

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4. Water Rights Associated with MBSE and Use by Cal-Am (CAW): Security National Guaranty, Inc (SNG), owner of the MBSE site has overlying water rights. In 2006 the Monterey County Superior Court issued a Decision and Judgment that adjudicated the Seaside basin, made factual determinations and implemented a "physical solution" which is the Court supervised groundwater management plan (California American Water v. City of Seaside, 2006, et al, Attachment J). In the adjudication, the court **confirmed that SNG has water rights and is entitled to pump 149 AFY from the Seaside Basin**. In addition, under the judgment, SNG has priority rights to pump the water, meaning, that if groundwater levels decline or are impacted, for example, then non-priority users must reduce their groundwater use first before SNG is impacted. Under the Judgment, SNG is under the Alternative Production Allocation (APA) , as opposed to the Standard Production Allocation (SPA). SNG can convert a portion or all of its water rights to SPA in perpetuity. In this case, SNG has rights that have "a prior and paramount right over those Parties Producing under the SPA to produce" their water. Thus, effectively, SNG is not subject to any reductions in pumping and will be able to use its 149 AFY allocation in perpetuity. SNG has an Active Well on the site.

On September 19, 2008, the Seaside Groundwater Basin Watermaster Board of Directors confirmed by a unanimous vote that under the adjudication and Decision, "SNG's proposal to produce 90 acre feet of water annually from the Seaside Basin for use on the SNG Property is well within SNG's 149 acre foot Alternative Production Allocation" and that SNG's plan for Cal-Am to pump SNG's water for delivery to the MBSE site "is consistent with the terms of the Basin Adjudication Decision". See Attachment E.

SNG's right to pump 149 AFY from the Seaside Basin consistent with the Decision of the Court is absolute and cannot be challenged. It should be noted that SNG has an Active Well on the MBSE site, and that it could have chosen not to seek this Application to amend Cal-Am's water distribution System to serve the MBS Ecoresort, and instead, opted to serve the site with the existing Active Well on-site. SNG's decision to seek this Application was prompted by the fact that pumping SNG's water from inland wells was an environmentally superior alternative to on-site pumping because of the concern for future salt water intrusion. While there has been no evidence to date of any salt water intrusion (MPWMD uses two (2) monitoring wells on the MBSE site), SNG chose to approach the Application from the environmentally preferred alternative, consistent with the MBS Ecoresort philosophy of ecological and sustainable design providing for minimum environmental impacts. Two of the MBS Ecoresort design elements incorporated in the design approach are Earth and Water: both speak to the issue of siting and water ecology. SNG chose the better alternative for MBS Ecoresort of

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pumping it's water from inland using the CAW wells and delivering it to the site using existing system and infrastructure, thereby reducing any environmental impacts to a minimum.

How would CAW deliver the water to the MBSE Site and Service it: CAW has existing wells in the Seaside Basin located approximately 2 miles from the coast, notably the Peralta wells as shown on Attachment F. Also shown on this Attachment is the operating PCA-W well located on the MBSE site. As part of its existing water distribution system and existing infrastructure, CAW has water lines that are stubbed for the MBSE project and are located on the corner of the Edgewater Shopping Center (Target, Costco) in Sand City. Those line are ready to serve the MBSE site once the extension lines are brought from the Edgewater Shopping Center to the MBSE site. That will be done during construction in the Sand City and Cal-Trans right of way when the utility lines are brought in. That is not an issue and both the City and Cal-Trans indicated this is a routine job. The extension lines are shown on the engineering drawings, Attachment G. Once the extension water lines are installed, service is not an issue. There is excess capacity and pressure, especially for fire suppression. SNG civil engineers and CAW engineers have reviewed the plans to make certain all codes and requirements are met. The CAW distribution system has the delivery capacity to address existing demands, including MBSE. Historically the CAW system, prior to aggressive conservation efforts, delivered much greater volumes of peak flow than the current system demand, including MBSE anticipated demand. The CAW system will continue to address the constraints of 95-10 and Seaside Basin restrictions in the system aggressive manner of previous years. The water delivered to MBSE will not be from any existing CAW water source. The MBSE delivered water remains the property right of MBSE and will be delivered through a long-term lease agreement utilizing the CAW delivery system.

MBSE is not a beneficiary of the Sand City desalination project and cannot be served by it. The MBSE site was specifically excluded by the MPWMD Board action in its December 2007 Board Meeting from being a beneficiary of the Sand City desalination plant because the Board noted that the MBSE site has its own water supply under the Seaside Basin Adjudication.

5. Water Saving Equipment and Wind: The water systems for the MBSE are designed to ensure durability and dependability in all types of environments, including "wind blown sand". It should be noted that through habitat and dune restoration proposed for the MBSE, all dunes will be stabilized by vegetative ground cover and dune and slope stabilization, minimizing the effects of wind blown sand. However, To ensure that windblown sand does not interfere with the operation and maintenance of the pool system, graywater system, and irrigation system, the following measures are taken:

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The pool pumps, heaters, and filters are placed in either a concealed subsurface chamber, or indoor maintenance chambers.

The graywater system (including the settling tanks, filters, and pumps) will be placed in the lower levels of the Monterey Bay Shores Ecoresort facility.

All outdoor pumps and filters are enclosed in inspection chambers with tightly fitting covers.

Outdoor storage tanks are tightly sealed, preventing sand from entering.

All air vents are designed to prevent airborne particles from entering.

The irrigation system will be a subsurface system, designed to function in sandy soils.

6. Addendum to FEIR Sections 3, 4.8 and 4.16: Provided on December 3, 2008 CD with pdf files and hard copies of the sections requested. On December 12, 2008, two bound volumes of the entire Addendum FEIR with exhibits were also delivered to MPWMD containing these sections.

7. Addendum to FEIR: In an effort to provide greater public transparency and an opportunity for public review of the MBSE, we have asked the City of Sand City, the lead agency on the MBSE, to post the Addendum FEIR on their website. The City has agreed to do that. www.SandCity.org. In addition, bound volumes of the Addendum FEIR are available for public review at the City Hall and have been available since mid-August 2008. Bound volumes are also available at the District office and have been available since early October. We also asked the Coastal Commission to post the Addendum FEIR on their website so as to facilitate greater public review. Coastal planner Mr. Michael Watson, the planner responsible for review of the MBSE project, responded that "it appears that we are not currently equipped to post the Addendum FEIR on the Commission's website. The staff report and related material will be posted when it goes to public hearing". In addition, SNG has moved forward to provide a website that provides additional information, the MBSE Booklet, a shorter version "At a Glance" and other material including the Addendum FEIR, as well as the ability to communicate and comment on the MBSE project. We are in the process of completing the construction of the Website, expected to be operating by December 30, 2008. www.MontereyBayShores.com. As the District is aware, legal counsel for the District Mr. Dave Laredo has previously agreed that there is no obligation under CEQA to circulate the Addendum FEIR for the MBSE. None-the-less, SNG in the spirit of openness, has caused others and itself to post the environmental document online.

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8. Public Outreach programs: Since the November 17, 2008 Public Hearing for the Application of SNG and CAW for the Water Distribution System permit, numerous outreach and presentations have taken place, including providing Addendum FEIR

copies to members of the public who attended the meeting and requested copies. In the MPWMD public hearing on November 17th, Dr. Ed Ghandour in his comments to the Board, invited the public to attend the public hearing and workshop that was being held the following day in the City of Sand City. This hearing was televised to the public.

November 18, 2008: Public Hearing and a Workshop held for one hour in Sand City on the MBSE . Attachment H.

December 3, 2008: Green Building Expo, held at the Monterey Conference Center. Keynote speaker Paul Kephart, Rana Creek, member of the MBSE team, presented the MBSE project as part of the keynote address "the Sexiest Water Projects We have Ever Seen". Mr. Kephart discussed water systems and water conservation as part of the MBSE design. See Attachment I.

Presentations have been made to AMBAG and numerous small groups that expressed an interest in the MBSE. Discussions have been held with Surfrider Foundation and Monterey Coastseeker/The Otter Project who have been provided with copies of Addendum FEIR. Numerous presentations are planned in January and February.

Additional meetings and outreach to the public is planned as part of the establishment of a website for the project and a local office located at 135 Webster Street, Monterey. Numerous groups are being contacted for presentations, discussions and follow-up. Two open house events will be held in January in the local office.