



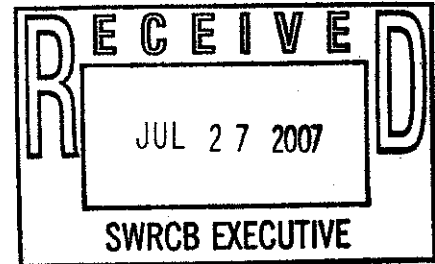
City of Morro Bay

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6/26/07 Scoping Mtg.
CA Ocean Plan Amend.
Deadline: 7/27/07 Noon

July 25, 2007

Ms. Song Her
Clerk to the Board, Executive Office
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100



Subject: Comment Letter – California Ocean Plan Amendment

Dear Ms. Her and Honorable Board:

On behalf of the City of Morro Bay, thank you for the opportunity to provide comments on the Scoping Document for 2008 Amendments to the California Ocean Plan and Appendix III, Proposed Standard Monitoring Procedures (2008 Ocean Plan). These comments are provided by staff at the City of Morro Bay and include a letter attachment from the City's technical consultant Douglas A. Coats, PhD, of Marine Research Specialists. The comments are intended to address areas of concern contained in the project description designated as having the highest priority for adoption. The proposed amendments could impact City of Morro Bay's ability to discharge to the ocean from the City's wastewater treatment plant, from the City's desalinization plant, and raises considerable issues related to the City's storm water discharge and non point sources pollution programs.

City staff recommends the comment period be extended and the Board provide additional outreach workshops to allow the City of Morro Bay and the small other coastal communities throughout the State of California the opportunity to provide further comments on the proposed amendments to the 2008 Ocean Plan. City staff is concerned that the proposed amendments could have profound financial and operational implications for the City of Morro Bay and other coastal communities throughout the State.

The following comments provided by City staff are directed towards storm water discharge and non-point source issues that are covered in the Project Description Issues numbers 2, 10, 14, 15, 17, 18, and 23. Comments pertaining to the City's wastewater treatment plant are contained in the letter attachment from Marine Research Specialists.

FINANCE
595 Harbor Street
HARBOR DEPARTMENT
1275 Embarcadero Road

ADMINISTRATION
595 Harbor Street
CITY ATTORNEY
955 Shasta Avenue

FIRE DEPARTMENT
715 Harbor Street
POLICE DEPARTMENT
850 Morro Bay Boulevard

PUBLIC SERVICES
955 Shasta Street
RECREATION AND PARKS
1001 Kennedy Way

Desalination Facilities and Brine Disposal:

Throughout the States, as freshwater resources are threatened by pollution and intensification of use, coastal communities are turning to desalinization as a tool for draught protecting and managing existing resources as well as for a new water source. There appears to be several gross assumptions made in defining the “problem”.

The first gross assumption is that brine discharges form a dense homogeneous plume that settles to the ocean bottom and causes a negative impact to benthic marine species. In tidal influenced coastal waters, there is mixing that occurs due to tidal action and the influences of in-rushing fresh waters mentioned in the report.

The second gross assumption is that the study of purple sea urchin development in a highly saline environment is indicative of all benthic species. Each benthic species has a differing tolerance to salinity. While a localized increase in salinity may be harmful to some species it could be equally beneficial to others.

Unless or until good science establishes that there are dense saline plumes causing damage to the ocean environment from desalination facilities, it is a large and unnecessary expense to require monitoring of the brine disposal from these facilities. The evidence cited supports taking no action at this time because the link between brine disposal from desalination plants and damage to benthic marine life has not been demonstrated. A dense plume that can only occur under rare circumstances and that might cause damage to some species while benefiting does not appear to be a cause for costly regulatory action.

Non-point Source and Storm Water Discharges:

It is City staff's understanding that the California Ocean Plan is intended to set standards for ocean water quality similar to the Basin Plan rather than impose additional permit requirements. The stormwater permit requirements should remain within the National Pollutant Discharge Elimination System (NPDES) permit process, rather than be scattered throughout several new layers of regulatory processes.

To eliminate the monitoring of minor flows that do not have a consequential effect on ocean water quality, the proposed outfall monitoring during dry weather requires a better definition of what constitutes a dry weather flow.

The Central Coast Regional Water Quality Control Board (RWQCB) has a regional water quality-monitoring program known as Central Coast Ambient Monitoring Program (CCAMP). City staff supports the RWQCB's effort to enhance and expand this program for coastal monitoring rather than have the State impose this additional unfunded monitoring requirement upon the cities and counties.

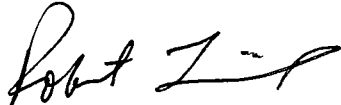
Ms. Her Song
July 27, 2007
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I would like to thank you again for this opportunity to provide comments on the 2008 Ocean Plan and we hope the Board will consider our comments. If you have any questions or comments, please contact me at (805) 772-6261.

Sincerely,

Bruce Ambo
Public Services Director

By,

A handwritten signature in black ink, appearing to read "Robert Livick", with a stylized flourish at the end.

Robert Livick, PE/PLS
City Engineer

cc: Robert Hendrix, Bill Boucher, Bruce Keogh, Dylan Wade, Rachel Grossman,
Douglas Coats, Jill Falcone

Attachment: Letter from Dr. Douglas Coats, Marine Research Specialists, dated July 26, 2007.

marine research specialists

3140 Telegraph Road, Suite A · Ventura, CA 93003 · (805) 644-1180

Ms. Song Her
Clerk to the Board
Executive Office
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-0100

26 July 2007

Reference: Comment Letter – California Ocean Plan Amendment

Dear Ms. Her:

On behalf of the City of Morro Bay and the Cayucos Sanitary District (hereinafter MBCSD), we have conducted a review of the referenced document¹ to identify areas of potential concern to the MBCSD Wastewater Treatment Plant,² and to the City of Morro Bay's Desalinization Plant.³ The comments provided below focus only on those issues pertinent to these two facilities. Other issue areas will be addressed by the MBCSD under separate cover.

Issue 2: Fecal Coliform Standard for Shellfish. We oppose adoption of the recommended alternative (Alternative #2), and recommend not changing the current bacterial standard (Alternative #1). The Treatment Plant will be significantly impacted by passage of the proposed Ocean Plan amendment because the Plant discharges into coastal waters that have been designated for shellfish harvesting by the Central Coast Basin Plan. The proposed alternative would add a fecal coliform standard for receiving waters that could, at a minimum, needlessly increase monitoring requirements for the Treatment Plant. More importantly, however, the Treatment Plant's ability to demonstrate compliance with the proposed standard is of great concern because non-point source coliform contamination of receiving waters severely confounds compliance assessments throughout the central coast region. While the State Board acknowledges "*background*" non-human sources, their reliance on other "*indicator*" bacteria to measure those contributions is not well-supported, nor do they provide a definitive and proven method for source identification. Finally, because of significant non-point source contamination from Morro Creek, the addition of the proposed fecal coliform standard could cause the receiving waters along Atascadero Beach to be listed as impaired (Section 303(d) of the CWA⁴). Such a designation could have profound implications for future permitting and monitoring requirements of both the Desalinization Plant and Treatment Plant discharges.

It is important to note that the Treatment Plant disinfects all wastewater prior to its discharge at a location well offshore of the surfzone. Coliform densities measured in wastewater prior to discharge are consistently below densities measured in the surfzone along the adjacent beach. Nevertheless, the Treatment Plant has been required to conduct extensive and regular coliform

¹ http://www.swrcb.ca.gov/plnspols/docs/oplans/scopemtjune2007/scopingdocamend_cop.pdf

² The Wastewater Treatment Plant owned by the City of Morro Bay and the Cayucos Sanitary District (MBCSD) has a 301(h)-modified NPDES permit for open-ocean discharge of treated wastewater.

³ The City of Morro Bay's Desalinization Plant operates on an as-needed basis. Intake water is from beach wells and brine is discharged into open-ocean waters north of Morro Rock.

⁴ The Federal Clean Water Act

monitoring within the surfzone for over a decade, even though the Department of Health Services also regularly conducts monitoring of its own. However, during a 2006 review of discharge-permit requirements, Regional Board staff and the EPA acknowledged that such an extensive and redundant monitoring program by the Treatment Plant is unnecessary. Unfortunately, passage of a revised fecal coliform limit may eliminate much of the discretion recently exercised by the staff of these agencies, and could result in the implementation of an even more complex and costly version of surfzone monitoring than currently exists. For example, the scope of the monitoring would markedly increase with the addition of assessments for indicator bacteria. However, the addition of unproven methods for monitoring of indicator bacteria would not resolve the ambiguity arising from non-point sources, and could, in fact, increase the potential for a false determination of non-compliance by the Treatment Plant.

Issue 10: Desalination Facilities and Brine Disposal. We oppose the adoption of Alternative #2, which establishes a narrative objective for increases in receiving-water salinity. Instead, the Ocean Plan should remain unchanged until adequate research has been conducted on the potential impacts from brine discharge. Otherwise, adoption of even a narrative salinity objective will result in costly and potentially unnecessary benthic monitoring requirements for most, if not all brine dischargers, including the City of Morro Bay's Desalinization Plant. Benthic monitoring programs are extraordinarily expensive; for example, the Treatment Plant's benthic monitoring effort is the most expensive component of its receiving-water monitoring program. It requires specialized field sampling equipment, singular taxonomic expertise, and complex analyses and reporting.

As stated in the scoping document, in the discussion of Alternative #3, imposing a numeric objective is also untenable because of the lack of adequate data on potential impacts, and because of differences in specific discharges and their receiving waters. Although not explicitly mentioned in the scoping document, the prescription of a single objective for all discharges is particularly inappropriate for the intermittent discharge of brine, as is the case for Morro Bay's Desalinization Plant. Nevertheless, even under the recommended action of no numeric objective (Alternative #3), the Regional Board could still choose to establish its own numeric limit.

Imposing either a narrative or numeric salinity objective has far reaching implications for the MBCSD. Such action should not be taken without a full assessment of the potential net benefit to the marine environment, and of the potential impacts to existing infrastructure. For example, brine generated by the City of Morro Bay's Desalinization Plant could be commingled with wastewater from the Treatment Plant prior to its discharge through the Treatment Plant's discharge. Although such an arrangement would be costly, it would probably allow the Desalinization Plant to comply with salinity objectives. However, combining the discharges could have potentially negative impacts on the performance of the Treatment Plant. The attendant increases in discharge density will negatively affect the initial dilution levels currently achieved by the existing discharge of wastewater alone. As a result, there may be no net benefit to the receiving waters. However, without additional dilution modeling, and reliable quantitative assessments of potential impacts from brine discharge, such a determination cannot be made.

Issue 13: Review Table B Water Quality Objectives. We recommend that there be no change to the existing numeric radioactivity objective (Alternative #1). Our objection to the proposed amendment is based on a belief that there is insufficient basis for the proposed adoption of the USDOE standard. Not only is the current human-health standard for radioactivity levels in drinking water well established, but the proposed revision of the radioactivity objective to conform to the USDOE standard for protection of aquatic life does not have the same level of supporting research. Moreover, because of differences in measurement units, among other things, the USDOE standard is not easily translated into numeric criteria. Consequently, it is difficult to determine what the new numeric limit will be, how it will be measured, or whether it is more or less restrictive than the existing objective. Until these deficiencies can be resolved, the radioactivity objective should not be changed.

Historically, the Treatment Plant's discharge has been well below the drinking-water standards for radioactivity that is promulgated in its current discharge permit. Radioactivity measured in the Plant's effluent arises from naturally occurring sources present in the regional geologic formations. Without the necessary additional research and information, it is impossible to determine how the USDOE standard will be implemented in individual discharge permits, namely, how compliance will be evaluated. This, along with the dated nature of the studies used to support the USDOE standard, is of particular concern because adoption of the standard could result in a revised permit limit that is below ambient background levels.

Issue 14: Regional Ambient Water Quality Monitoring. We recommend Alternative #1, which supports no change in existing monitoring procedures, rather than the proposed Alternative #3 which prescribes a monitoring program requiring participation in regional monitoring programs. Historically, the Treatment Plant was not required to participate in regional monitoring programs by virtue of its operation under Section 301(h) of the CWA. Congress included a subsection in the amended CWA to prevent imposition of unreasonable monitoring requirements on 301(h) dischargers because they saw a potential for abuse where excessive monitoring requirements unrelated to the discharge might be punitively imposed. There are currently no provisions in the proposed alternatives for Issues 14 and 15 (see below) to limit the potential abuse of regional monitoring programs, and this is of particular concern to the Treatment Plant. The Plant is currently in the process of upgrading its process to a level that will significantly exceed secondary standards. As a result, within the next few years, its monitoring program will not be afforded reasonable protection under Section 301(h). As a result, the proposed minimum standard monitoring procedures (discussed below under Issue 15) will require the Plant's participation in a regional monitoring program. Such a requirement is undesirable for two principal reasons.

First, there is a strong probability that most or all of the regional monitoring program components will provide no insight into potential marine impacts (or lack thereof) from the Plant's site-specific discharge. The loss of monitoring information directly pertinent to the Plant's discharge would eliminate the Plant's ability to definitively address claims made about the discharge, and any potential impacts it may have on the environment. Over the years, there have been many specious claims leveled against the Plant's discharge. Without recourse to the Treatment Plant's extensive record of monitoring data, it would have been difficult or impossible

to adequately address and refute these claims. This is of particular concern for the MBCSD discharge because it is comparatively isolated from other dischargers along the central coast. Most of the larger dischargers are located in the vicinity of Monterey Bay, where a well-established regional monitoring program already exists. It is likely that the proposed Ocean Plan amendment would force the MBCSD to participate in a distant monitoring program, where the water-quality issues have little relevance to Estero Bay.

Second, it is not clear that past cases of (monetary) participation by dischargers in regional monitoring programs have been entirely equitable. Ostensibly, dischargers would be relieved from site-specific (core) monitoring requirements in lieu of their participation in regional monitoring programs. However, there is no specific guidance or controls in the proposed amendments for the implementation of this trade-off. Consequently, it is difficult to determine whether such a trade-off will be reasonable. For example, there is great uncertainty in what site-specific requirements would have been imposed on individual dischargers had they not participated in the regional monitoring program. Instead, there is a danger that required participation in these regional monitoring programs will be viewed as a source of funding to address any number of new water-quality concerns, regardless of whether they are related to the point-source dischargers that provide the funding. More specifically, the proposed amendment fails to specify how fractional participation in regional monitoring will be allocated among individual dischargers. This could have the effect of unduly burdening small dischargers with more than their fair share of the monetary costs of supporting the programs. One reasonable approach to address this deficiency would be to base participation on total solids emissions. That way, dischargers would bear a burden of the monitoring costs that would be relatively proportional to their potential impact on the environment.

Issue: 15: Standard Monitoring and Reporting Requirements. As with Issue #14, we oppose the recommended amendment. The proposed amendment imposes minimum standards for monitoring procedures⁵ which could unreasonably expand the scope of monitoring beyond what would normally have been required of the MBCSD Treatment Plant. This is particularly true as plans are implemented to upgrade the Treatment Plant to standards that far exceed those of secondary treatment. Specifically, this amendment would remove the Regional Board's discretion in reducing monitoring requirements for high quality dischargers such as the MBCSD Treatment Plant. Regional Board staff should be afforded the flexibility to design monitoring programs that are pertinent to the issues associated with a specific discharge.

An example of a specific concern is the amendment's minimum requirement for frequent (five times per month) sampling of receiving waters for indicator bacteria. This was discussed under our response to Issue #2, which pointed out the incongruity of requiring dischargers with disinfected effluent to conduct regular receiving-water monitoring for coliform. The MBCSD expended significant effort during the recent permit application process to provide evidence to support a reduction in extraneous surfzone bacterial monitoring. The recommended amendment will eliminate a large part of the Regional Board staff's current flexibility in being able to address redundant or extraneous sampling within monitoring programs.

⁵ http://www.swrcb.ca.gov/plnspols/docs/oplans/scopemtg_june2007/prostdmonproc.pdf

Issue 22: Suspended Solids Regulation in Table A. We strongly oppose the proposed amendment to modify the suspended solids limit and recommend Alternative #1, where the limit would remain unchanged. Our opposition is both to the modification of the limit, and to the imposition of a restrictive time schedule for its implementation. As stated previously, the MBCSD Treatment Plant is currently upgrading its process to treatment levels that are likely to far exceed secondary standards. Thus, the MBCSD discharge will soon easily meet the proposed suspended solids limit. Nevertheless, we are opposed in principal to arbitrary changes in a limit that do not have a demonstrable environmental benefit.

It is apparent from the rationale provided by in Scoping Document that there is no substantive environmental basis for reducing the suspended solids limit. Instead, the Scoping Document identifies the existence of dischargers that do not treat their effluent to full secondary levels as the rationale for changing the solids limit. The Scoping Document provides no scientific evidence that the current limit is environmentally inadequate. The Scoping Document also incorrectly implies that the current solids limit in the Ocean Plan is not consistent with USEPA standards. This is misleading because the amended CWA does not require full secondary standards of all ocean dischargers. The CWA was amended by Congress in 1977 because secondary treatment standards are purely technology-based; and there was no evidence that a tangible environmental benefit would be realized by forcing open-ocean dischargers to perform costly upgrades to full-secondary treatment. Since that time, a wealth of ocean monitoring data, including the more than two decades of data collected by the Treatment Plant, has demonstrated that 301(h) dischargers have had no perceptible impact on the marine environment. Moreover, data collected from ocean dischargers that have upgraded to full secondary treatment have not revealed evidence of any substantive change to the marine environment following the upgrades.⁶

Unless the State Water Resources Control Board can quantitatively demonstrate that a tangible environmental benefit will result from a revision to the Ocean Plan objectives, we strongly feel that the arbitrary imposition of a technology-based standard is unwarranted. Irrespective of the availability of a particular technology, standards should be based on a demonstrable environmental benefit. Ignoring this undermines the credibility of the Ocean Plan as an environmental document, and sets a dangerous precedent wherein each new treatment technology that is developed will be immediately required of all dischargers, regardless of its proven potential to protect or enhance the environment.

Additionally, the Scoping Document suggests that the true purpose of the amendment is to target and penalize specific treatment plants. We take exception to how the Scoping Document singles-out, by name, ocean dischargers with legitimate discharge permits that happen to allow for modifications to the secondary treatment standards. The Central Coast Regional Water Quality Board originally raised the issue of revising the suspended solids limit several years ago, at a time when the Central-Coast region included two dischargers, Morro Bay and Goleta, which had permits for the discharge of effluent that underwent partial or blended secondary treatment. Now,

⁶ Diener, D.R. and S.C. Fuller. 1995. Infaunal Patterns in the Vicinity of a Small Coastal Wastewater Outfall and the Lack of Infaunal Community Response to Secondary Treatment. *Bulletin of the Southern California Academy of Sciences*. 94(1):5-20.

with both these dischargers having voluntarily elected to complete upgrades to full secondary treatment levels, the continued pursuit of this amendment appears to be moot from their standpoint. Moreover, planning, financing, and constructing of a new treatment facility takes time. Consequently, imposing a restrictive time schedule for compliance with the new solids limit may force the MBCSD to construct a plant that generates lower quality effluent than currently planned, simply to meet the time schedule proposed in the amendment.

Finally, with regard to the Scoping Document's negative implication of the MBCSD discharge, grossly prejudicial statements should be corrected and the Scoping Document should be re-circulated. In particular, the Document incorrectly states that the MBCSD Treatment Plant discharges only primary treated wastewater for at least some portion of the year. However, at least some of the MBCSD discharge always receives secondary treatment, and in fact, for the vast majority of the time, *all* of the Plant's effluent receives secondary treatment.

Please contact the undersigned if you have questions regarding these comments.

Sincerely,

Douglas A. Coats
Vice President

MARINE
RESEARCH
SPECIALISTS

Digitally signed by Dr. Douglas A. Coats

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Douglas A. Coats, Ph.D.
Senior Scientist