

Meeting Minutes

CCLEAN Steering Committee

April 22, 2008

10:00 – 12:00

Watsonville Wastewater Treatment Plant

Participants:

Barbara Pierson: City of Watsonville, (831) 768-3179

Dane Hardin: Applied Marine Sciences, (831) 426-6326

Ray von Dohren: Carmel Area Wastewater District, (831) 624-1248

Akin Babatola: City of Santa Cruz, (831) 420-6045

Garrett Haertel: Monterey Region Water Pollution Control Agency, (831) 883-6176

Lee Genz: Dynegy Moss Landing LLC, (831) 633-6785

Karen Worcester: Central Coast Water Board. (805) 549-3333

Bob Geyer: City of Watsonville, (831) 768-3149

Chris Coburn: Santa Cruz County, (831)454-2763

Thomas Quattlebaum: Pebble Beach Company, (831)625-8402

Kevin Silviera: City of Watsonville, (831)768-3175

Tom Reeves: City of Monterey, (831) 646-3448

Heidi Burch: City of Carmel-by-the-Sea, (831) 620-2006

Agenda Items:

1) **Review of last meeting minutes:** The minutes from the 03-04-08 meeting were approved with a few minor changes. They will be posted on the website. The financial summary will also be posted on the website.

2) **Financial Update:** In the fiscal year 07/08 the City of Watsonville has collected \$211,241 from the member agencies and has spent \$174,988

The breakdown is:	Applied Marine Science	\$80,334
	Weston Solutions	\$19,440
	Kinnetic Laboratories (KLI)	\$63,096
	Monterey Bay Analytical	\$ 200
	City of Watsonville	\$ 480
	Administration Fee (7%)	\$11,448

All the CCLEAN agencies are current on their payments and additional invoices are coming in.

3) **Discussion of setting up a workshop for including stormwater agencies into CCLEAN “Becoming a True Regional Program”:**

It was suggested that CCLEAN should modify its current approach to recruiting new member agencies. The current mode seems to be a series of attempts to convince agencies to join CCLEAN, and this seems to be creating the impression that we want them to join

for our benefit. Perhaps a workshop should be developed and conducted where a third party, such as a representative from the State or Regional Board, would present a more global perspective of effective regional monitoring programs. The benefits of a Regional Program would be clear to all; the benefits; synergies; visions and costs can be evaluated to enable all the agencies to develop the sense of mission to participate.

We discussed the fact that although a stormwater monitoring program and a point discharge monitoring program have overlapping components (including ambient and reference data trends of the water and sediment qualities of the bays; common elements of quality assurance programs; management structure, etc.,) there are also components that are unique to each type of discharger, especially with the refocus of CLEAN on effluent monitoring of the 4 POTWs. The division of cost would have to take this in to account.

Ray asked what the timeline is for the ASBS monitoring program. It was suggested by Ray that it may be too early for the ASBS agencies to consider joining CCLEAN, if these issues are not addressed. There is a draft Special Protection Monitoring Program that has not been approved. All the municipalities and agencies that discharge stormwater into Areas of Special Biological Significance (ASBS) in the Monterey and Carmel Bays have filed for exemptions from discharge prohibition. Dominic Gregorio informed the representatives of the municipalities and agencies, via a conference call, that they would receive letters stating that their exemption applications were incomplete.

As to the suggestion that a truly comprehensive regional monitoring program needs to include all ocean dischargers, Karen informed everyone that there is an Agricultural Monitoring Program in the central coast. It has \$1,000,000/year budget and 50 monitoring stations. The program focuses on issues up-stream of the ocean. When toxicity is found, they look up stream for the cause and try to remedy the situation. There is also CCAMP that does monthly monitoring of the watersheds. Tom asked where information about these different monitoring programs can be found. Dane suggested the Sanctuary's website, www.sanctuarysimon.org. Go to the "Monterey Bay" tab, "Water Quality" tab, and then the "Project" tab.

Karen proposed that she and Dane will work together to develop a framework of a Regional Monitoring Program that accommodates all the different agencies, which will then be subject to review by CCLEAN stakeholders. Chris brought up the point that counties and cities should also be considered, because they are working on compliance with "Interim Storm Water Regulations". Dane and Karen will bring their ideas back to the group at our next meeting. Akin will work on putting together a clear set of objectives for the regional monitoring workshop.

At this point in the meeting the representative of the storm water agencies left. They thanked Dane for his hard work and all agreed that a Regional Monitoring Program would be the most efficient way to approach monitoring in the Monterey Bay Area.

4) **Technical Document:**

a) **Discussion of choosing an Integrate High Volume Water Sampling Method:**

The 2 methods we are evaluating are the solid phase extraction (SPE) method that CCLEAN is presently using for effluent monitoring, river monitoring, and

ambient monitoring in the Bay, and the semi permeable membrane device (SPMD) and Polar Organic Compound Integrative samplers (POCIS) methods that Santa Cruz and Monterey Regional are using on their effluent. The technical document, which is due July 1st, will include a side by side comparison of the two methods and a recommendation of which method to use. The issues of concern are validation of the SPE method and whether the SPMD method includes compounds in the particulate phase for which the extract is analyzed. Akin argued that the argument that the SPE actually analyzes for solids fraction of the trace compounds and the POCIS/SPMD do not is contradicted by the lab notation of the silt layer of silt on the outside of the SPMD, when it is sent to the lab for extraction. He showed us a description of the POCIS pre-extraction condition and the SPMD pre-dialysis condition of the devices that were sent to the lab at the end of March this year. He emphasized the need to have validation for the performance characteristics of the methods including the following: How do the compounds sampled by SPE behave over the thirty day sampling period? Do they change in concentration? Is the change predictable under different sampling conditions such as pH and temperature? What is the behavior of a Day zero spike within the beads? What is the data comparison between an integrative sampling method and several grabs and composites in the same environmental matrix? Has this been done for each method?

- b) There was also a discussion of the possible application of the sampling methods upstream for dischargers, whether the matrix would reasonably accommodate either of the two sampling methods. Other questions include the value of flow based sampling versus equilibrium based sampling; since there might be a claim that flow based sampling was more appropriate to estimating loading to the bay. It was agreed that Dane and Akin would develop questions that would be addressed to each of the sampling methods.

- c) **Flow-through Bioassay:** Dane talked to the people from the University of Colorado at Boulder, with a view to exploring their willingness to collaborate with us on this project. They would provide the equipment, organisms, and expertise in evaluating the feminization of the fat head minnows for a price of \$300,000 the first year and \$200,000 for the following years. All representative of the CCLEAN agencies felt this was too expensive. It would increase our annual budget by more than half of the existing budget. Karen suggested that we look at other methods where samples are collected and analyzed in a laboratory. We also discussed what end points we will be looking for in these analyses. The University of Colorado group looks at a multitude of end points including nesting behaviors, histological changes and morphological ones, etc. It might be cheaper if we look at just large morphological changes in the fish. Dane will investigate alternative methods that are not so expensive. He suggested contacting Dr. Ankley from the EPA, who was involved in developing the fathead minnow feminization procedure.

d) **QAPP:** An updated QAPP is also due July 1st.

5) **Report from Meetings.**

- A) Dane presented CCLEAN results at the Coast and Ocean Regional Roundtable (CORRT). This was a forum organized by Monica Hunter of the Planning and Conservation League Foundation to promote dialogue between water quality scientists and local resource managers and planners. Monica also is a member of the Regional Board.
- B) Regional Board meeting March 20th and 21st: The new permits for Monterey Regional and Carmel were approved at this meeting as well as the revision of Santa Cruz's and Watsonville's permit. These passed on the consent agenda. Karen presented an update of CCLEAN. The board seems to be very happy with CCLEAN. Akin mentioned that he was able to update Roger Briggs on the EDC analyses that Santa Cruz is doing and the drug take back program they have instituted.
- C) Akin attended a CIWQS/EPA joint meeting at SCCWRP headquarters in Costa Mesa, in February. The meeting was to update the eminent board set up to review CIWQS and its value and structure for stakeholders. Many experts in the field including Brock Peterson, Val Conner, and Dominic Gregorio were present. EPA announced that they are developing 2 methods for dischargers to enter monitoring data via the internet. They are being tested in Maine and Illinois. Santa Cruz will host the CIWQS meeting at the end of June.

6) **Project Update:**

- A) **River Sampling:** This will just be the Pajaro and San Lorenzo Rivers. The cost will be covered by Watsonville and Santa Cruz respectively. The sampling occurred during the same time period as the Effluent sampling.
- B) **Effluent Sampling:** The wet weather sampling occurred in February and March of 2008.
- D) **Sediment Sampling:** New Fields have completed the analysis of the historical sediment and benthic community data for the first 5 years of CCLEAN. They have recommended changes in the sampling locations. Two sample locations would remain at the 80 ft. depth contour, two would be located closer to the rivers, and Dane is considering locating 2 near storm water outfalls. Garrett mentioned that he had seen maps that showed vectors of sediment movement in the Bay that the Sanctuary has. He will forward that information to Dane.
- E) **Mussel Sampling:** Mussel sampling was done during the wet season.
- F) **Offshore Ambient Monitoring:** The wet weather sampling will be done in February and March of 2008.
- G) **Proposition 50 Grant:** Dane will request a no-cost extension of this grant. They plan to sample 2 storm events next wet season and do the wetland sampling next year. Dane, Akin, and researchers from UC Davis met to discuss the issue of non-detects of Fecal and Total Coliforms in the effluent samples of Santa Cruz's WWTP. The problem was that the samples were diluted to the extent that ND

was equivalent to <900,000 MPN/100 ml.

- 7) **Set Date for the next Meeting:** The next meeting was set for Tuesday, May 13, 2008 at the Monterey Regional WWTP in Marina.

Items not on the Agenda:

- 1) Karen informed us that Mike Higgins is going to be playing a more active role in CCLEAN. Since CCLEAN is more involved in Effluent compliance monitoring, Mike will over see that part of the program. Karen will still be involved with the Regional aspects of the program.
- 2) Karen told us that they are finding fish with gonadal tumors in Morro. They are attributing the tumors to nonylphenol.