

**Participating Organizations**

- Alliance for a Living Ocean
- American Littoral Society
- Arthur Kill Coalition
- Asbury Park Fishing Club
- Bayberry Garden Club
- Bayshore Saltwater Flyrodgers
- Belford Seaweed Co-op
- Belmar Fishing Club
- Beneath The Sea
- Bergen Save the Watershed Action Network
- Berkeley Shores Homeowners Civic Association
- Cape May Environmental Commission
- Central Jersey Anglers
- Citizens Conservation Council of Ocean County
- Clean Air Campaign
- Coalition Against Toxics
- Coalition for Peace & Justice
- Coastal Jersey Parrot Head Club
- Coast Alliance
- Communication Workers of America, Local 1034
- Concerned Businesses of COA
- Concerned Citizens of Bensonhurst
- Concerned Citizens of COA
- Concerned Citizens of Montauk
- Dosl's Sea Roamers
- Eastern Monmouth Chamber of Commerce
- Environmental Response Network
- Explorers Dive Club
- Fisheries Defense Fund
- Fishermen's Dock Cooperative
- Fisher's Island Conservancy
- Friends of Island Beach State Park
- Friends of Liberty State Park
- Friends of Long Island Sound
- Friends of the Boardwalk
- Garden Club of Englewood
- Garden Club of Fair Haven
- Garden Club of Long Beach Island
- Garden Club of Monticumen
- Garden Club of Navesink
- Garden Club of New Jersey
- Garden Club of New Vernon
- Garden Club of Oceanport
- Garden Club of Princeton
- Garden Club of Ridgewood
- Garden Club of Rumson
- Garden Club of Short Hills
- Garden Club of Shrewsbury
- Garden Club of Spring Lake
- Garden Club of Washington Valley
- Great Egg Harbor Watershed Association
- Highlands Business Partnership
- Highlands Chamber of Commerce
- Hudson River Fishermen's Association/NJ
- Interact Clubs of Rotary International
- Jersey Coast Shark Anglers
- Jersey Shore Audubon Society
- Jersey Shore Captains Association
- Jersey Shore Running Club
- Junior League of Monmouth County
- Junior League of Summit
- Kiwanis Club of Manasquan
- Kiwanis Club of Shadow Lake Village
- Leonardo Party & Pleasure Boat Association
- Leonardo Tax Payers Association
- Main Street Wildwood
- Marine Trades Association of NJ
- Monmouth Conservation Foundation
- Monmouth County Association of Realtors
- Monmouth County Audubon Society
- Monmouth County Friends of Clearwater
- Montauk Fisherman's Emergency Fund
- National Coalition for Marine Conservation
- Natural Resources Protective Association
- Navesink River Municipalities Committee
- Newcomers Club of Monmouth County
- NJ Beach Buggy Association
- NJ Commercial Fishermen's Association
- NJ Council of Dive Clubs
- NJ Environmental Federation
- NJ Environmental Lobby
- NJ Marine Educators Association
- NJ PIRG Citizen Lobby
- NJ Sierra Club
- NJ Windsurfing Association
- Nottingham Hunting & Fishing Club
- NYC Sea Gypsies
- NY/NJ Baykeeper
- NY Marine Educators Association
- Ocean Advocates
- Ocean Conservancy
- Ocean County Citizens for Clean Water
- Ocean Divas
- Ocean Wreck Divers
- Outreach/First Presbyterian Church of Rumson
- Picatinny Saltwater Sportsmen Club
- Raritan Riverkeeper
- Riverside Drive Association
- Rotary Club of Long Branch
- Saint George's by the River Church, Rumson
- Saltwater Anglers of Bergen County
- Sandy Hook Bay Cattamaran Club
- Save Barnegat Bay
- Save the Bay
- SEAS Monmouth
- Seaweeders Garden Club
- Shark River Cleanup Coalition
- Shark River Surf Anglers
- Sheepshead Bay Fishing Fleet Association
- Shore Adventure Club
- Shore Surf Club
- Sierra Club, Shore Chapter
- Soroptimist Club of Cape May County
- South Monmouth Board of Realtors
- Staten Island Friends of Clearwater
- Strathmere Fishing & Environmental Club
- Surfers' Environmental Alliance
- Surfrider Foundation, Jersey Shore Chapter
- TACK 1
- Terra Nova Garden Club
- Unitarian Universalist Congregation of Mon. County
- United Boatmen of NY/NJ
- United Bowhunters of NJ
- Volunteer Friends of Boaters
- Waterspirit
- Women's Club of Brick Township
- Women's Club of Keyport
- Women's Club of Long Branch
- Women's Club of Merchantville
- Zen Society

# Clean Ocean Action

www.CleanOceanAction.org



Ocean Advocacy  
Since 1984

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March 12, 2007

**RE: Draft NJPDES Renewal Permit for the Cape May County Municipal Utilities Authority – 7-mile/Middle, Permit # NJ0052990.**

**VIA ELECTRONIC MAIL AND FASCIMILE**

Dear Ms. Patterson:

Clean Ocean Action is a regional, broad-based coalition of over 150 conservation, environmental, fishing, boating, diving, student, surfing, women's, business, service, and community groups with a mission to improve the degraded water quality of the marine waters of the New Jersey/New York coast. These comments are in response to the draft New Jersey Pollutant Discharge Elimination System (NJPDES) permit # NJ0052990 for the Cape May County Municipal Utilities Authority – 7-mile/Middle to discharge to surface water. The design flow for this facility is 7.67 million gallons per day (MGD) with an average monthly flow of 3.33 MGD. The effluent from this facility is discharged into the Atlantic Ocean approximately 5537 feet offshore at Latitude 39° 05' 10" Longitude 74° 42' 15". The permit also contains conditions allowing the permittee to beneficially reuse treated effluent. Specifically, the permittee would be approved to reuse 300,000 gallons per day of wastewater for irrigation at multiple sites and several other public access and restricted access uses.

In general, COA is encouraged by several proposed additions to the permit requirements that are meant to improve New Jersey Department of Environmental Protection's (herein "Department") ability to assess the impacts of the wastewater discharge on aquatic organisms. We look forward to following the progress of both the Rutgers University study and the EPA funded Benthic Index study. We are pleased by the increased monitoring requirements that have been included in this draft permit, and the addition of effluent limitations for Chlorine Producing Oxidants (CPOs). These improvements are certainly a step in the right direction. However, there are still some significant issues that must be addressed and some of

the newly proposed requirements are not adequate to address water quality issues during this five-year permit cycle. COA's issues and comments are detailed below.

**The Department must require the use of the EPA approved method for detecting Enterococcus in wastewater and should provide a clear timeline for the completion of this facility's fecal coliform/enterococci comparison study and enterococci spike evaluation.**

In a January 10, 2007 Public Information Meeting on NJPDES regulations, the Department stated they would begin to require dischargers to utilize newly approved EPA analytical methods for Enterococci, but the requirement would maintain the "monitor only" status until further data are collected and analyzed. There is no language in this draft permit requiring the use of EPA Method 1600 for analyzing Enterococci in the effluent. Furthermore, COA supports the Department's need for a comprehensive analysis, but it seems there should be sufficient data for the Department to draw some conclusions about the correlation between fecal coliforms and enterococci and to quantify the frequency and magnitude of enterococci spikes. COA requests an update on the status of the investigation as it pertains to this facility, including:

1. How long has this facility been monitoring its effluent for Enterococci?
2. What is the frequency of the facilities current monitoring efforts?
3. How many data points have been submitted to the Department by this facility to date?
4. What analytical method was utilized?
5. How many additional sampling points does the Department need to make a scientifically valid comparison between Fecal Coliform and Enterococci concentrations in this facilities effluent?
6. What is the frequency and magnitude of unexplained enterococci spikes recorded by this facility?

COA looks forward to reviewing the current data available from this facility.

**The increased use of Water Quality Based Effluent Limits (WQBELs) is promising, but there are still substantial concerns that need to be addressed.**

New requirements in this draft permit represent significant progress towards the development and subsequent adoption of WQBELs for toxins that protect humans and sensitive aquatic life. However, there are considerable concerns regarding implementation schedules, analytical methods and monitoring frequencies being used for these calculations. We also continue to urge the Department to reject the concept of a mixing zone when developing WQBELs.

A. Chlorine Producing Oxidants (CPOs) WQBELs:

- i. Clean Ocean Action commends the Department for requiring CPO effluent limits in this draft permit, as COA has requested this requirement be added to ocean discharge NJPDES permits for many years. The compliance schedule of 36 months from effective date of permit (EDP) is an improvement from some previous NJPDES permits for ocean dischargers, but COA feels strongly that sufficient data exists to allow the Department to set an interim CPO limit for the permittee at the EDP.
- ii. We object to the use of decay and demand factors in setting CPO limits as they are based on studies prepared for and by the regulated industry, and have not undergone public and peer review and are therefore unsubstantiated. Moreover, it is not clear what regulatory process, if any, was used to establish a protocol

whereby actual levels of CPO discharged by the applicant's facility can be (exponentially) reduced to theoretical levels based upon calculations for such factors.

- a. As of March 5, 2007, Clean Ocean Action is in receipt of both the requested CPO Decay and Demand studies. We will now have an opportunity to review the document and will do so expeditiously. However, we note the CPO Decay document sent by the Department appears to be a subsection of a larger report. The document lacks a title page or any other identifying cover. The heading at the top of the first page is "TASK 2". To ensure adequate review of the provided section in the appropriate context, Clean Ocean Action is requesting a copy of the entire document.
- b. Based on the Department's review of the use of the decay and demand factors beginning on page 6 of the draft permit, the studies used were prepared for and by consultants for the "NJ Coastal Discharge Group" (an industry group of representatives of ocean dischargers), and these studies have not undergone peer review. What review was conducted and what independent technical evaluation was done by the Department to affirm the studies findings?
- c. How were the factors developed for use in New Jersey permitting limits?
- d. Has EPA approved of the methodology and use of the CPO Demand and Decay factors?
- e. What was the process, if any, that the Department used to establish a protocol whereby actual levels of CPO discharged by the applicant's facility can be (exponentially) reduced to theoretical levels based upon calculations for Demand and Decay? Was there a public comment period on the application of these factors?

iii. We remain disappointed at the incorporation of dilution factors (mixing zones) in the development of these WQBELs.

B. Ammonia Monitoring and Reporting Requirement and Toxicity Study:

COA is frustrated by the fact that WQBELs will be delayed for another entire permit cycle due to the lack of facility-specific ammonia data, as we have been urging the Department to include this parameter in NJPDES permits for ocean dischargers for some time.

- i. We are encouraged by this addition to the draft permit and look forward to reviewing the results of the permittee's Ammonia Toxicity study.
- ii. We request that all data and results from this study be made available for public review.

C. Whole Effluent Toxicity:

The semi-annual monitoring frequency requirements in this draft permit **are not sufficient** to adequately detect and assess variations in effluent toxicity between and within years.

D. Toxic Metals, Organic Compounds and Cyanide Monitoring and Reporting:

- i. COA has repeatedly urged the Department to increase the frequency of monitoring of pollutants to monthly intervals.

- ii. The monitoring frequency requirements listed in this draft permit **are not sufficient** to adequately detect and assess variations in toxin levels between and within years.
  - iii. COA reiterates our request for the Department to require monthly toxin scans. Not only will this schedule allow the Department to adequately calculate the WQBEL for these important pollutants in a timely manner, this safe-guard of increased monitoring is necessary to protect against discharges that have the potential to cause further degradation to receiving waters.
- E. Dissolved Oxygen Monitoring and Reporting:
- i. We are encouraged by the addition of this requirement to the draft permit. It is unclear why this monitoring requirement was not already in place, considering Dissolved Oxygen is the only parameter used by the Department to determine the ecological health of New Jersey's coastal waters.
  - ii. The language in this section should be clarified to ensure the implementation of limits is allowed, as needed within this 5-year permit cycle, once a reasonable data set has been obtained for this discharge.

**The Department is taking positive steps toward a better understanding of baseline conditions off the New Jersey coastline.** Clean Ocean Action congratulates the Department on receiving the EPA grant to develop indicators of ecosystem health for the benthic community in the estuarine and nearshore ocean waters of New Jersey. The cooperative investigation with Rutgers University and other partners in the Mid-Atlantic Coastal Ocean Observing Regional Association (MACOORA) to develop a regional ocean observing system to enable the Department to conduct detailed measurements of dissolved oxygen conditions in New Jersey's ocean waters is also very encouraging.

Data collected during the course of these studies is an important step in adequately assessing the impact of ocean discharges on aquatic organisms and should provide the foundation for making a finding of "no unreasonable degradation" as is required in the Ocean Discharge Criteria regulations at 40 CFR 125. By compiling existing data on benthic communities in nearshore ocean waters of New Jersey, the Department should find that the wealth and depth of the decades of data collected by state, federal and local agencies, academia and private interests will expedite the study's conclusion.

To ensure that the ocean ecosystem is not degraded by this discharge the Department will still need to take additional actions to compliment these two studies. These actions include: (1) monitoring of sediment contamination, (2) more frequent monitoring of priority pollutants, (3) publication of monitoring reports and priority pollutant scans in a form that is easy to access by the public, and (4) a phase-out of mixing/impact zones for existing discharges. COA applauds the inclusion of a "reopener clause", as it ensures that any relevant findings will be incorporated into the permit in a timely manner.

**The draft approval for the reuse of 300,000 gallons per day (GPD) of wastewater for irrigation and other public access uses lacks important information about the quality of the discharge and the ability of the permittee to meet discharge limits.** As written, the draft permit is vague concerning reuse plans and specifications on how the plant will meet RWBR

requirements. Clean Ocean Action does note this draft permit includes an estimated volume of water to be diverted for reuse. However, there is little or no information about infrastructure and other important details regarding wastewater re-use, including:

- Does the facility currently meet requirements for RWBR established by the NJDEP? The information provided does not clearly show how the facility plans to achieve RWBR requirements for parameters such as TSS, given that the facility's current average discharge (from 2001-2006<sup>1</sup>) significantly exceeds the Department's re-use criteria. For example, the Permittee reported (for April 2001 through January 2006) a weekly average for Total Suspended Solids of 9.31 mg/L<sup>2</sup>. Yet, the RWBR requirements, and consequently the draft permit for reuse, require an instant maximum of only 5.0 mg/L. As a result, the permittee will either be unable to divert the effluent for a public-access beneficial re-use or will violate the reuse requirements and thus jeopardize environmental quality at the re-use location.
- The draft permit does not contain information for any toxic parameters and it is not clear why it can be assumed that the treated effluent can be considered safe for the environment and the public.

In a January 10, 2007 Public Information Meeting on NJPDES regulations, the Department stated they will be proposing a new requirement that all reuse applicant's submit a "Reuse Feasibility Study" which would address many of our questions.

**Clean Ocean Action urges the Department to either require this facility to first submit a Reuse Feasibility Study, or refrain from approving any additional reuse of wastewater until the newly proposed requirements are adopted.**

**In conclusion,**

COA finds that the Department has made significant progress towards being able to assess whether an effluent discharges will not degrade the aquatic ecosystems. The pace of these changes is still not satisfactory and there are still some serious concerns that need to be addressed. The state must: (1) submit requested additional information to COA, (2) increase monitoring as recommended and provide easy access of information to the public, and (3) rescind the finding of "no unreasonable degradation" until the Rutgers and Benthic Indices studies are complete, along with the collection of additional information necessary to adequately assess impacts to aquatic organisms.

We thank you in advance and look forward to your written reply.

Sincerely,



Cindy Zipf



Jennifer Samson, Ph.D.

<sup>1</sup> Permit Summary Table: Page 22 of facility Fact Sheet included in this draft permit # NJ0052990

<sup>2</sup> Permit Summary Table: Page 22 of facility Fact Sheet included in this draft permit # NJ0052990

Executive Director

Principal Scientist