

Participating Organizations

Alliance for a Living Ocean

- American Littoral Society
- Arthur Kill Coalition
- Asbury Park Fishing Club
- Bayberry Garden Club
- Bayside Saltwater Flyrodders
- Belford Seafood 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
- Dossil'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 Morristown
- 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
- Piscataway 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 Catamaran 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 I
- 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

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*Ocean Advocacy
Since 1984*

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May 18, 2007

RE: Draft NJPDES Renewal Permit for the Monmouth County Bayshore Outfall Authority, NJPDES Permit # NJ0024694.

VIA STANDARD MAIL AND FASCIMILE

Dear Mr. Thompkins:

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 # NJ0024694 for the Monmouth County Bayshore Outfall Authority to discharge to surface water. The design flow for this facility is 33 million gallons per day (MGD) with an average monthly flow of 15.7 MGD. The effluent from this facility is discharged into the Atlantic Ocean approximately 4000 feet offshore at Latitude 40° 23' 30.0" Longitude 73° 57' 39.0". The permit also contains conditions allowing the permittee to beneficially reuse treated effluent. Specifically, the permittee would be approved to reuse for several different public access and restricted access uses. The volume of water to be reused is not provided in the draft permit.

In general, although 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, there are significant concerns regarding the operations of this facility, including compliance issues.

The Department needs to investigate the remaining capacity of the facility, as the Daily Maximum flow rate for this facility was only 0.2 MGD (32.8 MGD¹) below the permitted capacity of 33 MGD. The draft permit only provides a daily

¹ Permit Summary Table: Page 20 of facility Fact Sheet included in this draft permit # NJ0024694

maximum value, so it is unclear whether the facility reported such high flow rates for three consecutive months, which would require the permittee to develop a Capacity Assurance Program. Regardless of whether this benchmark has been reached, Clean Ocean Action is concerned about the near capacity discharge rate of 32.8 MGD and encourages the Department to investigate the frequency of such high flow rates.

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.

As of October 16, 2006, all surface water discharges to SC waters cannot have enterococci levels exceeding a geometric mean of 35/100 ml. This draft permit was written after the new standards were adopted. 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. The Department's decision to maintain the "monitor only" status, as reflected in this draft permit, is not legally sufficient and would threaten health and wellbeing of humans engaging in a recreational use of the receiving waters. In addition, there is no language in the draft permit specifically requiring the use of EPA Method 1600 for analyzing Enterococci in the effluent. If the intent of monitoring is to determine compliance, as the draft permit states "[t]he reported data will be reviewed to evaluate if the enterococci criteria are consistently being achieved by the facility", then it is unclear why the Department would choose to regulate Enterococci in such an informal manner, as this language will weaken or even eliminate enforcement action when the submitted data indicate the facility has violated surface water quality standards.

We note the sampling frequency requirements for Enterococci were changed to include five (5) samples within a one (1) month period (in order to allow a geometric mean to be calculated) but the frequency was reduced from monthly to quarterly. In the interest of expediting the Department's investigation into the relationship between Fecal Coliform and Enterococci, the monthly requirement should be maintained, along with the addition of a five sample per month minimum. COA also requests an update on the status of the Department's 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.

To conclude, the final permit must include the required Enterococci limit of 35/100 ml (geometric mean) and language must be added that specifically requires the use of EPA Method 1600.

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 all WQBELs, as they have done with Chlorine Producing Oxidants.

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. The need for an immediate CPO standard is even more pressing for this facility, as the Daily Maximum value of **1.8 mg/L** reported in the Permit Summary Table² is over 3 times higher the final limit of 0.48 mg/L set by the Department and over 250 times higher than the New Jersey's Chronic Surface Water Quality Criteria (SWQC) and 100 times higher than Acute SWQC. This level of CPO is unacceptable and will cause unreasonable degradation to the marine environment, as it is acutely and chronically toxic to marine organisms within and around the discharge pipe.
- ii. We object to the use of a decay factor in setting CPO limits as it is based on studies prepared for and by the regulated industry, and did not undergo public and peer review and is 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 a factor.
 - a. As of March 5, 2007, Clean Ocean Action is in receipt of one section of the requested CPO Decay study. The document sent by the Department is actually only a subsection of a larger report. We submitted a formal Open Public Records Act request for the entire document and are awaiting our full copy, therefore, once we have had the opportunity to review the entire document we may have additional comments.
 - b. Based on the Department's review of the use of the decay factors beginning on page 7 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 Decay factors?

² Permit Summary Table: Page 20 of facility Fact Sheet included in this draft permit # NJ0024694

- e. What process, if any, did the Department use 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 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 some 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 object to the fact that no Dissolved Oxygen (DO) requirement was included in this draft permit. We supported the inclusion of a monitor and report requirement for DO in the Wildwood/Lower Region Water Treatment Facility draft permit issued by the Department in December 2006. D.O. must be included, as it is currently the only parameter used by the Department to determine the ecological health of New Jersey's coastal waters. Moreover, the northern New Jersey nearshore waters often experience dangerously low D.O. levels during the summer months.

Objection to the removal of groundwater monitoring for the two retention basins associated with this permit. It is unclear how this facility could be eligible for a reduction in monitoring associated with the groundwater discharge when they have incurred numerous violations. In 2002, the facility was issued violations (N.J.A.C. 7:14A-6.12(c)&(d)) for failure to develop or implement integrity test requirements for the liners, and for failure to replace the liner

at the Union Beach Pump Station in a timely fashion after an integrity test demonstrated perforations (N.J.A.C. 7:14A-6.12(a)). The replacement of the liner in 2004 does not justify the removal of monitoring requirements, as the facility has repeatedly failed to meet requirements of their NJPDES permit. A search of Department issues violations found at least six serious violations including three unreported spills into the surrounding waterway, two of which occurred in 2006. Our investigation only went back 5 years, but this facility has a long history of violating New Jersey's environmental regulations and must not be permitted to operate under a general permit for groundwater or receive any reduction in monitoring requirements. Therefore, Clean Ocean Action requests justification and rationale for this proposed permit action.

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 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 notes this draft permit does not include an estimated volume of water to be diverted for reuse and 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, Fecal Coliform or CPO, given that the

facility's current average discharge (from 2001-2006³) significantly exceeds the Department's re-use criteria. For example, the Permittee reported (for June 2001 through December 2006) a weekly average for Total Suspended Solids of 19.3 mg/L⁴. 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 states “[t]he following Reclaimed Water for Beneficial Reuse sections (8-14) of the permit are for informational purposes only. These sections are inactive and not effective until such time as the Department activates the requirements in these sections with minor modifications.” Clean Ocean Action requests clarification on these statements, including the implications of these sections being inactive and not effective. If the inactivity of these sections jeopardizes the Department's ability to regulate the quality of wastewater or will cause harm to the environment in any way, the Department must cease all diversion of wastewater until these sections are reactivated.

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 and the Reclaimed Water for Beneficial Reuse Sections 8-14 are activated.

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. We look forward to a written reply to the substantial issues raised in our comments

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

Sincerely,



Cindy Zipf
Executive Director



Jennifer Samson, Ph.D.
Principal Scientist

³ Permit Summary Table: Page 20 of facility Fact Sheet included in this draft permit # NJ0024694

⁴ Permit Summary Table: Page 20 of facility Fact Sheet included in this draft permit # NJ0024694