American Littoral Society American Littoral Society
Arthur Kill Coalition
Asbury Park Fishing Club
Bayberry Garden Club
sshore Saltwater Flyrodders
Belford Seafood Co-op
Belmar Fishing Club
Benearth The Sea Beneath The Sea Bergen Save the Watershed Action Network

Bergen Save the Watershed Action Network
Berkeley Shores Homeowners Gwic Association
Cape May Environmental Commission
Central Jersey Anglers
Citizens Conservation Council of Ocean County
Cean Air Campaign
Coalition Against Toxics Coalition for Peace & Justice Coastal Jersey Parrot Head Club Coastal Jersey Partor Treat 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

Dosil's Sea Roamers Eastern Monmouth Chamber of Commerc 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 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
Challen Club of Morristown Garden Club of Navesink 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 Highlands Chamber of Commerce Hudson River Fishermer'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 Lunior League of Monmouth Junior League of Summit Kiwanis Club of Manasquan Kiwanis Club of Shadow Lake Village

Garden Club of Shrewsburg

Kawanis 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 Audubon Society
Monmouth County Fiends 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 Commercial Fishermen's Association

NJ Commercial Fishermen's Association
NJ Council of Dive Clubs
NJ Environmental Federation
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NJ PIRG Gitzen Lobby
NJ Sierra Club
NJ Sierra Club
NJ Sierra Club
Nottingham Hunting & Fishing Club
NVC Sea Gypsies
NYC Sea Gypsies
NY Marine Educators Association
Ocean Advocates
Ocean Conservancy
Ocean County Citizens for Clean Water

Ocean Divas

Ocean Wreck Divers Ocean Wreck Divers
Outreach/First Presbyerian 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 Catamaran Club

andy 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 Shore Surf Club, Shore Chapter Soroptimist Club of Cape May County South Monmouth Board of Realtors

Staten Island Friends of Clearwate Strathmere Fishing & Environmental Club Surfers' Environmental Alliance Surfrider Foundation, Jersey Shore Chapter

Surfinder 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 Waterspiri Women's Club of Brick Townshir Women's Club of Keyport Women's Club of Long Branch Women's Club of Merchantville

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## Clean Ocean Action



Ocean Advocacy

Since 1984

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Pilar Patterson Chief, Bureau of Point Source Permitting Region 2 P.O. Box 029 Trenton, NJ 08625

August 1, 2007

RE: Draft NJPDES Renewal Permit for the Ocean City Regional Water Treatment Facility, NJPDES Permit # NJ0035343.

## VIA FASCIMILLE AND E-MAIL

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 # NJ0035343 for the Ocean City Regional Water Treatment Facility that discharges wastewater to surface water. The design flow for this facility is 8.24 million gallons per day (MGD) with an average monthly flow of 3.1 MGD. The effluent from this facility is discharged into the Atlantic Ocean approximately 6000 feet offshore at Latitude 39° 14' 20.5" Longitude 74° 37' 40.9". The permit also contains conditions allowing the permittee to beneficially reuse treated effluent. 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, but there are still several issues of concern, which are listed in more detail below.

The Department must increase the sampling frequency for Fecal Coliform to once daily. The monitoring frequency of eight (8) grab samples per month should be increased to once daily in order to be consistent with other wastewater treatment facilities that discharge into the Atlantic Ocean. Bacteria concentrations are highly dynamic and therefore must be monitored on a more frequent basis than eight (8) times per month, in order to adequate assess the concentrations and variability of bacteria in the effluent. Therefore, COA urges the Department to increase the sampling frequency for Fecal Coliforms to once daily.

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 and this draft permit was written after the new standards were adopted. The draft Permit does not include any data for Enterococci in wastewater from the previous permit cycle.<sup>1</sup> Please provide an explanation for the lack of data on previous concentrations of Enterococci in wastewater. In addition, there is no language in the draft permit specifically requiring the use of EPA Method 1600 for analyzing Enterococci in the effluent. 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 potentially allows the permittee to violate surface water quality standards. 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 weakens or even eliminates enforcement action against this permittee, even when submitted data indicate the facility has violated surface water quality standards. The failure to require the use of EPA Method 1600 could further complicate and delay the Department's ability to analyze the data.

We note the sampling frequency requirements for Enterococci includes 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 wastewater effluent data provided in the Permit Summary Table of this fact sheet is incomplete. This facility operates under a five (5) year permit, therefore all data collected during the permit cycle should be included in the Permit Summary Table, yet the Table provided on Page

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<sup>&</sup>lt;sup>1</sup> Permit Summary Table: Page 22 of facility Fact Sheet included in this draft permit # NJ0035343

22 of the draft permit fact sheet only includes data from 1/2004 through 12/2005. The permit summary tables only present wastewater data regarding past effluent discharge levels for the period of 1/2004 through 12/2005. Why has the department failed to present wastewater data for the entire five (5) year period of the facility's previous permit cycle (particularly data for 2006)? How can COA and concerned members of the public evaluate the appropriateness of the proposed initial limits and final limits based upon wastewater data that does not reflect the facility's performance for the past year and a half, and only partially represents its performance under its prior permit? To allow the public the opportunity to adequately review the draft permit the Department must provide a complete five (5) year data set in the permit summary table.

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.

- A. Chlorine Producing Oxidants (CPOs):
  - 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. Based on the Department's review of the use of the decay and demand 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?
    - b. How were the factors developed for use in New Jersey permitting limits?
    - c. Has EPA approved of the methodology and use of the CPO Demand and Decay factors? It would appear from the draft permit that EPA has not done so.
    - d. 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. The incorporation of dilution factors (mixing zones) in the development of these WQBELs continues to be objectionable because of the harm mixing zones present to marine life.
- B. Ammonia Monitoring and Reporting Requirement and Toxicity Study:

WQBELs should not be delayed for another entire permit cycle due to the purported lack of facility-specific ammonia data. We have been urging the Department to include this parameter in NJPDES permits for ocean dischargers for some time.

- i. We are encouraged by the addition of the monitor and report requirement for Ammonia, as well as an Ammonia Toxicity Study, to the draft permit and look forward to reviewing the results of the 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 supported the inclusion of a monitor and report requirement for DO in this draft permit. D.O. is currently the only parameter used by the Department to determine the ecological health of New Jersey's coastal waters. The inclusion of DO data from wastewater dischargers is an important and necessary addition to the Department's ongoing efforts to assess ocean water quality.

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 use in Spray Irrigation is objectionable because there is a lack of important information about the quality of the discharge and the ability of the permittee to meet discharge limits. The permitted activity is classified under Restricted Access-Land Application and Non-Edible Crops, which includes limits for nitrogen, fecal coliform and CPO. 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 includes 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 reuse, including whether the facility currently meets requirements for RWBR established by the NJDEP.

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.

**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

Gennifer C. Lamson