

Participating Organizations

Alliance for a Living Ocean

American Littoral Society

Arthur Kill Coalition

Asbury Park Fishing Club

Bayberry Garden Club

Bayshore 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 Bensonshurst

Concerned Citizens of COA

Concerned Citizens of Montauk

Dodg'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 Newswick

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 Fishermen'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 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

Surfdrifter 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



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

February 8, 2007

RE: Draft NJPDES Renewal Permit for the Wildwood/Lower Region Water Treatment Plant, Permit # NJ0053007.

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 # NJ0053007 for the Wildwood/Lower Region Water Treatment Plant to discharge to surface water. The average design flow for this facility is 14.18 million gallons per day (MGD). The effluent from this facility is then combined with effluent from Cape May City Regional Wastewater Treatment Facility (WWTF) and Lower Township WWTF before being discharged into the Atlantic Ocean. The Atlantic Ocean discharge point is located approximately 5560 feet offshore at Latitude 38° 59' 56.3" Longitude 74° 51' 12.51" and is permitted to discharge 21.18 MGD of combined effluent. The permit also contains conditions allowing the permittee to beneficially reuse treated effluent. Specifically, the permittee would be approved to reuse wastewater from discharge outfall #003B for spray irrigation of Route 47 Highway Median, this is considered a Public Access use.

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.

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. We 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. The Department has failed to provide copies of the studies as requested that are the basis for the use of these factors and have misrepresented status of these documents.
 - i. In a letter dated August 19, 2004, Sam Wolfe, Assistant Commissioner, state, “The Department is presently reviewing a final study report on “chlorine demand...” COA requested a copy of that report at that time.
 - ii. At a meeting on August 10, 2005, the Department again referred to studies that would be used in determining CPO limits. At that time, the Department stated that the Decay Study was complete, however, the Demand study was not completed. COA requested a copy of the study at the meeting of the decay study, and when available, the demand study. The Department agreed to send documents as requested. COA still has not received copies of these studies. With respect to the decay study, it is frustrating to note that on page 7 of this draft permit, the Department states that a “final report entitled “Evaluation of Chlorine Demand in Coastal Waters of New Jersey, **dated December 23, 2002** [*emphasis added*]...was submitted to the Department.” It is unacceptable that the Department misrepresented the status of the reports and has not provided copies of the documents to the public as requested. Thus, once again COA requests copies of these reports.
 - b. Based on the Department’s review of the use of the decay and demand factors 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 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 their addition in this 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. 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. As a result of infrequent monitoring requirements in previous permits, the Department does not have an acceptable data set (in the words of the Department “at a minimum, 10 data values”¹) for determining the need for toxic pollutant specific WQBELs.
 - a) Table A-1, DSN 001B indicates that for a four (4) year period, there are only seven or eight available data values for all four pollutants analyzed.
 - b) Table A-2, DSN 003A indicates that for a similar period there are only nine available data values for two of the four pollutants analyzed.
 - ii. The monitoring frequency requirements listed in this draft permit **will still not be 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.

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.

¹ Draft NJPDES Renewal Permit for Wildwood/Lower Region Water Treatment Plant, Permit # NJ0053007; Section 6. Summary of Permit Conditions, B. Basis and Derivation for Effluent Limitations and Monitoring Requirements – Specific, # 13, page 14 of the Fact Sheet.

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 wastewater from discharge outfall #003B for irrigation of the vegetated median on Route 47 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. Plans other than infrastructure for beneficial re-use are not detailed. For example, what volume of water is intended to be re-used? Does the facility currently meet requirements for RWBR established by the NJDEP (e.g. of Nitrogen, CPO, and TSS)? The information provided does not clearly show how the facility plans to achieve RWBR requirements for parameters such as TSS and CPO, given that the facility’s current average discharge (from 2001-2005²) significantly exceeds the Department’s re-use criteria. For example, the Permittee reported (for April 2001 through October 2005) a weekly average for Total Suspended Solids of 9.25 mg/L³. 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 public health at the re-use location. In addition, no information is provided in the Notice for 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 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.

² Permit Summary Table: DSN003A. Page 28 of facility Fact Sheet included in this draft permit # NJ0053007

³ Permit Summary Table: DSN003A. Page 28 of facility Fact Sheet included in this draft permit # NJ0053007

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

Sincerely,

A handwritten signature in black ink, appearing to read 'CZ' or 'CZP', with a stylized flourish at the end.

Cindy Zipf
Executive Director

A handwritten signature in black ink that reads 'Jennifer C. Samson' in a cursive script.

Jennifer Samson, Ph.D.
Principal Scientist