

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 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 New York

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 Gyppies

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

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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July 18, 2007

RE: Draft NJPDES Renewal Permit for the Middletown Township Sewerage Authority, NJPDES Permit # NJ0025356.

VIA STANDARD MAIL AND E-MAIL

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 # NJ0025356 for the Middletown Township Sewerage Authority that discharges wastewater to Monmouth County Bayshore Outfall Authority (MCBOA), which then discharges to surface water. Clean Ocean Action also submitted comments (dated May 18, 2007) on the recently released draft NJPDES permit for MCBOA (NJPDES permit # NJ0024694), which are referenced in this comment letter. The design flow for this facility is 10.8 million gallons per day (MGD) with an average monthly flow of 8.0 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, but there are still several issues of concern, which are listed in more detail below.

The Department needs to investigate the remaining capacity of the facility, as the Daily Maximum flow rate for this facility was 15.6 MGD¹ which is 50% greater than the permitted capacity of 10.8 MGD. The draft permit only provides a daily 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 3-month benchmark has been reached, Clean Ocean Action is concerned about the substantial volume above the permitted discharge rate and requests the Department investigate the frequency of such high flow rates. COA raised similar concerns about the near-permit flow rate conditions reported for at the Monmouth County Bayshore Outfall Authority (MCBOA) in their recent draft permit (NJPDES permit # NJ0024694) and the excessive flow rates at this facility are likely contributing to those conditions.

In addition, the effluent limitations and permit conditions are calculated using the flow value of 10.8 MGD. If the facility routinely discharges at rates above this rate, the use of 10.8 MGD is inappropriate and the limitations and conditions of this permit may not be adequate to protect water quality. The Department must determine the frequency of flow rates above the permitted volume and adjust the calculations to compensate for the increased flow.

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. Yet, data provided on the concentration of Enterococci in effluent from this facility from 2002-2007 reported a **geometric mean of 45.4 colonies/100ml²**. The reported instantaneous maximum for this facility was **600 colonies/100ml³**, which is six (6) times greater than the human health water quality standard for Enterococci. 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 allows the permittee to violate surface water quality standards at levels that threaten the health and wellbeing of humans engaging in a recreational use of the receiving waters. 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.

¹ Permit Summary Table: Page 17 of facility Fact Sheet included in this draft permit # NJ0025356

² Permit Summary Table: Page 17 of facility Fact Sheet included in this draft permit # NJ0025356

³ Permit Summary Table: Page 17 of facility Fact Sheet included in this draft permit # NJ0025356

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):

Clean Ocean Action is discouraged by the Department failure to require CPO effluent limits in this draft permit, as COA has requested this requirement be added to ocean discharge NJPDES permits for many years. The need for an immediate CPO standard is even more pressing for this facility, as the Daily Maximum value of **12 mg/L** reported in the Permit Summary Table⁴ is over 1600 times higher than the New Jersey's Chronic Surface Water Quality Criteria (SWQC) and 900 times higher than Acute SWQC. This facility sends it's effluent to the MCBOA, which discharges into the Atlantic Ocean. The recently released draft permit for MCBOA (NJPDES permit # NJ0024694) reported a maximum value of **1.8 mg/L**⁵, which 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. Without limits on the CPO concentrations that are contributing to the effluent released by MCBOA, it will be difficult for MCBOA to reduce CPO

⁴ Permit Summary Table: Page 17 of facility Fact Sheet included in this draft permit # NJ0025356

⁵ Permit Summary Table: Page 20 of facility Fact Sheet included in this draft permit # NJ0024694

concentrations in their ocean discharge to allowable levels. The level of CPO currently being released from MCBOA 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.

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 experience dangerously low D.O. levels during the summer months.

The need for a liner at the Belford Pumping Station detention basin utilized by this facility is not addressed in the draft permit, even as this facility continues to exceed groundwater quality standards. In an inspection report from February 2006, the Department reported periodic groundwater contamination at the Belford Pumping Station... "*MCBOA continued to periodically exceed Groundwater Monitoring Standards as indicated in the quarterly reports.*"⁶ In the same inspection reported, the Department's Division of Compliance and Enforcement

⁶ Standard Compliance Inspection for the Monmouth County Bayshore Outfall Authority, Activity # SCI 060001, 2/07/2006 to 2/23/2006

identified the lack of a liner on the Bedford Detention Basin as the potential source of groundwater contamination and recognized the need to address the problem in this permit renewal process, *“the lack of a liner at the Belford Station will be discussed as part of the permit renewal process”*⁷ A similar situation at the Union Beach Pump Station Detention Basin (which also send it’s discharge to MCBOA) resulted in the replacement of the liner in 2003⁸. Yet, the issue of adding a liner to the Belford Station basin is not even discussed in the draft permit. Therefore, Clean Ocean Action requests justification and rational for not requiring the use of a liner at the Belford Pumping Station.

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 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 re-use, including whether the facility currently meets requirements for RWBR established by the NJDEP. The information provided does not clearly show how the facility

⁷ Standard Compliance Inspection for the Monmouth County Bayshore Outfall Authority, Activity # SCI 060001, 2/07/2006 to 2/23/2006

⁸ Standard Compliance Inspection for the Monmouth County Bayshore Outfall Authority, Activity # SCI 030001, 3/11/2003

plans to achieve RWBR requirements for parameters such as TSS and Fecal Coliform, given that the facility's current average discharge (from 2002-2007⁹) exceeds the Department's re-use criteria. For example, the Permittee reported (for Jan. 2002 through Jan. 2007) a weekly average for Total Suspended Solids of 16 mg/L¹⁰. 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.

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

⁹ Permit Summary Table: Page 17 of facility Fact Sheet included in this draft permit # NJ0025356

¹⁰ Permit Summary Table: Page 17 of facility Fact Sheet included in this draft permit # NJ0025356