



*Ocean Advocacy  
Since 1984*

Howard P. Thompkins, Chief  
Bureau of Point Source Permitting Region 1  
P.O. Box 029  
Trenton, NJ 08625

February 5, 2008

**RE: Draft NJPDES permit for the Township of Ocean Sewerage Authority,  
NJPDES Permit # NJ0024520.**

## **VIA ELECTRONIC MAIL AND FASCIMILE**

Dear Mr. Thompkins:

Clean Ocean Action (COA) is a regional, broad-based coalition of 125 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 # NJ0024520 for the Township of Ocean Sewerage Authority. which discharges to surface waters of the Atlantic Ocean. The design flow for this facility is 7.5 million gallons per day (MGD) with an average monthly flow of 5.34 MGD. The effluent from this facility is discharged into the Atlantic Ocean approximately 1800 feet offshore at Latitude 40° 15' 16.2" Longitude 73° 58' 57.5". 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 still several issues of concern, which are listed in more detail 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.** 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

Permit Summary Table<sup>1</sup> included in this draft Permit indicates a major problem with Enterococcus concentration in the facilities discharge including a monthly average of **103.3 colonies/100ml, over three (3) times the Surface Water Quality Standard** of 35 colonies/100ml. The instant maximum concentration reported was **3840 colonies/100ml, almost 38 times the 104 colonies/100ml concentration** used to close beaches for the protection of human health. In addition, there is no language in the draft permit specifically requiring the use of EPA Method 1600 for analyzing Enterococci in the effluent. The Department's decision to maintain the "monitor only" status, as reflected in this draft permit, is not legally sufficient and potentially allows this permittee to continue 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 analytical method was utilized?
3. 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?
4. 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. We also request an electronic copy of the "**Enterococci and Fecal Coliform Split Sample Report**" that is required to be submitted by the permittee when it becomes available.

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.

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<sup>1</sup> Permit Summary Table: Page 22 of facility Fact Sheet included in this draft permit # NJ0024520

- 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.
  - 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. We request a copy of the "**Ammonia Toxicity Final Report**" when it becomes available.
  - ii. We request that all data and results from this study also be made available for public review.
- C. Whole Effluent Toxicity:  
The annual and 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.

**The monitor/report requirement for Dissolved Oxygen is a welcome addition.**

We support 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 and the role of this facility in the development of an extensive area of dangerously low DO off the New Jersey coast every summer and fall.

**Sampling for 209 PCB Congeners is a positive step, but there are still serious implementation and enforcement issues with PCB PMPs.** COA strongly supports the requirement to analyze the effluent for 209 PCB congeners using the EPA Method 1668A, which will considerably lower the detection limit compared to previous approved methods and increases the number of PCB congeners detected. Although EPA Method 1668A is still unable to achieve a level of sensitivity equal to the water quality standard for PCBs, it is certainly a step in the right direction.

COA submitted comments on the Proposed Rule N.J.A.C. 7:14A-11.13 and 14.4, New Jersey Pollutant Discharge Elimination System: Monitoring and Pollutant Minimization Plans for PCBs. We are disappointed to find some of our concerns were not addressed in the final version, as is apparent in this draft major modification permit action, including:

A. Scientific support for the limited PCB monitoring schedule:

The permittee is required to monitor its effluent for the 209 PCB congeners from 6 samples over 24 months, including 3 wet-weather events and 3 dry weather events. Although COA acknowledges these sampling requirements represent the maximum allowable under the new rule establishing PMPs<sup>2</sup>, we consider the total of 6 samples to be insufficient to accurately characterize the discharge. We therefore request the Department provide scientific justification for allowing such a limited monitoring requirement.

Clarification is needed on when and how PCB Pollutant Minimization Plan (PMP) would be implemented:

- i. What criteria will the Department use to determine whether the permittee is required to develop a PMP?
- ii. If this facility is required to conduct a PMP and is consequently allowed to “*suspend, reduce, or eliminate the remaining PCB monitoring*”<sup>3</sup>, how will the Department determine the success/effectiveness of the PMP at eliminating discrete sources,?
- iii. What happens if the original PMP is not effective in reducing PCB loads?
- iv. What follow-up will be required once a permittee identifies PCB sources?
- v. What happens if a permittee identifies sources that are out of their control?
- vi. Who will pay for the clean-up/reduction measures identified in the PMP?

B. Actual and enforceable PCB reduction limits are unclear

The rule states that “[t]he PMP shall be developed to achieve maximum practical reduction in accordance with the PMP Technical Manual...”<sup>4</sup> The meaning and development of the “*maximum practical reduction*” is unclear. Additionally, if the permittee is required to develop a PMP to achieve the maximum practical reduction, there are no clear requirements that those reductions must be achieved.

- i. How is “maximum practical reduction” defined?

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<sup>2</sup> N.J. Admin. Code, § 7:14A-14.4 (2007)

<sup>3</sup> N.J. Admin. Code, § 7:14A-14.4(a)(3) (2007)

<sup>4</sup> N.J. Admin. Code, § 7:14A-11.13(d)(2) (2007).

- ii. Who determines the maximum practical reduction of PCBs that must be achieved by the permittee and how is this determination made?
- iii. Will the maximum practical reduction be a numerical or narrative limit?
- iv. If the maximum practical reduction is not met, whether a numerical or narrative limit, is this considered a NJPDES permit violation? If yes, to what penalty would the permittee be subject?

COA requests an electronic copy of this facility's "**Final PCB Sampling Report**" including all data and QA/QC information and any consequent Determination Letter from the Department regarding the requirement of the facility to prepare and submit a PMP, as these documents become available.

To conclude, COA supports the addition of effluent monitoring for PCBs, but we are not satisfied with the decision by the Department to forgo numerical limits on PCBs in the effluent in favor of the development of a PCB PMP that has serious flaws with both implementation and enforcement that will make it nearly impossible to eliminate sources and ultimately reduce PCB concentrations in New Jersey's coastal 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.

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.

**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

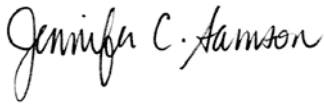
these changes is still not satisfactory and there are still some serious concerns that need to be addressed.

We thank you in advance and look forward to your written reply to the substantial issues raised in our comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'CZipf'.

Cindy Zipf  
Executive Director

A handwritten signature in black ink, appearing to read 'Jennifer C. Samson'.

Jennifer Samson, Ph.D.  
Principal Scientist

A handwritten signature in black ink, appearing to read 'David Byer'.

David Byer, Esq.  
Water Policy Attorney