

Algal Conditions in New Jersey Estuarine and Coastal Waters
Week of June 12, 2006

TO: Distribution

FROM: Bill Heddendorf, Environmental Specialist
Bureau of Marine Water Monitoring

DATE: June 15, 2006

SUBJECT: Report of Algal Conditions in New Jersey Coastal Waters
Week of June 12, 2006

Samples were collected by the USEPA helicopter and analyzed at the NJDEP Bureau of Marine Water Monitoring's Leeds Point Laboratory.

Raritan/Sandy Hook Bay Area

The waters of Raritan Bay and Sandy Hook Bay were experiencing a bloom of mixed diatoms consisting mostly of *Thalassiosira spp.* and *Cerataulina pelagica*. Total diatom cell counts 1,560 cells/mL. *Dinophysis spp.* was detected in the Raritan Bay but concentrations were below bloom or toxic levels. No toxic species were detected in the Sandy Hook Bay.

New Jersey Coastal Area

The ocean waters from Long Branch to Cape May are generally clear with sparse algal concentrations. No toxic species were detected.

Barnegat Bay Area

The waters of Barnegat Bay from Toms River to Little Egg Inlet are mostly clear with sparse algal concentrations. Significant amounts of detritus were detected near Toms River and Manahawkin. No toxic species detected in any samples from Barnegat Bay.

Great Bay

The waters of Great Bay are generally clear with sparse algal concentrations. No toxic species were detected.

Great Egg Harbor

The waters of the Great Egg Harbor are generally clear with sparse algal concentrations. No toxic species were detected.

Delaware Bay/Capeshore Area

The waters of the Delaware Bay had a vast assemblage of algal species dominated by *Amphidinium spp.*. No toxic species were detected.

No samples collected in the New Jersey Coastal Waters were found to contain the Paralytic Shellfish Poisoning species *Alexandrium spp.

**NJDEP Leeds Point Laboratory
Phytoplankton Data Sheet**

Date: 06/14/2006

Collector: EPA

Station #	Time	Water Temp.	Chlorophyll (ug/l)	Dominant Species	Toxic Species*
26A	08:52		40.79	<i>Thalassiosira spp.</i>	<i>Dinophysis spp.</i>
906A	08:58		43.31	<i>Thalassiosira spp.</i> & <i>Cerataulina pelagica</i> Total diatoms (1,560 cells/mL)	None present
A11A	09:16		4.20	<i>Cerataulina pelagica</i>	None present
A24A	09:29		2.52	Sparse algal concentrations	None present
1605A	10:44		5.47	Sparse algal concentrations Significant amounts of detritus	None present
1651D	11:07		3.36	Sparse algal concentrations	None present
1670D	11:18		2.94	Sparse algal concentrations	None present
1703C	11:27		12.61	Sparse algal concentrations Significant amounts of detritus	None present
A54B	11:31		1.26	Sparse algal concentrations	None present
1800B	11:38		2.94	Sparse algal concentrations	None present
1818D	11:41		1.26	Sparse algal concentrations	None present
2100A	11:51		2.10	Sparse algal concentrations	None present
2720B	12:11		2.94	Sparse algal concentrations	None present
A85A2	12:19		2.52	Sparse algal concentrations	None present
3826A	12:48		23.97	Vast assemblage of phytoplankton dominated by <i>Amphidinium spp.</i>	None present
3895E	12:57		17.66	Vast assemblage of phytoplankton dominated by <i>Amphidinium spp.</i>	None present

- **Toxic Species = toxic species associated with shellfish safety including; *Prorocentrum lima.*, *Alexandrium spp.*, *Dinophysis spp.*, and *Pseudonitzschia spp.***

