

Algal Conditions in New Jersey Estuarine and Coastal Waters Week of August 7, 2006

TO: Distribution

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

DATE: August 10, 2006

SUBJECT: Report of Algal Conditions in New Jersey Coastal Waters
Week of August 7, 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 were experiencing a bloom consisting mostly of *Cerataulina pelagica* and *Eucampia zodiacus*. Cell counts for the two species reached 780 cells/ml. No toxic species were detected. The waters of the Sandy Hook Bay were experiencing a mild bloom of *Eucampia zodiacus*. The potentially toxic species *Dinophysis sp.* was detected but concentrations were below toxic or bloom levels.

New Jersey Coastal Area

The ocean waters from Long Branch to Manasquan were generally clear with low concentrations of *Eucampia zodiacus*. The ocean waters from Ship Bottom to Cape May were generally clear with sparse algal concentrations. No toxic species were detected.

Barnegat Bay Area

The waters of Barnegat Bay from Toms River to near Barnegat Inlet had sparse algal concentrations with significant amounts of detritus. The waters of Barnegat Bay near Manahawkin were experiencing a mild bloom of *Pleurosigma sp.* Cell counts reached 660 cells/ml. No toxic species detected in any samples from Barnegat Bay.

The waters of Little Egg Harbor had low concentrations of *Pleurosigma sp.* with significant amounts of detritus. No toxic species were detected.

Great Bay

The waters of Great Bay were generally clear with low concentrations of *Pleurosigma sp.*. No toxic species were detected.

Great Egg Harbor

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

Delaware Bay/Capesboro Area

The waters of the Delaware Bay had sparse algal concentrations with significant amounts of detritus. 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: 08/09/2006

Collector: EPA

Station #	Time	Water Temp.	Chlorophyll (ug/l)	Dominant Species	Toxic Species*
26A	0828	23.8	35.32	<i>Cerataulina pelagica</i> and <i>Eucampia zodiacus</i> (Total cell count 780 cells/ml)	None present
906A	0839	25.0	18.92	<i>Eucampia zodiacus</i>	<i>Dinophysis sp.</i>
A11A	0846	22.8	7.57	<i>Eucampia zodiacus</i>	None present
A24A	0903	22.8	5.47	<i>Eucampia zodiacus</i>	None present
1605A	0910	24.9	13.46	<i>Eucampia zodiacus</i> Significant amounts of detritus	None present
1651D	0924	25.7	5.89	Sparse algal concentrations Significant amounts of detritus	None present
1670D	0935	25.5	2.94	Sparse algal concentrations	None present
1703C	1027	26.3	15.77	<i>Pleurosigma sp.</i> (660 cells/ml) Significant amounts of detritus	None present
A54B	1030	22.7	4.20	<i>Eucampia zodiacus</i>	None present
1800B	1036	25.8	6.73	<i>Pleurosigma sp.</i>	None present
1818D	1040	24.9	4.63	Sparse algal concentrations Significant amounts of detritus	None present
2100A	1049	25.7	8.41	<i>Pleurosigma sp.</i>	None present
2720B	1109	26.9	2.52	Sparse algal concentrations	None present
A85A2	1115	22.6	2.10	Sparse algal concentrations	None present
3826A	1143	23.4	5.89	Sparse algal concentrations Significant amounts of detritus	No Sample
3895E	1216	26.7	11.35	Sparse algal concentrations Significant amounts of detritus	None present

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

