From: Officer In Charge, Naval Medical Administrative Unit, Monterey
To: Occupational Safety and Health Manager (Code 223), Naval Postgraduate School, Monterey Bay
Subj: MONITORING DATA RESULTS, NAVAL POSTGRADUATE SCHOOL, MONTEREY, MWR DEPARTMENT, MARINA, BOAT SANDING (ET-0082)

Ref: (a) Industrial Hygiene Field Operations Manual NEHC-TM6290.91-2, Revision B, Appendix A
(b) Navy Environmental Health Center Technical Manual NEHC-TM-6260.96-1, Change 1 of Sep 98, Section 2
(c) OPNAVINST 5100.23E, Chapter 5, para 0502c(2)
(d) OPNAVINST 5100.23E, Chapter 8, paragraph 0803f

Encl: (1) Industrial Hygiene Air Sampling Survey Forms

Monitoring data was collected on 20 July 2000 to determine the copper dust exposure of a worker sanding the hull of a Navy boat located at the Frank Siino Shipyard. The monitoring was conducted by Eric Thurston, Naval Medical Administrative Unit, Monterey Industrial Hygienist.

Results are as follows:

<table>
<thead>
<tr>
<th>WORKER'S NAME</th>
<th>AGENT</th>
<th>TWA (units)</th>
<th>CRITERION (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BM2 Leslie Bates</td>
<td>Copper dust</td>
<td>0.93 mg/m3</td>
<td>1 mg/m3</td>
</tr>
</tbody>
</table>

Results, traceable to Industrial Hygiene Survey ET-0082 and San Diego Laboratory Analysis Number 4421, indicate that copper dust exposure during this job statistically exceeds both the Medical Surveillance Action Level and Permissible Exposure Limit outlined in reference (a).

No deficiencies were noted during performance of this job. Personnel should continue to wear a respirator equipped with HEPA filter cartridges during this job. Enrollment in a medical surveillance program for copper dust exposure is not required because the job's frequency does not meet the 10 days per quarter or 30 days per year criterion outlined in reference (b).

As outlined in reference (c), engineering controls are the preferred means of controlling exposure to airborne toxics. In light of this, NPS should purchase or rent from the Frank Siino Shipyard a sander equipped with a hose connected to a vacuum cleaner. This method is expected to lower levels enough to preclude the necessity to wear a respirator during this job.
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6. Reference (d) requires that this job be remonitored on a regular basis; it is requested that the Marina contact the industrial hygienist approximately every 6 months to conduct the required monitoring of this job, and the job will be added to the next version of the department’s Workplace Monitoring Plan.

7. A copy of the sampling forms is provided as enclosure (1).

8. For further information or clarification, please contact me at (831) 656-3466 or sethurst@nps.navy.mil.

S.E. THURSTON
By direction