From: Commanding Officer, Naval Hospital Lemoore
To: Chief of Staff, Naval Postgraduate School,  
1 University Circle, Monterey CA 93943

Subj: VENTILATION MEASUREMENTS, NAVAL POSTGRADUATE SCHOOL,  
MONTEREY, PHYSICS DEPARTMENT, BUILDING 245 NANOMEMS  
LABORATORY HOODS

Encl: (1) Industrial Hygiene Ventilation Measurements Report

1. Ventilation measurements of the two Naval Postgraduate  
School, Physics Department’s Building 245 nanoMEMS Laboratory  
Clean Room laboratory hoods were conducted on 12 May 2014 by  
Naval Hospital Lemoore’s Monterey area Industrial Hygienist.

2. Results and recommendations are discussed in enclosure (1).

3. Further clarification or consultation with respect to this  
report is available from S. Eric Thurston, Industrial Hygienist  
at COMM (831)656-1074, e-mail sethurst@nps.edu.

K. R. DAGHER  
By direction

Copy to:  
NPS Assoc Mil Dean  
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FW Mont Env Prot Spec
INDUSTRIAL HYGIENE SURVEY DATA

ACTIVITY: NPS Monterey  DATE: 12 May 2014

DEPARTMENT: Physics Dept. Bldg 245  POC: Professor Grbovic

LOCATION: nanoMEMS Lab, Room 214  IND. HYG.: Eric Thurston

OPERATION/PROCESS DESCRIPTION: Two high-tech laboratory flow hoods controlled by electronics located at their tops are present in the Watkins Hall, Room 214 10,000 level Clean Room. Measurement results are summarized below:

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>SOURCE</th>
<th>MEASUREMENT</th>
<th>CRITERION</th>
<th>CONDITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room 214, 10,000 Level Room</td>
<td>Flammables Lab Hood</td>
<td>120 fpm</td>
<td>80-100 fpm</td>
<td>Satisfactory</td>
</tr>
<tr>
<td></td>
<td>Corrosives Lab Hood</td>
<td>130 fpm</td>
<td>80-100 fpm</td>
<td>Satisfactory</td>
</tr>
</tbody>
</table>

DISCUSSION: The flow rates for both hoods meet the criterion of 80 to 100 feet per minute (fpm) outlined in reference (a), with the flammables hood’s flow rate approximately 10 fpm lower and the corrosives hood’s flow rate approximately 20 fpm lower than the flow rates measured during the 2013 Physics Department’s two-year industrial hygiene survey. No corrective action is necessary; the lower flow rates might possibly be explained by the difference in meteorological conditions of the two measurement days, with conditions during the current survey not as windy as those during 2013 due to a local heat wave. The hoods will next be remeasured as part of the department’s 2015 two-year industrial hygiene survey.

REFERENCES:

(a) Industrial Ventilation: A Manual of Recommended Practice, 27th Edition, Chapter 13, Figure VS-35-01, page 13-49, ACGIH