Chemical Engineering 4310  
Fall Semester 2015  
**Homework Assignment #2**  
Chapters 2 and 3  
For return in marked box in hall of 2nd floor of Chemical Sciences

**Problems**

<table>
<thead>
<tr>
<th>Problems</th>
<th>Brief Problems Description</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-14</td>
<td>Compute the Mixture TLV</td>
<td>111</td>
</tr>
<tr>
<td>3-15</td>
<td>Determine if the worker exposure within compliance</td>
<td>111</td>
</tr>
<tr>
<td>3-22</td>
<td>Determine the ventilation rate</td>
<td>113</td>
</tr>
<tr>
<td>3-24</td>
<td>Estimate the ambient vapor concentration</td>
<td>113</td>
</tr>
<tr>
<td>3-29</td>
<td>Determine an appropriate control velocity and air flow rate.</td>
<td>114</td>
</tr>
<tr>
<td>3-39</td>
<td>Determine if the Noise exposure exceed the permissible limit</td>
<td>117</td>
</tr>
</tbody>
</table>

1. Go to the [www.osha.gov](http://www.osha.gov) web site and look up the OSHA regulation CFR 1910.119. Appendix A contains a list of chemicals with threshold quantities. If your plant site exceeds this threshold quantity then this standard applies.
   - a. Methyl isocyanate
   - b. Phosgene
   - c. Acetone
   - d. Ethylene oxide

   - a. What does STQ mean?
   - b. Look up the STQ values for the following chemicals: ammonium nitrate, ethylene oxide.

3. Go to the the EPW web site ([www.epa.gov](http://www.epa.gov)) and look up the RMP regulation (40 CFR 68). Look up the threshold quantities and toxic endpoints for the following chemicals:
a. Formaldehyde
b. Phosgene
c. Ethylene oxide

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