Each year, the Region 1 Office of Environmental Measurement and Evaluation (OEME) makes between 500 – 600 small purchases to acquire necessary laboratory and field supplies, equipment, and services. This event examined the OEME process from identification of the need for an item through completion of the purchase transaction.

The Region initiated the project to increase efficiency as the process team reduced from three people to one person, and to prevent errors created by handwritten orders. The small purchases process was inefficient, with many duplicate purchases for a single item often being placed during a short period of time. The process was also unevenly distributed across the year, with bottlenecks during peak ordering months.

**Goals:**
1. Streamline the process to identify, review and approve purchases – especially for acquisition of regular, routine laboratory supplies.
2. Develop a standard, electronic order, approval and tracking system.
3. Reduce the number of individual purchases by 20 percent.
4. Evenly distribute purchasing workload across all months of the fiscal year.

The Lean team identified the following improvements to the laboratory purchasing process:

- Automate the order form so that all information is standardized and submitted to purchasing correctly.
- Set up a visual inventory system for commonly ordered supplies.
- Provide the purchasing agent with a list of personnel who work in the same lab area so that their purchases can be bundled.
- Reduce review steps for items that are required to be ordered on a regular basis, such as standards.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Old Process</th>
<th>New Process</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days to Complete an Order</td>
<td>12</td>
<td>5</td>
<td>+60%</td>
</tr>
<tr>
<td>Number of Process Steps</td>
<td>27</td>
<td>16</td>
<td>+40%</td>
</tr>
</tbody>
</table>

Results are anticipated based on the new process design.

Event participants created a new process that will combine similar purchases into fewer, larger purchases; will transfer all orders to an electronic system; and will reduce the number of days to complete an order by sixty percent. As a result of the implementation of these improvements, errors in the lab purchase forms have been reduced by 50 percent.

**Event Team**

Lean Leader: Danielle Gaito
Team Leader: Ernie Waterman
Team Champion: Art Johnson