

### Merck Site Program Management

Merck's leadership focus is to develop a High Performing Organization (HPO); Merck has implemented an initiative that focuses on improving the culture and environment of our work place and its people, through inclusionary and physical properties means and methods! This challenge begins at the "top floor" and is cascaded down the "boots on the ground" crafts persons.

Two of Merck's recent programs have experienced significant results from this approach, the Elkton HPV Program of Projects in Elkton, VA., and the Vaccine Bulk Facility (VBF) at Durham, NC. The Elkton Program exceeded 250M and VBF exceeded 315M in Total Installed Cost (TIC).

To enable the projects of this complexity to achieve targeted results, it was imperative to create the right culture. This began with an aligned objective approach and quickly was followed by a fully integrated Merck/AE/CM management team with shared Incentative. To reduce craft labor risk, each project strategy included as much modularization as possible. Early Labor Market Surveys indicated that during our project peak periods there would be significant competition in the area for the best craft available. Merck set out to attract that talent by making ourselves as a preferred work place.

Vital to this approach was the novel implementation of "Craft as our Customer" initiative. The focus was to create a preferred work environment, with the craft totally integrated into all program elements - Safety, logistical planning, facilities planning and clean build components. The program focused on celebrating success frequently, and retaining quality craft while reducing burn-out periods normally experienced through schedule driven fast track projects. At Durham, the program was charted with supporting 1000 craft and another -professionals to provide facilities, parking, traffic control while remaining invisible to existing facilities, preparing for licensing. The Elkton Program had another 400.

Durham and Elkton accomplished a combined 1.7M safe work hours and with a combined 0.67RIR rate. The VBF Program is currently the fastest tracked project within the Merck Global Engineering Services capital plan. The HPV and VRF projects are currently the two fastest projects within Merck Global Engineering Services capital plan, achieving Charter to OQ completion on a complex biological project in 24-26 months. Both projects beat internal soft cost benchmarks and compared favorably to hard cost benchmarks.

The Merck Site Program Management (SPM) process was implemented at each site respectively and is seen as the catalyst to the success of each. We believe; that while technological innovations are important to incremental advances. However we hold that focusing on our leadership and people soft skill management is an area where we have demonstrated significant gains in craft productivity and safety compliance are our key to success.

The Merck Site Program Management process was founded on a methodology to support capital projects through a structured, disciplined process that focuses on Safety, Logistics, Culture and Environment in a way that increases people and work flow efficiencies that enable a reduction in overall total cost of construction for multiple projects executed in a common time frame by applying the CURT Safety Blue Print, Lean Principles and Carbon Foot Print concepts through an organized core of safety/logistical/capital project management experienced professionals supporting Merck Global Engineering Services capital projects.

In closing, Merck's Site Program Management approach is unique in the industry as it focuses on people, and high performing teams as the greatest opportunity to advance our best practice technologies, safety compliance, productivity factoring and overall well being of our culture. So therefore we believe people and culture drive our success.

## SPM Exhibits

	 <p><b>Safety Processing Center</b> approximately 2000 orientations provided</p>	 <p><b>Craft Entry</b> "Hall of Fame" Boards Were utilized with specific information about a person and their families.</p>
 <p><b>View</b> entry from craft parking lot</p>	 <p><b>Safety Culture</b> setting the stage</p>	 <p><b>Administration Complex</b> housed ~ 200 professionals</p>
 <p><b>Safety Poster</b> the program utilized the family of onsite workers for the safety posters</p>	 <p><b>View</b> craft restroom and break area walkways</p>	<p>Attached are exhibits of the "craft as our customer" influence that SPM provided from facilities, to signage to include a general services needs.</p>
 <p><b>Internal view of craft break area</b> crews keep clean and neat at all times.</p>	 <p><b>Craft Break Area</b> accommodates ~400 craft daily</p>	