"SAFETY AT DuPONT" - NASA ORGANIZATIONAL ISSUES Deborah L. Grubbe, P.E., DuPont House Science Committee - 29 October 2003

I am a chemical engineer by training and have 25 years of experience with DuPont in engineering design, construction and operations. My current role is Corporate Director-Safety and Health.

Today I would like to focus my remarks on "Safety at DuPont." In summary, good safety practice takes committed leadership, educated personnel, integrated safety systems, and a continuous attention to detail. DuPont has been in business for over 200 years. We started as a manufacturer of black powder for the US Government in 1802. DuPont first kept injury statistics in 1912, installed an off the job safety process in the 1950's, and worked with the US Government to establish OSHA 1910.119 in the 1980's. Even today, DuPont continues to improve its own safety systems. In 1994, DuPont established a Goal of Zero for injuries and incidents, and in the year 2000, decided to adopt a Goal of Zero for soft tissue injuries like, and not limited to, carpal tunnel syndrome and back injuries.

DuPont always strives to improve its safety performance. In fact, safety is a precarious subject; just when you think you are good, that is the time you should start to worry. The key is to never become complacent. DuPont does have a leadership commitment to put safety first and we are committed to continuous improvement throughout our whole organization.

Safety conscious organizations hold similar organizational attributes:

- 1. Safety comes first, and all organizational leadership is actively engaged
- 2. Standards are high, are well communicated, and everyone knows their role
- 3. Line management is accountable for safety
- 4. If the work cannot be done safely, it is not done until it can be done safely.
- 5. Safety systems, tools and processes are in place and training is constant.

DuPont is a large organization, diverse in products, in technologies, and in global locations. However, in spite of this diversity, we have a single safety culture. We have an integrated, disciplined set of beliefs, behaviors, safety systems and procedures. The safety culture is held together by committed and visible leadership. We ensure that our contractors also have similar management processes in place to manage their own safety to high standards.

DuPont safety culture starts at the top of the organization. Our CEO is actively engaged in leading safety. He starts his key meetings with safety, and he insists that safety come first on every employee's list. He expects to be notified by his direct reports, of each employee lost time injury or fatality, employee or contractor, within 24 hours of the event.

Safety management is the unique balance of the carrot and the stick. There must be recognition and reward, as well as serious implications for blatant disregard of safety procedures and standards. If a DuPont employee continuously disregards procedures,

he/she endangers his/her life, the lives of his/her colleagues, the shareholders' investment, and the health and welfare of the communities where we do business. We usually prefer that these kinds of people find work somewhere else.

Any person can stop any job at anytime if there is a perceived safety danger. Employees are trained to look out for each other and to ensure that they and their colleagues work safely.

The corporate safety organization is accountable for being the watchdog on corporate policy and for examining how well DuPont executes against its own procedures. This organization, in conjunction with business safety leaders, also develops safety improvements. All improvements are owned and implemented by the line organization. There are multiple audits to ensure compliance to standards. These audits can range from a sales manager observing the driving habits of his/her sales representatives, to an external consultant evaluating how well we conduct our audits. The point is that DuPont never stops looking for weaknesses in its safety systems.

The corporate safety organization reports to a separate leader. This person does not have a specific business or manufacturing role and is accountable for integrating safety, health and environmental excellence as a core business strategy. His organization works with each DuPont leader to ensure there is clear knowledge of the risks present in his/her area, and to ensure safe, injury-free operation.

Just as our CEO considers himself the "chief safety officer" for DuPont, each of our managers and supervisors are the chief safety officers for their respective organizations. They are never relieved of their safety duties. The safety organization in DuPont is sometimes a consultant, sometimes a conscience, and sometimes a leader. Our collective goal is to have every employee and every contractor that works at our facilities leave every day just as they arrived.

In 2002, over 80 percent of our 367 global sites completed the year with zero lost time injuries. While we are proud of the thousands of employees and their achievements; we are not satisfied with this performance. We believe that all injuries and incidents are preventable. Complacency and arrogance are our enemies.