Manager's Notebook

THE SCREAM BY EDVARD MUNCH

Sustainable Careers

Part 2: Future career prospects for environmental professionals

By Richard MacLean

In the first article on environmental, health and safety careers (Manager's Notebook, "Sustainable Careers," Environmental Protection, January/February 2003, accessible under "Archives" at www.eponline.com), we examined the need to take direct responsibility for one's own future job security. This month, we examine the major trends that will dead-end some jobs and raise others to new heights. Now may be a good time to take a hard look at your own career path.

"Sustainable Careers" produced more reader response than any previous Manager's Notebook article (sample feedback appeared in the March 2003 *Environmental Protection* "Letters to the Editor"). Environmental, health and safety (EHS) professionals are worried about their future in a profession that, by all accounts, is in less demand and simultaneously morphing into "something new." Catch phrases, such as triple bottom line, sustainable development and social responsibility, are the jargon du jour, but what do they really mean in terms of your personal development needs and career path?

The concern expressed by *Environmental Protection* readers is consistent with research being managed by the Center for Environmental Innovation (CEI) and conducted by the Wharton School at the University of Pennsylvania and the Boston University School of Management.[1] It is also consistent with recent research by the National Association of Environmental Managers (NAEM), which found an "expected decline in the total EHS population by 2012...of between two and 10 percent." Corporate headquarters jobs [read higher paying jobs] "are expected to decrease in most industries."[2]

EHS is not exactly an up-and-coming growth career and path to riches. Or is it?

Arguably, this projected decline may be the future that EHS managers are hoping for, namely, a gradual decline and no precipitous drop. Few managers like to admit that their long-term career prospects might be headed for oblivion. The NAEM study predicted that some sectors will be affected more than others. Refining and oil and gas sectors fare well; high tech industries, such as defense and telecom, fare the worst. I suspect that the sector economic conditions at the time of the survey heavily influenced this perception. Another telling example of the mood uncovered by the study: Edvard Munch's most famous work, *The Scream*, was selected as the lead-in illustration for the conclusions.

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The Dynamics in Play

EHS professionals appear to be losing the security and prominence they had in the 1980s, in part, because they are not positioning themselves for the dynamics in play. What dynamics are EHS professionals currently considering? Again, the NAEM study is informative.

Nine factors were identified as likely to impact the EHS profession: the two most important are stakeholder non-governmental organization (NGO) influence and changes in corporate governance; product stewardship and actual global climate change ranked last. Again, I suspect that these choices may be heavily influenced by current events. Both extremes are telling and may reflect a habitually short-sited view of our own profession and the forces that will shape it.

Here is my view of what will take place in the future.

Skilled technical jobs move offshore — China, India, the Philippines and Mexico, among others, are dramatically increasing their number of natural science and engineering college graduates. They are paid a fraction of U.S.-based white collar workers. Over the next 20 years, we will witness the equivalent of the blue-collar job exodus that has plagued U.S. manufacturing workers over the past 30 years.

If you have not read the recent cover story article, "Is Your Job Next?," in *Business Week,* you should.[3] Highly skilled technical jobs that do not need to be physically located on site will migrate to service centers located around the world.

Communications technology continues to improve — There is a rule of thumb for the power of computer chips: they double every 1.5 years.[4] This ratio provides an insight into what we can expect from communications technologies, specifically as they relate to video teleconferencing and the infrastructure that allows a dispersed group of individuals to meet and talk "face to face."

The impact will be profound, since it allows the best, lowest cost resources from around the world to work in real time. I regularly serve international clients, largely because of the magic of the Internet. The current ease of electronic communication is just a prelude to the possibilities of direct client and stakeholder interaction.

Cheaper and better global communications techniques will also bring EHS issues to the public's attention faster. Boycotts and coordinated attacks against corporations seeking operating and expansion permits will accelerate. The demand for greater disclosure and, in particular, data that can be independently verified, will increase. The age of transparency will arrive.

Traditional regulations have gone about as far as they can — The basic framework for EHS regulations will stabilize (some say they already have). Development and especially enforcement of regulatory systems similar to those of developed countries will dominate the agenda in developing companies. The shift will be toward broad guidelines and business incentives, such as emissions trading, some of which will be implemented on a global basis. Greenhouse gases are a case in point. This focus on international agreements and incentives will extend to other resource issues, such as fresh water, topsoil protection, marine habitats and other food supply issues.

One or more triggering events galvanize public opinion — One might claim that DDT's impact on the eggshells of the bald eagles, our national symbol, triggered the EHS events over the past 30 years. Rachel Carson, author of *Silent Spring,* captured the public's attention of a past generation through her book that focused on the negative impacts of chemicals on the environment; who knows what events might produce a similar future response. It is not a question of if, but of when. For many, this doomsday paranoia is unjustified since they believe that no matter what the issue, technology will come to the rescue. Don't bet on it.

My opinion — and I am not alone — is that some significant future EHS issue or series of events will flare up and will not be as easily reversible as DDT, asbestos and polychlorinated biphenyls (PCBs). We currently live in a soup of new synthetic chemicals, many of which are biologically active. Dr. Irving Selikoff, considered the father of asbestos health research, stated that the "blessing" in the grotesque Thalidomide-related birth defects situation was that they were immediate, horrific and thus, recognized and stopped quickly.

Some lower-order animals may be seeing the impact of human activity in a similar way today, but we humans seem to be just fine with that; who cares about some ugly amphibian? But what if the fuzzy, cute primates start to die precipitously or the next generation of children in some countries develops abnormal health conditions?

The smoking gun DNA mutation may never surface, or then again it may make headlines later this year, cheered on by plaintiff attorneys. Corporations, however, are already responding to emission and resource issues, such as freshwater supplies and global warming. The nature of environmental issues is changing from a regulatory to a resource focus. Similarly, the nature of health and safety issues is shifting from blunt trauma and acute exposure to biological impacts at the DNA level.

EHS concerns migrate into project and process engineering — EHS professionals over the past 30 years have developed the regulatory and pollution control hardware infrastructure where little existed previously. This work was the bread and butter of EHS professionals that led to their prominence and security in the 1980s. This framework has now been codified and is nothing more than just another design specification for process and product engineers.

More and more technology innovations that, in the past, were touted for their pollution control attributes will be nothing more than routine design criteria for products and services. Was the x-ray technology advancement that eliminated silver film developed by a pollution-prevention effort led by EHS professionals? I don't think so. Pollution prevention and loss control will migrate from a regulatory focus to a product and process innovation focus.

Career Implications

What will these trends mean to the career prospects of EHS professionals? First, one needs to define success. To some professionals, it means money and power. But, many EHS professionals recognize that success is more about job satisfaction. It is hard to have job satisfaction, however, if you are unemployed, without clients and/or completely ignored. So, for the purpose of this examination, career success means a degree of job security with continuing professional, personal and financial growth.

Second, timing is important. If your career is just a few years away from retirement, these long-term trends may have no substantive impact. Hold on as best you can in these turbulent times. If you have 10 or more years left of active employment, now may be a good time to take these trends into consideration.

Third, if you are planning to remain on a technical career path, you had better position yourself as an irrefutable world class expert, because the person competing with you in the job marketplace may be a PhD located in Bombay, India, with numerous publications and better English verbal and written skills than most Americans. If your duties require you to be physically located at a manufacturing site, you have some insulation, but recognize that your financial compensation and career path will not be remarkable. The same limited career options apply to traditional EHS technical professionals working inside regulatory agencies, NGOs and especially consulting companies.

Not surprisingly, supply and demand will

drive these dynamics: expect the demand to possibly drop and the supply to increase based on an increasingly global marketplace. It is not sufficient to get good performance reviews from your current boss; you need to build a platform of excellence as described in part one of this series.

Expect outsourcing to significantly increase. Technical service groups inside U.S.-based companies that can now justify their existence by competing head-to-head with local consulting firms will have to compete in the future with consulting firms that may be using overseas technical centers. Customer interface will remain local, of course, and not surprisingly, relationship skills will command premium salaries, not technical skills. Thus, the EHS technical expert who can also identify the business significance, sell the services and explain the results will be in far greater demand. In consulting, the rainmaker who can bring in the business will be well paid and in demand.

Fourth, if you want to advance your income, security and influence substantially, do not look to the traditional, higher level EHS roles of the past. It may sound crass, but if your current title contains the words environment, health or safety, maneuver to purge EHS from your title if you want to be taken seriously by business executives (and thus eligible for significant promotion). There were a lot of strategic planning managers in the 1980s that made a similar title purge when planning was viewed by business management as a bureaucratic process that added little strategy or value to the business.

Significant issues now and in the future will be those concerning human and natural capital (a.k.a. resources). If management views you as having unique skills in dealing with resource issues, you will be in demand and will command a higher salary than if you are perceived to be the person taking care of the regulatory compliance details. Again, the professional who works with stakeholders to gain approval for a new facility will command a higher stature than the individuals who actually complete the permits.

An illuminating example of this shift from traditional to new EHS roles is the major thrust by General Electric (GE) in water treatment. In just 18 months GE aggressively positioned itself as number two in the industry.[5] GE, not renowned for its environmental leadership in traditional EHS programs, clearly understands the business opportunities in resolving emerging water shortages. Similar business positioning strategies by companies, such as British Petroleum (BP), which now also uses the name Beyond Petroleum, are underway because of global warming.

Issues, such as global climate change and water resources, are producing gradual but fundamental changes in how business is responding to resource issues. This has broad implications: the best jobs will be those associated with the migration of EHS issues into core business activities. The EHS managers ranked actual global climate change in the NAEM survey as the factor least likely to impact EHS professionals. Yes, the earth will not warm much over the next 10 years, but the premium jobs for which EHS managers are ideally suited will be the new ones created to address global warming and other resource-related shifts.

For EHS attorneys, these trends may mean that those skilled in international resource treaties may command a premium over those specializing in interpreting mature regulations. For regulatory staffs, it may mean that those skilled in incentive-based agreements, partnerships and other innovative interventions will have the greatest growth potential. For health and safety professionals, it may mean that those who optimize productivity and customer and community relationships will be viewed as offering the greatest business value.

These trends will be gradual, extending over decades. If, however, an unmistakable triggering event occurs, EHS careers could transform overnight for those properly positioned. If the public better understands humans' interdependence with nature, the consequences could be far broader than the past era of command and control regulations. For example, careers in the sciences, such as ecology, toxicology, epidemiology and so on, would be catapulted to the forefront.

Conclusions

George Carpenter, director, corporate sustainable development, Procter & Gamble, said it best: "EHS is a maturing field with processes and management systems that are well understood. In many cases, EHS measurements have been systematized to the degree that it is part of the daily work integrated into routine plant operations like many other aspects of business."[6] Note that George does not even have the word "environment" in his title.

All of the dynamics identified in this article are well underway. The bottom line is that if you view your EHS career as a continuum of traditional roles and responsibilities, you are doomed to be constantly looking over you shoulder for the next cutback and griping about the poor pay and lack of recognition. Those who prepare for these emerging dynamics will be in far greater control of their own destiny. Indeed, if one or more triggering events occur, they may see themselves thrust into prominence.

How do you go about positioning yourself for these changes? I'll provide guidance in part three of this series on careers if I receive sufficient reader interest.

These are the worst of times for EHS professionals, but they are also the best of times for those who are willing to change. EP

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References

[1] See Web site at *www.Enviro-Innovate.org*
[2] Available from the NAEM Web site, *www.naem.org,* NAEM 2002 EHS Forum Presentation Downloads, Richard Fiore, "The Future of the EHS Professional: A Survey in 50 Corporations," September 2002.
[3] Pete Engardio, et. al, "Is Your Job Next?," *Business Week,* February 3, 2003, Pages 50-60.
[4] See Web site *www.offshore.com.ai/security/ rate-of-computer-progress*
[5] Matt Murry, "GE's Immelt Starts Renovations On the House That Jack Built," *Wall Street Journal,* February 6, 2003, Page 1.
[6] George Carpenter, Procter & Gamble, written communication with author, March 18, 2002.