

Code of Ethics

1. To strive to ensure this code is upheld by colleagues and co-workers
2. To hold paramount the safety, health, and welfare of the public, to strive to comply with ethical design and sustainable development practices, to protect the privacy of others, and to disclose promptly factors that might endanger the public or the environment
3. To improve the understanding by individuals and society of the capabilities and societal implications of conventional and emerging technologies, including intelligent systems
4. To avoid unlawful conduct in professional activities, and to reject bribery in all its forms
5. To seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, to be honest and realistic in stating claims or estimates based on available data, and to credit properly the contributions of others
6. To treat all persons fairly and with respect, and to not engage in discrimination based on characteristics such as race, religion, gender, disability, age, national origin, sexual orientation, gender identity, or gender expression
7. Engineers shall undertake assignments when relatively qualified by education or experience in the specific technical fields involved. Whether through on-site training, or prior knowledge and experience.
8. Engineers shall not reveal facts, data, or information without the prior consent of the client or employer except as authorized or required by law or this Code
9. Engineers shall be objective and truthful in professional reports, statements, or testimony. They shall include all relevant and pertinent information in such reports, statements, or testimony, which should bear the date indicating when it was current
10. Engineers shall not falsify their qualifications or permit misrepresentation of their or their associates' qualifications. They shall not misrepresent or exaggerate their responsibility in or for the subject matter of prior assignments. Brochures or other presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, joint ventures, or past accomplishments

Assignment Description

Paper Definition:

There are many examples of violations of ethical standards in the industry. Students are to pick a case study from the past and apply the ENGR-501 code of ethics to the case.

Summarize the case. Compare which standards were violated and which were upheld. It is not required, but if you wish, you may provide a solution of your own for extra points.

Requirements:

There is no page or word limit to the paper. Students will be graded based on their reasoning and decision making.

Grading:

- Pick a topic/ case study.
- Detail the case and your opinion on what went wrong.
- Apply the ENGR-501 Code of Ethics to the case.
- Propose your own solution to the problem.

<https://www.nytimes.com/2016/01/10/magazine/the-lawyer-who-became-duponts-worst-nightmare.html>

Background

Teflon is a brand name for a type of polymer known scientifically as polytetrafluoroethylene (PTFE). It was discovered in 1938 by a chemist named Roy Plunkett, while he was working for DuPont. PTFE has exceptional chemical resistance, allowing exhibition of high heat resistance and a general non-stick nature.

The manufacturing process of Teflon involves the use of perfluorooctanoic acid (PFOA), which is a persistent environmental pollutant and linked to severe health issues, particularly a wide variety of cancers. The human body does not bode well to consumption of materials with exceptional chemical resistance.

It was not until the early 2000s that the public became widely aware of the problems associated with PFOA. This awareness stemmed from a class action lawsuit initiated in 2001 in West Virginia against DuPont. The lawsuit revealed that DuPont had been aware of the potential health issues related to PFOA exposure as far back as the 1960s but had actively minimized the severity of these risks.

Further investigations into DuPont's practices uncovered that the company had knowingly released PFOA into the environment, contributing to pollution and contamination of water supplies near its manufacturing facilities. The most well-documented case, which the lawsuit stemmed from, was at DuPont's Washington Works plant near Parkersburg, West Virginia. The company was found to have disposed of PFOA both directly into the Ohio River and indirectly through local landfills. This disposal led to widespread environmental contamination and elevated levels of PFOA in the water consumed by the surrounding community.

Ethical Analysis

1. Upholding the Code by Colleagues and Co-Workers:

The reports and legal findings that suggested DuPont was aware of the harmful effects of PFOA but did not fully disclose these to the public or its workers is in contradiction to striving to ensure that the code is upheld by colleagues and co-workers.

2. Holding Paramount the Safety, Health, and Welfare of the Public:

The delayed acknowledgment and response to the dangers of PFOA indicated that DuPont did not prioritize public safety, health, or welfare, nor did it comply with ethical design and sustainable development practices.

3. Improving Understanding of Societal Implications of Technologies:

DuPont's handling of the information related to the health effects of PFOA and its impact on the environment shows a lack of effort to this ethical standard. There was a significant delay in public awareness regarding the risks associated with Teflon and PFOA.

4. Avoiding Unlawful Conduct and Rejecting Bribery:

There's no specific evidence that DuPont engaged in bribery in the context of the Teflon issue. However, their handling of PFOA pollution suggests concerns regarding adherence to lawful conduct in their professional activities.

5. Honest Criticism, Acknowledgment of Errors, and Realism in Claims:

Documents and legal proceedings revealed that DuPont may have failed to promptly acknowledge and correct errors related to the health effects of PFOA. This indicates a lack

in seeking criticism of their technical work and being honest and realistic in claims based on available data.

6. Treating All Persons Fairly and Without Discrimination:

The Teflon predicament primarily concerns environmental and health ethics rather than discrimination. There's no direct connection between DuPont's actions regarding Teflon and discrimination based on race, religion, gender, etc. It might be true, however, that their manufacturing plants were built in lower-income areas to avoid impactful public scrutiny, but I found no evidence of this.

7. Undertaking Assignments With Appropriate Qualifications:

This ethical principle seems not directly challenged in the Teflon situation, assuming that DuPont's engineers and scientists were qualified. However, the issue lies more with the corporate decisions made despite the technical knowledge possessed.

8. Confidentiality of Information:

There's no specific information suggesting DuPont improperly disclosed confidential information. The ethical concern was more about the lack of disclosure of known risks to the public and authorities.

9. Objectivity and Truthfulness in Professional Reports:

The evidence suggesting that DuPont downplayed or did not fully disclose the risks of PFOA to the environment and public health raises concerns about their duty to being objective and truthful in reports.

10. Falsification of Qualifications and Misrepresentation:

There's no public evidence that DuPont falsified qualifications or misrepresented the qualifications of their employees in relation to the Teflon issue. The ethical concerns are more centered around the management of environmental and health risks.