

AMERICAN INTERNATIONAL UNIVERSITY - BANGLADESH

Course Code:

EEE 2215

Course Name:

Engineering Ethics

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AMERICAN INTERNATIONAL UNIVERSITY - BANGLADESH (AIUB)

Where leaders are created

Case Title

Environmental Impact of Industrial Activity

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Case Description

A multinational corporation, under the leadership of their group leader, operates a large industrial facility in a developing country. The facility produces chemicals for various industrial applications. Despite the availability of technology to minimize environmental impact, the corporation has been cutting corners on environmental regulations to maximize profits. As a result, the surrounding communities suffer from pollution, including air and water contamination. Complaints from locals have been ignored, and the corporation continues to operate without addressing the environmental concerns.



General Discussions

In considering this case, several ethical dimensions emerge. Firstly, there's the environmental impact of the corporation's actions, which directly affects the health and well-being of the surrounding communities. Secondly, there's the economic dimension, where the corporation prioritizes profit over environmental and social responsibility. Lastly, there's the cultural aspect, as the corporation operates in a developing country where regulatory oversight might be weaker, and the impacts of industrial activity can be more acutely felt.



Ethical Code Review

❖ IEEE Code of Ethics:

The IEEE Code of Ethics similarly emphasizes the importance of upholding the safety, health, and welfare of the public. It includes provisions related to environmental responsibility, stating that engineers should "endeavor to extend public knowledge and appreciation of the profession and its achievements" and "be alert to the environmental consequences of engineering activities."

The corporation's actions, as described in the case, clearly violate the IEEE Code of Ethics by ignoring environmental consequences and failing to promote public knowledge and appreciation of engineering achievements in sustainability.



Ethical Code Review

❖ ACM Code of Ethics and Professional Conduct :

The ACM Code of Ethics and Professional Conduct applies specifically to computing professionals. It emphasizes the need to contribute to society and human well-being, including through sustainable development.

In the case study, the corporation's failure to address environmental concerns and its disregard for the impacts of its activities on the community violate the ACM Code of Ethics. Computing professionals within the corporation have a responsibility to ensure that their work contributes to social good and does not harm the environment or community well-being.



Ethical Code Review

❖ NSPE Code of Ethics for Engineers :

The NSPE Code of Ethics for Engineers emphasizes the importance of holding paramount the safety, health, and welfare of the public. It includes provisions related to environmental sustainability, stating that engineers should "seek opportunities to be of constructive service in civic affairs and work for the advancement of the safety, health, and well-being of their community."

In the case described, the corporation's actions directly contradict this principle by neglecting environmental concerns and prioritizing profit over the well-being of the community. This violates NSPE's Code of Ethics by ignoring the responsibility to ensure environmental sustainability and protect the community from harm.



Explanation of the Code

The chosen code of ethics emphasizes the responsibility of engineers and corporations to consider the broader impacts of their activities, including environmental, social, and economic consequences. This involves adhering to regulations, implementing sustainable practices, and addressing concerns from affected communities. Engineers and corporations are expected to prioritize the long-term well-being of society and the environment over shortterm gains. They should integrate ethical considerations into their decisionmaking processes and strive to minimize harm while maximizing benefit to stakeholders. In the case of industrial activity, this means utilizing technology and best practices to minimize environmental impact, engaging with communities to address concerns, and ensuring compliance with regulations to uphold ethical standards.



Ethical Violations

- Neglecting Environmental Sustainability: The corporation prioritizes profit over environmental regulations, leading to pollution and harming surrounding communities.
- Ignoring Community Concerns: Complaints about pollution from locals are ignored, violating ethical principles of addressing stakeholder needs and grievances.
- ❖ Prioritizing Profit Over Social Responsibility: By prioritizing profit, the corporation fails to fulfill its ethical duty to contribute positively to society and the environment.



Ethical Violations

- Disregarding Regulatory Standards: The corporation's actions show a disregard for environmental regulations, risking public health and environmental well-being.
- Lack of Transparency and Accountability: Ignoring complaints and avoiding regulatory scrutiny demonstrate ethical lapses in governance and integrity



Conclusions

The corporation's actions demonstrate a flagrant disregard for ethical principles, as it prioritizes profit over environmental sustainability and community welfare. The resulting pollution and health hazards pose significant risks to the surrounding communities. Urgent measures are needed to rectify the situation and mitigate the environmental impact. The corporation must engage in transparent and accountable practices, address community concerns, and implement sustainable solutions to prevent further harm. This case underscores the importance of upholding ethical standards in corporate conduct and ensuring that business practices align with societal and environmental well-being. By taking decisive action to rectify these ethical violations, the corporation can rebuild trust with stakeholders and demonstrate a genuine commitment to responsible and sustainable business practices.



Recommendations

To avoid such a case in the future, the corporation and its leadership should take several steps:

- 1. Compliance with Regulations: Ensure strict adherence to environmental regulations, both local and international, to minimize negative impacts.
- 2. Investment in Sustainable Practices: Allocate resources towards implementing sustainable technologies and practices to reduce environmental harm.
- 3. Community Engagement: Establish dialogue with the affected communities, listen to their concerns, and take appropriate actions to address them.
- 4. Ethical Oversight: Implement mechanisms for ethical oversight within the corporation to prevent similar violations in the future. This could include internal auditing, whistleblower protection, and ethical training for employees and leadership. By following these recommendations, the corporation can uphold its ethical responsibilities and contribute to a more sustainable and responsible industrial practice.

THANK YOU