

American International University Bangladesh

Course Code: EEE 2216 Course Name: Engineering Ethics

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.



The corporation's actions have a direct and negative impact on the health and well-being of the surrounding communities.

Economic Dimension

The corporation prioritizes profit over environmental and social responsibility, creating an ethical conflict.

Cultural Aspect

The corporation operates in a developing country, where regulatory oversight might be weaker and the impacts of industrial activity can be more acutely felt.



IEEE Code of Ethics 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."

Violation

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.



ACM Code of Ethics and Professional Conduct 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.

Violation

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.



NSPE Code of Ethics for Engineers 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."

Violation

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





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.

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 wellbeing. 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



Compliance with Regulations

Ensure strict adherence to environmental regulations, both local and international, to minimize negative impacts.



Investment in Sustainable Practices

Allocate resources towards implementing sustainable technologies and practices to reduce environmental harm.



Community Engagement

Establish dialogue with the affected communities, listen to their concerns, and take appropriate actions to address them.



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.



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