Suggested Assignment
for
*Incident at Morales*

It is suggested that this page and the following page (which repeats the synopsis and cast of characters) be copied and distributed before viewing *Incident at Morales*. After viewing the video, ask viewers to prepare a written assignment in response to the instructions below. (Suggested length: 2 to 3 pages; 1.5 space; 12 point type; 1 inch margins)

1. List the ethical issues you observed in *Incident at Morales*.
2. From your personal perspective, prioritize these ethical issues from most critical to least critical.
3. Discuss the video from three additional perspectives:
   a) **Fred’s Perspective**: Assume you are Fred:
      i) What specific ethical issues do you (Fred) face?
      ii) What are some things that you should consider?
      iii) From whom or where would you seek guidance?
   b) **Wally’s Perspective**: Assume you are Wally:
      i) What specific ethical issues does Wally face?
      ii) What do you think Wally’s motivation was for having “One Rule”? 
      iii) What do you think about Wally’s “One Rule”? 
      iv) What decisions would you change if you were Wally?
   c) **Responsibility Perspective**: If you were in charge and had the authority and the funding to make any changes you wanted to make in company policies:
      i) What specific steps would you take to improve the company culture?
      ii) Who would you involve in this process?
      iii) How and when would you communicate the company policies to:
          (a) Your employees?
          (b) Your clients?
          (c) The public?

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**Synopsis:**

*Phaust Chemical* manufactures “Old Stripper,” a paint remover that dominates the market. On learning that *Phaust’s* competitor, *Chemitoil*, plans to introduce a new paint remover that may capture the market, executives at *Phaust* decide to develop a competing product.

To save money in manufacturing the product, *Phaust* decides to construct a new chemical plant in Mexico and hires chemical engineer, Fred Martinez, a former design engineer for the consulting company *Chemitoil*, to design the plant.

Problems arise when *Chemistre*, *Phaust’s* parent company in France, slashes budgets 20% across the board. In response, Chuck, the vice president of engineering at *Phaust*, strongly encourages Fred to reduce construction costs.

Fred confronts several engineering decisions in which ethical considerations play a major role: a) whether to use expensive controls manufactured by Lutz and Lutz, which has an inside connection at Phaust, b) whether to line the evaporation ponds in order to prevent the seepage of hazardous substances in the effluents into the groundwater, and c) whether to purchase pipes and connectors made with stainless steel or high pressure alloy.

When samples of *Chemitoil’s* new paint remover, “EasyStrip,” become available, it is clear that to be competitive with “EasyStrip,” *Phaust* must change the formulation of its new paint remover, which requires higher temperatures and pressures than originally anticipated. Some unexpected problems arise: a) leakage occurs in one of the connections, and b) the automatic control system fails; therefore, the plant manager offers to control the process manually. After the plant goes into full operation, an accident occurs, and the plant manager is killed while manually controlling the manufacturing process.

**Cast of Characters**

Fred: ............ Chemical Engineer hired by *Phaust*
Wally: ............ Fred’s supervisor at *Phaust*
Chuck: ............ Vice President of Engineering at *Phaust*
Dominique: ... Corporate liaison to *Phaust* from parent company *Chemistre*
Marja: ............ Fred’s wife, a compliance litigator for U.S. EPA
Hal: ............... Market Analyst at *Phaust*
Jen: ............... Research Chemist at *Phaust*
Peter: ............. Project Manager of construction of the new plant in Morales
Jake: .............. Plant Manager for the *SuisseChem* plant in Big Spring, Texas
Manuel: .......... Plant Manager for the new *Phaust* plant in Morales

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Marketing Decisions

33. Someone at Phaust suggested the name “Strip-Teasy” for the new paint-stripping product. Was this suggestion appropriate from an ethical viewpoint?

34. Should engineers have some input with regard to how the product is to be marketed?

35. Do marketing methods ever have engineering consequences?

36. Regarding Hal, from product development and market research, Wally whispered to Fred: “He’s not one of us.” What feeling does this statement convey? Is this likely to promote tension and/or dissent?

37. Should corporations have an obligation to have sensitivity training for their managers and their engineers?
   a) What has society taught people in this matter?
   b) How is that brought into the corporate boardroom?
   c) How is that transcended into the corporate culture?

38. What do you think you would do to promote trust and respect among your colleagues and other professionals in other departments?

Budget Issues

39. The French corporate headquarters mandated a 20% cut across the board. Is there a difference between cutting budgets across the board rather than giving a bottom line and allowing management to differentially cut in ways that impact less severely on the viability of the project?

40. Regarding the sudden cut in budget, Chuck says “Sometimes you inflate budgets, and sometimes you build schedules with slack. That way, if something unexpected occurs, you’re covered.” Is this the same as covering for contingencies?

41. Did this attitude toward the budget promote “trust” in the company?

Interaction Between Plant Designers and Plant Operators

42. Should the engineers designing the project be in contact with people who have to maintain or operate it? Is this a serious consideration? How important is this relationship?

43. Is divorcing maintenance and operations from design a serious thing?

44. Is the separation of operations and design an ethical issue, or is it just a business issue?

45. When it becomes clear that the engineers are passing potential problems with valves and switches on to the future productivity of operations, does it seem that this is simply a way of sloughing off responsibility?

46. Is this action representative of the corporate culture of Chemitoil?

47. Does this attitude promote trust between designers and operations/maintenance personnel?

Safety Issues

48. Were there any scenes that revealed a lack of proper protective equipment being worn?

49. Does wearing proper protective equipment in a plant become a leading indicator of other corporate culture problems?

50. What about engineering college laboratories? Do faculty and students always wear appropriate safety gear?

51. Is this an ethical issue?

52. Do accidents just “happen,” or are they “caused”?

53. When we think about engineers working with operations people, should there be a mutual respect for entering - what we might call - their “territory of responsible care”?

54. Whose responsibility is it to make sure that reasonable care and attention is given to safety?
   a) The plant operator?
   b) The manager of the lab?
   c) Anyone who observes the problem?

55. If we were to analyze the culture of Phaust, would the safety issues provide some good indicators about the entire culture of the company?

Regarding the Software of the Cheaper Controls

56. Fred decides to investigate the possibility of using the less expensive controls which, according to Peter, the project manager in Big Spring, has software that’s “as buggy as a New York City basement.” Why is it that software is so hard to get correct?