

ETHICS APPROACHES

Clint Guymon, PhD PE

Brigham Young University

1st Jan, 2025

Jan. 12, 2025

Pres Nelson's PA

Revised May 2022

created in  Curvenote

Keywords Spiritual Safety, Process Safety, Chemical Engineering, Risk Assessment

Learning Outcomes

- Gain experience in applying ethics approaches to moral dilemmas
- Distinguish between standard ethical frameworks: Utilitarianism, Deontology, Virtue Ethics, and Contractarianism.
- Apply a systematic 6-step approach (Define, Consider, Plan, Confirm, Act, Reflect) to resolve ethical dilemmas.
- Analyze case studies to determine the most appropriate ethical course of action using both professional and gospel-centered perspectives.

• Child of God
• Child of Covenant
• Disciple of Jesus Christ

Reading

- Foundations of Spiritual and Physical Safety: with Chemical Processes; Chapter 2, Sections 4-6.

1 Additional Ethics Resources and Activities

Ethics decisions are made with respect to the principles to which you are committed. If someone is not committed to a specific principle set, it is easier to make unethical decisions with one or more justifications or rationalizations.

It is best to commit to a set of principles prior to the time when you are faced with an ethical decision.

Ethics Approach Step 1 Define

Carefully determine the root dilemma to be resolved. What is the real problem? It is common for ethical dilemmas to be convoluted combinations of many issues and it is tempting to hastily jump in and try to

solve the problem. When we do, we often focus on the wrong problem and end up exacerbating the entire situation. Often dilemmas are nothing more than a lack of communication.

Proper definition requires some sleuth work as the relevant data are gathered, the history of the situation is traced, the layers of “who said what and when” are peeled away, and the real dilemma is brought to light. Patience is also required. It is easy to jump to conclusions based on one person’s opinion or on less than all the data. Contractual, legal, and ethical obligations and commitments must be included as part of the definition.

Ethics Approach Step 2 **Consider and Analyze**

Consider possible actions and then forecast the outcome. This is something like a chess game since there are multiple possible outcomes for a given action depending upon the reactions of others. A good chess player looks multiple moves ahead to anticipate outcomes, and this same mentality is valuable in considering actions to resolve an ethical dilemma. Use the clear principles of the Gospel of Jesus Christ and consider the possible courses of action from each possible course of action. The above ethics principles can be helpful. What actions would be suggested by each ethics theory? The outcomes that need to be considered include the impact on others including the public, co-workers, and family. It is helpful to organize your analysis in a flowsheet that traces actions and outcomes.

Ethics Approach Step 3 **Plan**

Analysis, Approach

With the results of your analysis, it is time to select and plan your strategy. As you plan and prepare to put your plan into action, seek the guidance of the Spirit. *and others* Your plan will usually be a process involving several or many steps rather than a one-step action. Some steps may involve data gathering, and some will be dependent upon the intermediate responses and reactions of others. A good plan will produce inner peace—it will let you sleep at night.

Ethics Approach Step 4 **Seek Confirmation**

After you have done your homework and decided on a plan, you should seek divine approbation. (See D&C Section 9.) If this does not come, then more homework is most likely needed (Items 1, 2, and 3 above.) When you have this approval, then it is time to put the plan into action.

Ethics Approach Step 5 **Act**

Do it. Carry out your plan, being cautious and flexible as events unfold. Stick to your principles, but be humble and willing to admit your own failings and culpability

Ethics Approach Step 6 Reflect

Each time we go through the process of dilemma resolution, we should learn about ourselves and others. Take the time to digest the lessons learned so that your wisdom can increase in preparation for the next time. It helps to take some notes or make entries in a journal

2 Some Ethics Case Examples

- Chernobyl Firefighters
- Military Agreement of (Mission, Reactor, Ship, then Crew)
- Limited Information results in Bad Decision
- The Challenger Disaster
- Personal Story: Home Purchase
- Sulfanilamide Delayed Release
- The 1971 Ford Pinto
- Censorship

Example 1 - the book, Dilemma 1

2.1 Waste Scenario

Technician A is a field technician employed by a consulting environmental engineering firm. At the direction of his supervisor (Engineer B), Technician A samples the contents of drums located on the property of a client. Based on Technician A's past experience, in his opinion the analysis of the sample would most likely determine that the drum contents would be classified as hazardous waste. If the material is hazardous waste, Technician A knows that certain steps would legally have to be taken to transport and properly dispose of the drum, including notifying the proper federal and state authorities.

Technician A asks his supervisor, Engineer B, what to do with the samples. Engineer B tells Technician A only to document the existence of the samples. Technician A is then told by Engineer B that since the client does other business with the firm, Engineer B will tell the client where the drums are located, but do nothing else. Thereafter, Engineer B informs the client of the presence of drums containing "questionable material" and suggests that they be removed. The client contacts another firm and has the material removed.

Action Items

1. Examine the case study of "Technician A" and "Engineer B" regarding the hazardous waste drums; justify whether Engineer B's actions were ethical using the AIChE code of ethics and one of the four standard ethics approaches (utilitarianism, deontology, virtue, or contractarianism).

2. Pick one of the AIChE Code of Ethics points and discuss how it fits into one of more of the standard ethics approaches or the Gospel of Jesus Christ.
3. Pick one of the BYU Honor Code points and discuss how it fits into one or more of the standard ethics approaches or the Gospel of Jesus Christ.
4. Using the text (Page 25-26)([Guymon, 2025](#)) for details on Dilemma 2 (or other sources), assuming you are the first officer and you would not sink the ship if you strike the iceberg head on, would you turn the tiller on the Titanic or not? Why? Write a descriptive paragraph.
5. Using the text (Page 26-27)([Guymon, 2025](#)) for details on Dilemma 3 (or other sources), Is fear of death (or a perceived elevated likelihood of death) an ethical reason to not take efforts to save a life? Frame your argument for or against based on one of the ethical principles outlined.
6. Outline the six steps for making an ethical decision (Define, Analyze, Plan, Seek Confirmation, Act, Reflect) and explain what you would have done in one of the selected dilemmas you chose to write about.

References

C. Guymon. *Foundations of Spiritual and Physical Safety: with Chemical Processes*. 2025.