



Professional Ethics Exercises

CMPE 349 E.F.C. LaBerge

Options → NSPE Canons ↓	Go along with the decision	Appeal to higher management	Quit your job	Write your state representative	Call a newspaper reporter
Hold paramount the safety, health and welfare of the public.					
Perform services only in the area of your competence					
Issue public statements only in an objective and truthful manner					
Act for each employer or client as faithful agents or trustees					
Avoid deceptive acts					
Conduct themselves honorably ...					

Kosky, Balmer, Keat, Wise. *Exploring Engineering: An Introduction to Engineering and Design*. Elsevier, New York, 2016

Exercise 1



- **It is 2021 and you are a process engineer at a large oil refining company. The world is rapidly moving toward a hydrogen-based energy economy, and your company has been trying to develop an efficient and cost-effective way to extract hydrogen from crude oil. You found a low-cost process, but it produces a considerable amount of undesirable chemical by-product pollutants. However, during your work on this project, you also discovered an effective and inexpensive way to extract hydrogen directly from sea-water. You realize that revealing this process would effectively eliminate the world demand for petroleum, and would probably cause serious financial damage to your company. What do you do?**

Matrix for Exercise 1



	Quit your job; start new company	Reveal process to company for first refusal	Contact patent lawyer outside of company	Publish article without company permission
Hold paramount the safety, health and welfare of the public				
Perform services only in the area of your competence				
Issue public statements only in an objective and truthful manner				
Act for each employer or client as faithful agents or trustees				
Avoid deceptive acts				
Conduct themselves honorably...				

Exercise 2



- **You are a software engineer at a small company. As part of a subcontract to your company, you have written embedded software for a major manufacturer in a popular product line. Your supervisor asks you to install a “back door” into the software that will remain undisclosed, but will permit your company (but not the manufacturer) to monitor use of the software by the public. What do you do?**
- **Does your decision change if the the only purpose of the back door is to collect information for the maintenance and improvement of the software, without containing user-identifiable information?**



Accept responsibility [for decisions consistent] with the safety, health and welfare of the public				
Avoid real or perceived conflicts of interest; disclose when they exist				
Be honest and realistic in stating claims and estimates				
Reject bribery				
Improve understanding of technology; undertake tasks only if qualified				
Offer honest criticism of technical work; credit contributions of others				
Treat other fairly and without discrimination				
Avoid injuring others, their property, reputation or employment by malicious action				
Assist co-workers in professional development and [support ethical behavior]				