

This is a real case. Names and information have been changed to protect the innocent. The story line remains the same.

Mike Susser works full time at an industrial engineering company and attends school part time at night. He is working on a project to supply 1000 pumping stations to TopDog Corporation, a multinational corporation, including pumps, motors and controls, designed to empty liquid from a 50,000 gallon tank within 4 hours. He priced one system at the following specs:

<u>Item</u>	<u>PN</u>	<u>Price</u>
GS1 2.0HP AC DRIVE 230V 3P OUT	GS1-22P0	\$155.00
Farm Duty Electric Motor - 2HP	162489	\$249.99
3M PUMP 4x3 W/10" DBL SEAL	DEM402110PO	\$2,133.00
LU13-5001 Two-Wire Ultrasonic Level Transmitter	lu13-5001	\$660.25
Switching power supply 4.0 A maximum output current	PS24-050D	\$93.50
4 CH ANALOG INPUT 0-20MA /4-20MA 12 BIT RES	F0-04AD-1	\$79.00
		\$3,370.74

This project is a \$3.5 million job. As Mike Susser reviewed the specifications, he noticed that TopDog Corporation was a petroleum company. He “Googled” the company name and found news articles concerning explosive environments that were being investigated by local governing bodies. Emergency services were especially concerned about how to respond to potentially catastrophic disasters. Luckily, no disasters have occurred to this date. To be thorough, Mr. Susser investigated explosive proof designs. The project price would exceed \$10million.

Mr. Susser brought the matter up to his supervisor, Jack Aveeno. After reviewing the bid proposal and company specifications, he determined that it was not up to us to change the customer’s specifications. Mr. Susser should write-up the job specifications as originally planned. He should add a footnote at the end of the specification sheet in small print specifying the bid is not explosion proof. It will be up to the company to change their specifications and upgrade to explosion proof pumping stations.

As Mr. Susser reviewed the job bid once again, he did notice a note that referred to the customer’s product as explosive. He went to the salesman, Sam Rook, and pointed this out to him. Initially, Sam claimed that the note Mr. Susser found was only our company note, not the customer's, and the product was not deemed to be explosive. After additional research, Mr. Susser found customer specifications that clearly stated the product dust could be explosive. When he showed this to Mr. Rook, he was told once again to send out the approval data for the order and show the pumping station as non-explosive. Then he should wait and see if the customer changes it.

He felt it was useless to proceed any further. The bid was successful and the company received the \$3.5 million contract. Six months later, TopDog corporation makes headline news:

DISASTER AT TOPDOG—Facility bursts into flames, 3 confirmed dead, dozens injured, several missing. Cause undetermined.

This is a good example of a real-life engineering ethical problem, which could very well happen to our students when they enter the work force. Reflect on this situation and answer the following questions. Make sure you justify each position.

a. What is the dilemma?

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b. What are the alternatives?

c. What should this person do? Do you think Mr. Susser violated protocol when he went to his supervisor, Mr. Aveeno first? Should he bring the new information about the customer's specifications, as discussed with Mr. Rook, to the attention of Mr. Aveeno?

d. What would you do? Is the disaster at TopDog a coincidence? In hindsight, would it have made any difference to Mr. Susser knowing that a disaster of unknown origin afflicted this customer before?