

GREEN CAST, INC., Fall, 2022

Green Cast, Inc. produces and sells a line of ovenware (Oven-Safe Classic) that goes from oven (conventional or microwave) to the refrigerator without breaking. Its design is functional, yet attractive enough to both cook and serve food. The ovenware items are sold through gourmet shops, such as William Sonoma, and major department stores, such as Macy's and Bloomingdale's.

Due to an economic downturn, sales through gourmet shops and department stores have lagged expectations for the past two years. This has kept the product manager of the Oven-Safe Classic from meeting his required target of producing a 25% return on sales of the product. This return is measured by preparing an income statement containing the sales of this product less any expenses considered attributable to this product line. An attributable expense exists to benefit the product line. It is a cost that would be avoided if the product line were discontinued. Further, when calculating the required 25% return on sales, the product line profitability statement does not deduct any allocations for general and administrative costs. Exhibit 1 (data spreadsheet) provides a product income statement for this line for the past 5 years.

In an effort to increase sales, design engineers modified the ovenware product slightly in 2016. They made it less expensive to produce (saving about 36% of variable production costs) but indistinguishable in looks and functionality from the original product. The modified product also resulted in increased product longevity of about 10%. The product manager, excited about the modifications and cost savings, lowered the price by 11% and presented the item at a national food industry show at the end of 2016. He proudly advertised the product as having exactly the same looks, safety features, and functionality as the original product. He offered the same product warranty of six months under normal use conditions. He then booked sales of 1,500,000 pieces to existing customers for the first quarter delivery. Production commenced immediately to fill these first-quarter orders.

During routine quality testing in production, personnel discovered a serious problem with the product. The ovenware, under a small range of extremely high cooking temperatures (450-500 degrees), would explode if set on a cold trivet or placed in the refrigerator. The explosion could potentially cause the person holding the ovenware to suffer serious cuts and substantial, permanent burns. Unfortunately, the seriousness of the problem was not known until after the production of the 1,500,000 pieces was nearly completed. Based on statistical testing, it appeared that the flaw only occurs about .25 percent of the time (one quarter of a percent).

The production, quality, and product managers met to discuss this issue. They felt that they had only two options. First, they could delay shipment, recycle the current production, and produce the original ovenware using old methods. Of course, the product would have to be sold at the 11% price reduction while being produced with the old cost structure for six months. Customers would experience about a thirty-day delay in delivery and it is likely some would be so annoyed that they would cancel their orders. The product manager

estimated that about one-third of the year's orders would be lost. In addition, this would likely cause those customers to be permanently lost to competitors. At the conclusion of the six months period, the problem would be solved, and the product would achieve the 36% variable cost savings.

Second, they could ship the goods without calling attention to the problem and hope for the best. They would simply act surprised if any problem arose and pay for damages. With only a .25 percent (.0025) failure rate and **only** under a small range of temperatures, the risk of the flaw seemed quite small. Further, since the product exploded when set on a cold surface, perhaps no person would actually be hurt and the damages would be limited to broken ovenware replacement.

Under either alternative, production engineers would work on correcting the problem. Engineers felt that they could solve the problem by the end of the second quarter. If the first option were taken, it meant 6 months of old production under new reduced sales prices plus scrapping the existing flawed units. Under the second option, it meant 6 months of producing and selling flawed, new products. Then the problem would be corrected.

The managers decided that the risk of option two was worth taking and shipped the flawed products (without disclosing the potential hazards). They toned down the quality testing report results such that it appeared that the product might only crack (not explode). Within two months of shipment, things went well. Only 1,575 product claims were made, and none involved personal injury. Replacement items were provided and customers remained satisfied.

In the third month, a disaster occurred. Mrs. Rio organized a goodbye party for her son before he went away to college. She prepared her son's favorite chicken and rice dish and cooked it in her oven using the new Oven-Safe Classic that she bought from her local department store. She cooked it at 475 degrees for about two hours and when it was ready, she then placed it in the refrigerator. As the ovenware was placed in the refrigerator, it exploded, spraying glass and hot contents on Mrs. Rio. A glass fragment struck her in the eye. Mrs. Rio also suffered second and third-degree burns on her face, neck, and arms. The accident was reported in newspapers while the department store began investigating its cause.

Managers at Green Cast, Inc. acted surprised when contacted by the department store's manager. The product manager of Oven-Safe Classic answered questions regarding the product. He provided the altered quality report to the department store's manager and continued to sell the product while the engineers worked on a solution to the problem. Meanwhile, several other serious explosions occurred, and other people were seriously hurt. Finally, a quality engineer from Green Cast hired an attorney, met with a newspaper reporter, and disclosed that the original test results had been altered. The company was forced to recall all products and halt production.

Required

Write a report to the upper management of Green Cast, Inc. that explains what happened in the Oven-Safe Classic line. Explain the decision made and the basis of the decision. Offer Ethical Considerations and Strategic Considerations as well.

To prepare for this case, you may want to review managerial accounting LDC concepts 2, 5 and 8; financial accounting concept 9; and business law concepts 2 and 9.