## HILTON CHAPTER 14 P14-55 PROBLEM SOLUTION

## Problem 14-55

RNA-1 is converted into Fastkil. RNA-2 can be sold as is or converted into two new products.

1. Management’s analysis is incorrect because it *incorporates allocated portions of the joint-processing costs of VDB.*
* The weekly cost of VDB ($393,600) will be incurred whether or not RNA-2 is converted through further processing.
* Thus, any allocation of the common cost of VDB is strictly arbitrary and not relevant to the decision to market DMZ-3 and Pestrol.

 The decision not to process RNA-2 further is incorrect. This flawed decision resulted in the company failing to earn an incremental $32,000 in gross profit per week, as indicated by the following analysis.

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| --- | --- | --- | --- |
|  | b. | Revenue from further processing of RNA-2: |  |
|  |  |  DMZ-3 (400,000 × $92/100)  | $368,000 |
|  |  |  Pestrol (400,000 × $92/100)  |  368,000 |
|  |  |   Total revenue from further processing  | $736,000 |
|  |  | Less revenue from sale of RNA-2  |  512,000 |
|  |  |  Incremental revenue  | $224,000 |
|  |  |  Less incremental cost\*  |  192,000 |
|  |  |  Incremental profit  | $ 32,000 |
|  |  |  |  |
|  |  | \*The cost of VDB is not relevant and therefore is omitted from the solution. |