

### Targon Sprinklers, Inc.

Job order costing case; adapted from the December 1982 CMA Exam.

Targon Sprinklers, Inc. manufactures lawn equipment. A job order cost system is used because the products are manufactured in batches rather than on a continuous basis. Targon uses full absorption costing for accumulating overhead costs. Inventory balances as of August 31, 2008 were as follows:

Raw material & supplies	\$32,000
Work in process	1,200,000
Finished goods	2,785,000

Work in process consisted of two jobs:

Job number	Units	Description	Cost to date
3005-5	50,000	Estate sprinklers	\$700,000
3006-4	40,000	Economy sprinklers	500,000
Total			\$1,200,000

Finished goods consisted of five items:

Description	Quantity	Cost	Total cost
Estate sprinklers	5,000 units	\$22.00 each	\$110,000
Deluxe sprinklers	115,000 units	\$17.00 each	1,955,000
Brass nozzles	10,000 gross	\$14.00 per gross	140,000
Rainmaker nozzles	5,000 gross	\$16.00 per gross	80,000
Connectors	100,000 gross	\$5.00 per gross	500,000
Total			\$2,785,000

The factory budget for the current fiscal year is as follows:

Direct materials	\$3,800,000
Purchased parts	6,000,000
Direct labor (400,000 DLH)	4,000,000
Overhead:	
Supplies	190,000
Indirect labor	700,000
Supervision	250,000
Depreciation	950,000
Utilities	200,000
Insurance	10,000
Property taxes	40,000
Miscellaneous	60,000
Total factory overhead costs	\$16,200,000

In September, 2008, Targon purchased the following items, all of which were charged to raw material and supplies inventory:

Materials	\$410,000
Purchased parts	285,000
Supplies	13,000

Usage of raw materials, purchased parts, and supplies for the month of September was as follows:

Description	Purchased parts	Materials	Supplies	Total Requisitions
3005-5	\$110,000	\$100,000	0	\$210,000
3006-4	0	6,000	0	6,000
4001-3 (30,000 gross rainmaker nozzles)	0	181,000	0	181,000
4002-1 (10,000 deluxe sprinklers)	0	92,000	0	92,000
4003-5 (50,000 ring sprinklers)	163,000	0	0	163,000
Supplies	0	0	20,000	20,000
Totals	\$273,000	\$379,000	\$20,000	\$672,000

The payroll summary for September was as follows:

Description	Hours	Cost
3005-5	6,000	\$62,000
3006-4	2,500	26,000
4001-3	18,000	182,000
4002-1	500	5,000
4003-5	5,000	52,000
Indirect	8,000	60,000
Supervision		24,000
Sales and administration		120,000
Total		\$531,000

Other factory costs incurred during September were as follows:

Depreciation	\$62,500
Utilities	15,000
Insurance	1,000
Property taxes	3,500
Miscellaneous	5,000
Total	\$87,000

September production and sales data were as follows:

Job number	Quantity Produced	Description	Quantity Sold
3005-5	48,000 units	Estate sprinklers	16,000 units
3006-4	39,000 units	Economy sprinklers	20,000 units
4001-3	29,500 gross	Rainmaker nozzles	10,000 gross
4003-5	49,000 units	Ring sprinklers	22,000 units
		Deluxe sprinklers	32,000 units
		Brass nozzles	5,000 gross
		Connectors	26,000 gross

Assume that all sales are for cash, and that all purchases, payroll, and other expenses are paid as incurred. Assume that all items are sold at a markup of 125% of absorption cost.

**Required:**

1. Determine Targon Sprinkler's total production costs for September; organize your work so that you can identify the total cost of each job, broken down by material, labor, variable overhead, and fixed overhead.
2. Determine Targon's net income for the month of September.
3. Determine the value of ending inventories (individually and in total) as of September 30, 2008.
4. A total of 367,000 direct labor hours were worked through August 31, 2008. Total overhead incurred for the eleven months ending August 31, 2008 amounted to \$14,900,000. For the year ended September 30, 2008, is Targon over or under applied, and by how much? What should Targon do with the difference between applied and actual?