Chapter 12

Statement of Cash Flows

ANSWERS TO QUESTIONS

1. The income statement reports revenues earned and expenses incurred during a period of time. It is prepared on an accrual basis. The balance sheet reports the assets, liabilities, and equity of a business at a point in time. The statement of cash flows reports cash receipts and cash payments of a business, from three broad categories of business activities: operating, investing, and financing.

2. The statement of cash flows reports cash receipts and cash payments from three broad categories of business activities: operating, investing, and financing. While the income statement reports operating activities, it reports them on the accrual basis: revenues when earned, and expenses when incurred, regardless of the timing of the cash received or paid. The statement of cash flows reports the cash flows arising from operating activities. The balance sheet reports assets, liabilities, and equity at a point in time. The statement of cash flows and related schedules indirectly report changes in the balance sheet by reporting operating, investing, and financing activities during a period of time, which caused changes in the balance sheet from one period to the next. In this way, the statement of cash flows reports information to link together the financial statements from one period to the next, by explaining the changes in cash and other balance sheet accounts, while summarizing the information into operating, investing, and financing activities.

3. Cash equivalents are short-term, highly liquid investments that are purchased within three months of the maturity date. The statement of cash flows does not separately report the details of purchases and sales of cash equivalents because these transactions affect only the composition of total cash and cash equivalents. The statement of cash flows reports the change in total cash and cash equivalents from one period to the next.

4. The major categories of business activities reported on the statement of cash flows are operating, investing, and financing activities. Operating activities of a business arise from the production and sale of goods and/or services. Investing activities arise from acquiring and disposing of property, plant, and equipment and investments. Financing activities arise from transactions with investors and creditors.

5. Cash inflows from operating activities include cash sales, collections on accounts, and notes receivable arising from sales, dividends on investments, and interest on loans to others and investments. Cash outflows from operating activities include payments to suppliers and employees, and payments for operating expenses, taxes, and interest.

6. Depreciation expense is added to net income to adjust for the effects of a noncash expense that was deducted in determining net income. It does not involve an inflow of cash.

7. Cash expenditures for purchases and salaries are not reported on the statement of cash flows, indirect method, because that method does not report cash inflows and outflows for each operating activity. Rather, it reports only net income, changes in accounts payable and wages payable, and net cash flow from operating activities.

8. The $50,000 increase in inventory must be used in the statement of cash flows calculations because it increases the outflow of cash all other things equal. It is used as follows:

*Direct method*—added to cost of goods sold, accrual basis (the other adjustment would involve accounts payable) to compute cost of goods sold, cash basis.

*Indirect method*—subtracted from net income as a reconciling item to obtain cash flows from operating activities.

9. The two methods of reporting cash flows from operating activities are the direct method and the indirect method. The direct method reports the gross amounts of cash receipts and cash payments arising from the revenues and expenses reported on the income statement. The indirect method reports the net amount of cash provided or used by operating activities, by reporting the adjustments to net income for the net effects of noncash revenues and expenses, and changes in accruals and deferrals. The two approaches differ in the way they report cash flows from operating activities, but net cash provided by operating activities is the same amount.

10. Cash inflows from investing activities include cash received from sale of operational assets, sale of investments, maturity value of bond investments, and principal collections on notes receivable. Cash outflows from investing activities include cash payments to purchase property, plant, and equipment and investments, and to make loans.

11. Cash inflows from financing activities include cash received from issuing stock, the sale of treasury stock, and borrowings. Cash outflows from financing activities include cash payments for dividends, the purchase of treasury stock, and principal payments on borrowing.

12. Noncash investing and financing activities are activities that would normally be classified as investing or financing activities, except no cash was received or paid. Examples of noncash investing and financing include the purchase of assets by issuing stock or bonds, the repayment of loans using noncash assets, and the conversion of bonds into stock. Noncash investing and financing activities are not reported in the statement of cash flows, because there was no cash received or cash paid; however, the activities are disclosed in a separate schedule.

13. When equipment is sold, it is considered an investing activity, and any cash received is reported as a cash inflow from investing activities. When using the indirect method, the gain on sale of equipment must be reported as a deduction from net income, because the gain was included in net income, but did not provide any cash from operating activities. When using the indirect method, the loss on sale of equipment is added to net income because the loss was included in net income but did not require an operating cash outflow.

ANSWERS TO MULTIPLE CHOICE

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. d) | 1. d) | 1. a) | 1. c) | 1. a) |
| 1. b) | 1. d) | 1. b) | 1. d) | 1. c) |

Authors' Recommended Solution Time

(Time in minutes)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Mini-exercises* | | *Exercises* | | *Problems* | | *Alternate Problems* | | *Cases and Projects* | |
| *No.* | *Time* | *No.* | *Time* | *No.* | *Time* | *No.* | *Time* | *No.* | *Time* |
| 1 | 5 | 1 | 10 | 1 | 35 | 1 | 35 | 1 | 20 |
| 2 | 5 | 2 | 10 | 2 | 35 | 2 | 35 | 2 | 15 |
| 3 | 5 | 3 | 15 | 3 | 35 | 3 | 35 | 3 | 25 |
| 4 | 5 | 4 | 15 | 4 | 40 |  |  | 4 | 45 |
| 5 | 5 | 5 | 15 | 5 | 40 |  |  | 5 | 35 |
| 6 | 5 | 6 | 15 | 6 | 45 |  |  | 6 | 35 |
| 7 | 5 | 7 | 20 |  |  |  |  | 7 | \* |
|  |  | 8 | 20 |  |  |  |  |  |  |
|  |  | 9 | 20 |  |  |  |  |  |  |
|  |  | 10 | 10 |  |  |  |  |  |  |
|  |  | 11 | 15 |  |  |  |  |  |  |
|  |  | 12 | 10 |  |  |  |  | *Continuing Case* | |
|  |  | 13 | 20 |  |  |  |  | 1 | 40 |
|  |  | 14 | 25 |  |  |  |  |  |  |
|  |  | 15 | 20 |  |  |  |  |  |  |
|  |  | 16 | 25 |  |  |  |  |  |  |
|  |  | 17 | 25 |  |  |  |  |  |  |
|  |  | 18 | 15 |  |  |  |  |  |  |
|  |  | 19 | 15 |  |  |  |  |  |  |
|  |  | 20 | 20 |  |  |  |  |  |  |
|  |  | 21 | 35 |  |  |  |  |  |  |
|  |  | 22 | 35 |  |  |  |  |  |  |

\* Due to the nature of these cases and projects, it is very difficult to estimate the amount of time students will need to complete the assignment. As with any open-ended project, it is possible for students to devote a large amount of time to these assignments. While students often benefit from the extra effort, we find that some become frustrated by the perceived difficulty of the task. You can reduce student frustration and anxiety by making your expectations clear. For example, when our goal is to sharpen research skills, we devote class time discussing research strategies. When we want the students to focus on a real accounting issue, we offer suggestions about possible companies or industries.

MINI–EXERCISES

**M12–1.**

|  |  |  |
| --- | --- | --- |
| F | 1. | Purchase of stock. (This involves repurchase of its own stock.) |
| F | 2. | Principal payment on long-term debt. |
| I | 3. | Proceeds from sale of properties. |
| O | 4. | Inventories (decrease). |
| O | 5. | Accounts payable (decrease). |
| O | 6. | Depreciation, depletion, and amortization. |

**M12–2.**

|  |  |  |
| --- | --- | --- |
| + | 1. | Accrued expenses (increase). |
| – | 2. | Inventories (increase). |
| + | 3. | Accounts receivable (decrease). |
| – | 4. | Accounts payable (decrease). |
| + | 5. | Depreciation, depletion, and amortization. |

**M12–3.**

|  |  |  |
| --- | --- | --- |
| O | 1. | Receipts from customers. |
| F | 2. | Dividends paid. |
| F | 3. | Payment for share buy-back. |
| I | 4. | Proceeds from sale of property, plant and equipment. |
| F | 5. | Repayments of borrowings (bank debt). |
| O | 6. | Net interest paid. |

**M12–4.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Quality of income ratio | = | Cash flow from operations | = | $86,500 | = | 0.85 (85%) |
|  |  | Net income |  | $102,000 |  |  |

The quality of income ratio measures the portion of income that was generated in cash. A low ratio indicates a likely need for external financing.

**M12–5.**

|  |  |
| --- | --- |
| Investing Activities |  |
| Sale of used equipment | $ 400 |
| Purchase of short-term investments | (635) |
| Cash used in investing activities | $ (235) |

**M12–6.**

|  |  |
| --- | --- |
| Financing Activities |  |
| Additional short-term borrowing from bank | $1,200 |
| Dividends paid | (700) |
| Cash provided by financing activities | $ 500 |

**M12–7.**

|  |  |
| --- | --- |
| Yes | Purchase of building with mortgage payable |
| No | Additional short-term borrowing from bank |
| No | Dividends paid in cash |
| Yes | Purchase of equipment with short-term investments |

EXERCISES

**E12–1.**

|  |  |
| --- | --- |
| F | 1. Dividends paid |
| F | 1. Repayments of long-term debt |
| O | 1. Depreciation and amortization |
| F | 1. Proceeds from issuance of common stock to employees |
| O | 1. [Change in] Accounts payable and accrued expenses |
| NA | 1. Cash collections from customers |
| F | 1. Net repayments of notes payable to banks |
| O | 1. Net income |
| I | 1. Payments to acquire property and equipment |
| O | 1. [Change in] Inventory |

**E12–2.**

|  |  |
| --- | --- |
| I | 1. Sales of short- and long-term available-for-sale securities. |
| O | 1. Interest paid |
| I | 1. Additions to property, plant, and equipment. |
| O | 1. Income taxes paid. |
| F | 1. Issuance of EMC’s common stock |
| F | 1. Payment of long-term and short-term obligations |
| O | 1. Dividends and interest received. |
| O | 1. Cash received from customers. |
| I | 1. Purchases of short- and long-term available-for-sale securities |
| NA | 1. Net income |

**E12–3.**

1. NE Salaries expense  
 Accrued salaries payable

2. – NCFI Plant and equipment   
 Cash

3. + NCFO Cash  
 Accounts receivable

4. – NCFO Interest expense  
 Cash

5. – NCFF Retained earnings  
 Cash

6. + NCFI Cash  
 Accumulated depreciation  
 Plant and equipment

7. – NCFO Prepaid expenses (rent)  
 Cash

8. – NCFF Short-term debt  
 Cash

9. NE Inventory  
 Accounts payable

10. – NCFO Accounts payable  
 Cash

**E12–4.**

1. NE Inventory   
 Accounts payable

2. – NCFO Prepaid expenses (rent)  
 Cash

3. NE Plant and equipment   
 Note payable

4. NE Expense  
 Prepaid expense

5. – NCFO Income tax expense  
 Cash

6. – NCFI Investment securities   
 Cash

7. + NCFF Cash  
 Common stock  
 Additional paid-in capital

8. + NCFO Cash  
 Accounts receivable

9. + NCFI Cash  
 Plant and equipment (net)

10. + NCFF Cash   
 Long-term debt

**E12–5.**

Comparison of Statement of Cash Flows--direct and indirect reporting

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Cash Flows | | | | Statement of Cash Flows Method | |
| (and related changes) | | | | Direct | Indirect |
|  | 1. |  | Accounts payable increase or decrease |  | X |
|  | 2. |  | Payments to employees | X |  |
|  | 3. |  | Cash collections from customers | X |  |
|  | 4. |  | Accounts receivable increase or decrease |  | X |
|  | 5. |  | Payments to suppliers | X |  |
|  | 6. |  | Inventory increase or decrease |  | X |
|  | 7. |  | Wages payable, increase or decrease |  | X |
|  | 8. |  | Depreciation expense |  | X |
|  | 9. |  | Net income |  | X |
|  | 10. |  | Cash flows from operating activities | X | X |
|  | 11. |  | Cash flows from investing activities | X | X |
|  | 12. |  | Cash flows from financing activities | X | X |
|  | 13. |  | Net increase or decrease in cash during the period | X | X |

The direct method reports cash flows from operating activities individually for each major revenue and expense. In contrast, the indirect method reports a reconciliation of net income to cash flow from operating activities. The two methods report the investing and financing activities in exactly the same way.

**E12–6.**

|  |  |  |
| --- | --- | --- |
| **Cash flows from operating activities—indirect method** |  |  |
| Net income | $23,125 |  |
| Depreciation expense | 6,000 |  |
| Accounts receivable decrease ($10,500 – $11,000) | 500 |  |
| Inventory increase ($13,000 – $8,000) | (5,000) |  |
| Salaries payable increase ($2,250 – $800) | 1,450 |  |
| Net cash provided by operating activities | $26,075 |  |

**E12–7.**

Req. 1

|  |  |  |
| --- | --- | --- |
| **Cash flows from operating activities—indirect method** |  |  |
| Net loss | ($6,400 | ) |
| Depreciation expense | 4,500 |  |
| Amortization of copyrights | 200 |  |
| Accounts receivable decrease ($8,000 – $13,000) | 5,000 |  |
| Salaries payable increase ($12,000 – $1,000) | 11,000 |  |
| Other accrued liabilities decrease ($1,000 – $2,800) | (1,800 | ) |
| Net cash provided by operating activities | $12,500 |  |

Req. 2

The first reason for the net loss was the depreciation expense. This is a non-cash expense. Depreciation expense, along with decreased working capital requirements (current assets - current liabilities), turned the net loss into positive operating cash flow from operations. The reasons for the difference between net income and cash flow are important because they help the financial analyst determine if the trends are sustainable or whether they represent one-time events.

**E12–8.**

|  |  |  |
| --- | --- | --- |
| **Cash flows from operating activities—indirect method** |  |  |
| Net income | $ 14,000 |  |
| Depreciation expense | 8,500 |  |
| Loss on sale of equipment  Accounts receivable decrease | 2,500  10,000 |  |
| Salaries payable increase | 11,000 |  |
| Other accrued liabilities decrease | (2,000 | ) |
| Net cash provided by operating activities | $44,000 |  |

**E12–9.**

Req. 1

|  |  |  |
| --- | --- | --- |
| **Cash flows from operating activities—indirect method** |  |  |
| Net loss | ($13,402 | ) | |
| Depreciation, amortization, and impairments | 34,790 |  | |
| Decrease in receivables | 1,245 |  | |
| Increase in inventories | (5,766 | ) | |
| Decrease in accounts payable | (445 | ) | |
| Cash flows from operating activities | $16,422 |  | |

Note: The additions to equipment do not affect cash flows from operating activities.

Req. 2

The primary reason for the net loss was the depreciation, amortization, and impairments expense. These represent non-cash expenses. Large depreciation, amortization, and impairments expense, offset partially by increased working capital requirements, turned Time Warner’s net loss into positive operating cash flow. The reasons for the difference between net income and cash flow from operations are important because they help the financial analyst determine if the trends are sustainable or whether they represent one-time events.

**E12–10.**

|  |  |  |
| --- | --- | --- |
| Account |  | Change |
| Receivables |  | Increase |
| Inventories |  | Increase |
| Other current assets |  | Decrease |
| Payables |  | Increase |

**E12–11.**

|  |  |  |
| --- | --- | --- |
| Account |  | Change |
| Accounts receivable |  | Decrease |
| Inventories |  | Decrease |
| Other current assets |  | Increase |
| Accounts payable |  | Increase |
| Deferred revenue |  | Increase |
| Other current liabilities |  | Increase |

**E12–12.**

Req. 1

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Cash flows from investing activities** |  | **Year 1** |  | **Year 2** |  |  |
| Proceeds from sale of equipment |  | $17,864 |  | $12,163 |  |  |

The amount reported in the cash flow from investing activities section of the statement of cash flows is the total cash proceeds from the sale of the equipment, regardless of the amount of any gain or loss.

Req. 2

Any gain on the sale of the equipment is subtracted from net income to avoid double counting of the gain. Any loss on the sale of the equipment is added to avoid double counting of the loss.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Cash flows from operating activities** |  | **Year 1** |  | **Year 2** |  |  |
| Loss (Gain) on sale of equipment |  | $16,751 |  | $(2,436) |  |  |

Computations:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Year 1** | | **Year 2** | |
| Plant and equipment (at cost) | $75,000 | $13,500 | |
| Accumulated depreciation | 40,385 | 3,773 | |
| Net book value | 34,615 | 9,727 | |
| Cash Proceeds – Net book value = Gain (Loss) on sale | (16,751) | 2,436 | |

**E12–13.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Req. 1  Equipment | | | | | |  | Accumulated Depreciation | | | | | |
| Beg. Bal. | 82,500 |  |  |  |  |  |  |  |  |  | 43,000 | Beg. Bal. |
|  |  |  |  | 10,500\* | Sold |  | Sold | 3,500\* |  |  | 1,500 | Dep. Exp. |
| End. Bal. | 72,000 |  |  |  |  |  |  |  |  |  | 41,000 | End. Bal. |

\*plug figures

Cost of equipment sold = $10,500

Accumulated depreciation on sold equipment = $3,500

|  |  |  |
| --- | --- | --- |
| Book value of sold equipment | $7,000 |  |
| Less: Loss on sale (given) | (2,300 | ) |
| Cash received from sale | $4,700 |  |

Req. 2

Any gain on the sale of the equipment is subtracted from net income to avoid double counting of the gain. Any loss on the sale of the equipment is added to avoid double counting of the loss. The loss of $2,300 would be added.

Req. 3

The amount of cash received is added in the computation of Net Cash Flow from Investing Activities, regardless of whether the sale results in a gain or loss. The cash inflow of $4,700 would be added.

**E12–14.**

Req. 1

|  |  |  |
| --- | --- | --- |
| **Cash flows from operating activities—indirect method** |  |  |
| Net income | $6,462 |  |
| Depreciation and amortization | 2,737 |  |
| Increase in accounts receivable | (666 | ) |
| Increase in inventory | (331 | ) |
| Increase in prepaid expense | (27 | ) |
| Increase in accounts payable | 520 |  |
| Decrease in taxes payable | (340 | ) |
| Increase in other current liabilities | 589 |  |
| Cash flows from operating activities | $8,944 |  |

Note: The cash dividends paid and treasury stock purchased are not related to operating activities and do not affect cash flows from operating activities.

Req. 2

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Quality of income ratio | = | Cash flow from operations | = | $8,944 | = | 1.38 |
|  |  | Net income |  | $6,462 |  |  |

Req. 3

The reason the quality of income ratio was greater than one was primarily because of large non-cash depreciation charges.

**E12–15.**

The investing and financing sections of the statement of cash flows for Oering’s Furniture:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | |  | | |
| **Cash flows from investing activities:** |  | |  | | |
| Purchase of property, plant & equipment | | $(1,071) | | |  | | |
| Sale of marketable securities | | 219 | | |  | | |
| Proceeds from sale of property, plant & equipment | | 6,894 | | |  | | |
| Net cash flows from investing activities | |  | | | $6,042 | | |
|  |  | |  | | |
| **Cash flows from financing activities:** |  | |  | | |
| Borrowings under line of credit | 1,117 | | |  | | |
| Proceeds from issuance of stock | 11 | | |  | | |
| Payments on long-term debt | (46) | | |  | | |
| Payment of dividends | (277) | | |  | | |
| Purchase of treasury stock | (2,583) | | |  | | |
| Net cash flows from financing activities |  | | | (1,778) | | |

**E12–16.**

|  |  |  |  |
| --- | --- | --- | --- |
| SHALLOW WATERS COMPANY Statement of Cash Flows For the Year Ended December 31, 2015 | | | |
| **Cash flows from operating activities:** |  |  |  | |  |
| Net income | $ 700 |  |  | |  |
| Adjustments to reconcile net income to net cash  provided by operating activities: |  |  |  | |  |
| Increase in accounts receivable | (500 | ) |  | |  |
| Decrease in prepaid expenses | 150 |  |  | |  |
| Decrease in wages payable | (450 | ) |  | |  |
| Net cash provided by (used for) operating activities | (100 | ) |  | |  |
| **Cash flows from investing activities:** |  |  |  | |  |
| Cash paid for equipment | (700 | ) |  | |  |
| Net cash provided by (used for) investing activities | (700 | ) |  | |  |
| **Cash flows from financing activities:** |  |  |  | |  |
| Cash proceeds from issuing stock | 200 |  |  | |  |
| Net cash provided by financing activities | 200 |  |  | |  |
| Net increase (decrease) in cash during the year | (600 | ) |  | |  |
| Cash balance, January 1, 2015 | 4,500 |  |  | |  |
| Cash balance, December 31, 2015 | $3,900 |  |  | |  |

**E12–17.**

Req. 1

The investing and financing sections of the statement of cash flows for Gibraltar Industries:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Cash flows from investing activities:** |  | | |  | | |
| Acquisitions (investments in other companies) | (109,248) | |  | | |
| Proceeds from sale of other equity investments | 69,368 | |  | | |
| Purchases of property, plant and equipment | (11,552) | |  | | |
| Net proceeds from sale of property and equipment | 1,226 | |  | | |
| Net cash provided by (used in) investing activities |  | (50,206) | | |
|  |  | | |  | | |
| **Cash flows from financing activities:** |  | | |  | | |
| Long-term debt reduction | (76,658) | | |  | | |
| Proceeds from long-term debt | 73,849 | | |  | | |
| Net proceeds from issuance of common stock | 34 | | |  | | |
| Net cash provided by (used in) financing activities |  | | | (2,775) | | |

Req. 2

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Capital acquisitions ratio | = | Cash flow from operations | = | $46,695 | = | 4.04 |
|  |  | Cash paid for plant & equipment |  | $11,552 |  |  |

The capital acquisitions ratio measures the company's ability to finance plant and equipment purchases from operations. Since this amount was more than 1 (4.04), the company has generated more than enough to finance plant and equipment purchases from operations.

Req. 3

Gibraltar’s management is using the cash proceeds from the sale of other equity investments, along with the excess cash generated by operations (see Req. 2) mainly to acquire (make investments in) other companies. It appears that the new long-term debt issuances are being used to pay off existing long-term debt.

**E12–18.**

Req. 1

Both of these transactions are considered noncash investing and financing activities, and are not reported on the statement of cash flows. The transactions must be disclosed in a separate schedule or in the footnotes. The information disclosed in the separate schedule would state:

a. Equipment valued at $36,000 was acquired by giving a $15,000, 12%, two-year note, and common stock with a market value of $21,000.

b. A machine valued at $12,700 was acquired by exchanging land with a book value of $12,700.

Req. 2

The capital acquisitions ratio measures the company's ability to finance plant and equipment purchases from operations. Since neither of these transactions enters the numerator or denominator of the ratio, they would have no effect. Many analysts believe that these transactions represent important capital acquisitions, and thus should be included in the denominator of the ratio to indicate what portion of all (not just cash) acquisitions are being financed from operations.

**E12–19.**

|  |  |  |
| --- | --- | --- |
| **Cash flows from operating activities—direct method** |  |  |
| Cash collected from customers1 | $93,500 |  |
| Cash payments to suppliers of inventory2 | (56,875 | ) |
| Cash payments to employees 3 | (10,550 | ) |
| Net cash provided by operating activities | $26,075 |  |

1. Cash collected from customers = Sales revenue + Decrease in Accounts receivable

$93,000 + $500 = $93,500

2. Cash payments to suppliers of inventory = Cost of goods sold + Increase in Inventory

$51,875 + $5,000 = $56,875

3. Cash payments to employees = Salaries expense – Increase in Salaries payable

$12,000 – $1,450= $10,550

**E12–20.**

Req. 1

|  |  |  |
| --- | --- | --- |
| **Cash flows from operating activities—direct method** |  |  |
| Cash collected from customers1 | $59,000 |  |
| Cash payments to employees2 | (35,000 | ) |
| Cash paid for other expenses3 | (11,500 | ) |
| Net cash provided by operating activities | $12,500 |  |

1. Cash collected from customers = Sales revenue + Decrease in Accounts receivable

$54,000 + $5,000 = $59,000

2. Cash payments to employees = Salaries expense – Increase in Salaries payable

$46,000 – $11,000 = $35,000

3. Cash paid for other expenses = Other expenses + Decrease in Other accrued liabilities  
 $9,700 + $1,800 = $11,500

Req. 2

The first reason for the net loss was the depreciation expense. This is a non-cash expense. Depreciation expense, along with decreased working capital requirements (current assets - current liabilities), turned the net loss into positive operating cash flow. The reasons for the difference between net income and cash flow are important because they help the financial analyst determine if the trends are sustainable or whether they represent one-time events.

**E12–21.**

Req. 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Cash flows from operating activities—direct method** | | |  |  | |
| Cash collected from customers1 | $151,600 | | |
| Cash payments to employees | (55,400) | | |
| Cash payments to suppliers2 | (53,520) | | |
| Cash payments for other expenses3 | (11,702) | | |
| Cash payments for income tax4 | (220) | | |
| Net cash provided by operating activities | $30,758 | | |

1. Cash collected from customers = Revenues + Decrease in Accounts receivable

$150,800 + $800 = $151,600

1. Cash payments to suppliers: Cost of sales – Decrease in Inventories – Increase in Accounts payable

$55,500 – $230 – $1,750 = $53,520

1. Cash payments for other expenses = Other expense + Increase in Prepaid expenses + Decrease in Accrued liabilities

$9,600 + $1,500 + $602 = $11,702

1. Cash payments for income tax = Income tax expense – Increase in income taxes payable

$1,500 – $1,280 = $220

Req. 2

The primary reason for the net loss was the depreciation and amortization expense. These represent non-cash expenses. Large depreciation and amortization expense, along with decreased working capital requirements, turned Trumansburg’s net loss into positive operating cash flow. The reasons for the difference between net income and cash flow from operations are important because they help the financial analyst to determine if the trends are sustainable or whether they represent one-time events.

**E12–22**

Req. 1

****

****

**E12–22 (continued)**

Req. 2

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | |  | | |  |  |  |
| Golf Universe Store  Statement of Cash Flows  For the Year Ended December 31, 2013 | | | |  | | |  |  |  |
|  |  | | |  | | |  |  |  |
| **Cash flows from operating activities:** |  |  |  |  |  |  |  |  |  |
| Net income |  | $ 20,200 |  |  |  |  |  |  |  |
| Depreciation expense |  | 3,000 |  |  |  |  |  |  |  |
| Changes in current assets and current liabilities |  |  |  |  |  |  |  |  |  |
| Inventory |  | (7,000 | ) |  |  |  |  |  |  |
| Accounts Payable |  | (3,000 | ) |  |  |  |  |  |  |
| Wages Payable |  | (1,000 | ) |  |  |  |  |  |  |
| Income Taxes Payable |  | 1,500 |  |  |  |  |  |  |  |
| Cash flows provided by operating activities |  | 13,700 |  |  |  |  |  |  |  |
| **Cash flows from investing activities:** |  |  |  |  |  |  |  |  |  |
| Purchase of investment |  | (15,000 | ) |  |  |  |  |  |  |
| Proceeds from sale of equipment |  | 6,000 |  |  |  |  |  |  |  |
| Cash flows provided by (used in) investing activities |  | (9,000 | ) |  |  |  |  |  |  |
| **Cash flows from financing activities:** |  |  |  |  |  |  |  |  |  |
| Sale of capital stock |  | 6,000 |  |  |  |  |  |  |  |
| Dividends paid |  | (12,000 | ) |  |  |  |  |  |  |
| Cash flows provided by (used in) financing activities |  | (6,000 | ) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **Net increase (decrease) in cash** |  | (1,300 | ) |  |  |  |  |  |  |
| Cash, beginning of year |  | 20,500 |  |  |  |  |  |  |  |
| Cash, end of year |  | $ 19,200 |  |  |  |  |  |  |  |

**PROBLEMS**

**P12–1.**

Req.1

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Related Cash | **Balance sheet at December 31** | | | | |  | |  | |  |  |
| Flow Section |  | | **2015** | | **2014** | | **Change** | |  |  | |
| Δ in Cash | Cash | | $73,250 | | $63,500 | | +9,750 | | 10 | Net increase in cash | |
| O | Accounts receivable | | 15,250 | | 21,350 | | -6,100 | | 3 | Add to net income the decrease in A/R | |
| O | Merchandise inventory | | 23,450 | | 18,000 | | +5,450 | | 4 | Subtract from net income the increase in Inventory | |
| I | Property and equipment | | 209,250 | | 160,350 | | +48,900 | | 7 | Payment in cash for equipment | |
| O | Less: Accumulated depreciation | | (57,450) | | (45,750) | | -11,700 | | 2 | Add to NI because depreciation expense does not affect cash | |
|  |  | | $263,750 | | $217,450 | |  | |  |  | |
| O | Accounts payable | | $16,500 | | $19,000 | | -2,500 | | 5 | Subtract from net income the decrease in Accounts Payable | |
| O | Wages payable | | 2,000 | | 2,700 | | -700 | | 6 | Subtract from net income the decrease in Wages payable | |
| F | Note payable, long-term | | 56,300 | | 71,000 | | -14,700 | | 8 | Cash used for repayment of note principal | |
| F | Contributed capital | | 103,950 | | 65,900 | | +38,050 | | 9 | Issuance of stock for cash | |
| O,F | Retained earnings | | 85,000 | | 58,850 | | +26,150 | | 1 | Increased for net income amount of $26,800  Decreased for dividends declared & paid $650 | |
|  |  | | $263,750 | | $217,450 | |  | | |  |  |
|  |  |  | | | |  | |  | |  |  |
|  | **Income statement for 2015** | | | | |  | |  | |  |  |
|  | Sales | | | $205,000 | |  | |  | |  |  |
|  | Cost of goods sold | | | 123,500 | |  | |  | |  |  |
|  | Depreciation expense | | | 11,700 | |  | |  | |  |  |
|  | Other expenses | | | 43,000 | |  | |  | |  |  |
|  | Net Income | | | $26,800 | |  | | | |  |  |

**P12-1 (continued)**

|  |  |  |  |
| --- | --- | --- | --- |
| Sharp Screen Films, Inc. | | | |
| Statement of Cash Flows | | | |
| For the Year Ended December 31, 2015 | | | |
|  |  |  |  |
| **Cash flows from operating activities:** |  |  |  |
| Net income |  |  | $26,800  1 |
| Adjustments to reconcile net income to net cash provided by operating activities: |  |  |  |
| Depreciation expense | $11,700 | 2 |  |
| Decrease in accounts receivable | 6,100 | 3 |  |
| Increase in merchandise inventory | (5,450) | 4 |  |
| Decrease in accounts payable | (2,500) | 5 |  |
| Decrease in wages payable | (700) | 6 | 9,150 |
| Net cash provided by operating activities |  |  | 35,950 |
| **Cash flows from investing activities:** |  |  |  |
| Cash payments to purchase fixed assets |  |  | (48,900)  7 |
| **Cash flows from financing activities:** |  |  |  |
| Cash payments on long-term note | (14,700) | 8 |  |
| Cash payments for dividends | (650) | 1 |  |
| Cash receipts from issuing stock | 38,050 | 9 |  |
| Net cash provided by financing activities |  |  | 22,700 |
| Net increase in cash during the year |  |  | 9,750 10 |
| Cash balance, January 1, 2015 |  |  | 63,500 |
| Cash balance, December 31, 2015 |  |  | $73,250 |

Req. 2

An overall increase in cash of $9,750 came from inflows of $35,950 from operating activities and a stock issuance of $38,050. A large percentage of the cash inflows were invested in equipment ($48,900), with $14,700 used to pay down long-term financing and $650 for dividends.

**P12–2.**

Req. 1

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Related Cash | **Balance sheet at December 31** | | | |  | | |  | |  | |  | | |
| Flow Section |  | | **2016** | | **2015** | | | **Change** | | | | |  | | | |
| Δ in Cash | Cash | $37,000 | | $29,000 | | | +8,000 | | | 10 | | Net increase in cash | | | |
| O | Accounts receivable | 32,000 | | 28,000 | | | +4,000 | | | 3 | | Subtract from net income the increase in A/R | | | |
| O | Merchandise inventory | 41,000 | | 38,000 | | | +3,000 | | | 4 | | Subtract from net income the increase in Inventory | | | |
| I | Property and equipment | 132,000 | | 111,000 | | | +21,000 | | | 7 | | Payment in cash for equipment | | | |
| O | Less: Accumulated depreciation | (41,000) | | (36,000) | | | -5,000 | | | 2 | | Add back to NI because depreciation expense does not affect cash | | | |
|  |  | $201,000 | | $170,000 | | |  | | |  | |  | | | |
| O | Accounts payable | $36,000 | | $27,000 | | | +9,000 | | | 5 | | Add to net income the increase in Accounts Payable | | | |
| O | Accrued wage expense | 1,200 | | 1,400 | | | -200 | | | 6 | | Subtract from net income the decrease in accrued wage expense | | | |
| F | Note payable, long-term | 38,000 | | 44,000 | | | -6,000 | | | 8 | | Cash used for repayment of note principal | | | |
| F | Contributed capital | 88,600 | | 72,600 | | | +16,000 | | | 9 | | Issuance of stock for cash | | | |
| O,F | Retained earnings | 37,200 | | 25,000 | | | +12,200 | | | 1 | | Increased for net income amount | | | |
|  |  | $201,000 | | $170,000 | | |  | | |  | |  | | | |
|  |  | |  | |  | | |  | |  | |  | | |
|  | **Income statement for 2016** | | | |  | | |  | |  | |  | | |
|  | Sales | | $120,000 | | |  | | |  | |  | | |  | | | |
|  | Cost of goods sold | | 70,000 | | |  | | |  | |  | | |  | | | |
|  | Other expenses | | 37,800 | | |  | | |  | |  | | |  | | | |
|  | Net Income | | $12,200 | | |  | | | | |  | | |  | | | |

**P12–2. (continued)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| BG Wholesalers | | | | |
| Statement of Cash Flows | | | | |
| For the Year Ended December 31, 2016 | | | | |
|  |  |  |  |  |
| **Cash flows from operating activities:** |  |  |  |  |
| Net income |  |  | $12,200 | 1 |
| Adjustments to reconcile net income to net cash provided by operating activities: |  |  |  |  |
| Depreciation expense | $ 5,000 | 2 |  |  |
| Increase in accounts receivable | (4,000) | 3 |  |  |
| Increase in merchandise inventory | (3,000) | 4 |  |  |
| Increase in accounts payable | 9,000 | 5 |  |  |
| Decrease in accrued expenses | (200) | 6 | 6,800 |  |
| Net cash provided by operating activities |  |  | 19,000 |  |
| **Cash flows from investing activities:** |  |  |  |  |
| Cash payments to purchase fixed assets |  |  | (21,000) | 7 |
| **Cash flows from financing activities:** |  |  |  |  |
| Cash payments on long-term note | (6,000) | 8 |  |  |
| Cash receipts from issuing stock | 16,000 | 9 |  |  |
| Net cash provided by financing activities |  |  | 10,000 |  |
| Net increase in cash during the year |  |  | 8,000 | 10 |
| Cash balance, January 1, 2016 |  |  | 29,000 |  |
| Cash balance, December 31, 2016 |  |  | $37,000 |  |

Req. 2

There was an increase in cash for BG Wholesalers this year of $8,000. Operating activities provided a positive cash flow of $19,000. This inflow of cash from operating activities, combined with the stock issuance for $16,000 cash, allowed the company to invest $21,000 in fixed assets and pay down a long-term note by $6,000.

**P12–3.**

Req.1

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Related Cash | **Balance sheet at December 31** | | | | |  | |  | |  |  |
| Flow Section |  | | **2015** | | **2014** | | **Change** | |  |  | |
| Δ in Cash | Cash | | $73,250 | | $63,500 | | +9,750 | | 10 | Net increase in cash | |
| O | Accounts receivable | | 15,250 | | 21,350 | | -6,100 | | 3 | Add to net income the decrease in A/R | |
| O | Merchandise inventory | | 23,450 | | 18,000 | | +5,450 | | 4 | Subtract from net income the increase in Inventory | |
| I | Property and equipment | | 209,250 | | 160,350 | | +48,900 | | 7 | Payment in cash for equipment | |
| O | Less: Accumulated depreciation | | (57,450) | | (45,750) | | -11,700 | | 2 | Add to NI because depreciation expense does not affect cash | |
|  |  | | $263,750 | | $217,450 | |  | |  |  | |
| O | Accounts payable | | $16,500 | | $19,000 | | -2,500 | | 5 | Subtract from net income the decrease in Accounts Payable | |
| O | Wages payable | | 2,000 | | 2,700 | | -700 | | 6 | Subtract from net income the decrease in Wages payable | |
| F | Note payable, long-term | | 56,300 | | 71,000 | | -14,700 | | 8 | Cash used for repayment of note principal | |
| F | Contributed capital | | 103,950 | | 65,900 | | +38,050 | | 9 | Issuance of stock for cash | |
| O,F | Retained earnings | | 85,000 | | 58,850 | | +26,150 | | 1 | Increased for net income amount of $26,800  Decreased for dividends declared & paid $650 | |
|  |  | | $263,750 | | $217,450 | |  | | |  |  |
|  |  |  | | | |  | |  | |  |  |
|  | **Income statement for 2015** | | | | |  | |  | |  |  |
|  | Sales | | | $205,000 | |  | |  | |  |  |
|  | Cost of goods sold | | | 123,500 | |  | |  | |  |  |
|  | Depreciation expense | | | 11,700 | |  | |  | |  |  |
|  | Other expenses | | | 43,000 | |  | |  | |  |  |
|  | Net Income | | | $26,800 | |  | | | |  |  |

**P12-3. (continued)**

|  |  |  |  |
| --- | --- | --- | --- |
| Sharp Screen Films Inc. | | | |
| Statement of Cash Flows | | | |
| For the Year Ended December 31, 2015 | | | |
|  |  |  |  |
| **Cash flows from operating activities:** |  |  |  |
| Collections from customers ($205,000 + $6,100) | $211,100 | 3 |  |
| Payments to suppliers ($123,500 + $5,450 + $2,500) | (131,450) | 4, 5 |  |
| Payments for wages ($43,000 + $700) | (43,700) | 6 |  |
| Net cash provided by operating activities |  |  | 35,950 |
| **Cash flows from investing activities:** |  |  |  |
| Cash payments to purchase fixed assets |  |  | (48,900)  7 |
| **Cash flows from financing activities:** |  |  |  |
| Cash payments on long-term note | (14,700) | 8 |  |
| Cash payments for dividends | (650) | 1 |  |
| Cash receipts from issuing stock | 38,050 | 9 |  |
| Net cash provided by financing activities |  |  | 22,700 |
| Net increase in cash during the year |  |  | 9,750 10 |
| Cash balance, January 1, 2015 |  |  | 63,500 |
| Cash balance, December 31, 2015 |  |  | $73,250 |

Req. 2

An overall increase in cash of $9,750 came from inflows of $35,950 from operating activities and a stock issuance of $38,050. A large percentage of the cash inflows were invested in equipment ($48,900), with $14,700 used to pay down long-term financing and $650 for dividends.

**P12–4.**

Req. 1

|  |  |  |
| --- | --- | --- |
| OMEGA COMPANY Cash Flows from Operating Activities Direct Method | | |
| **Cash flows from operating activities:** |  |  |
| Cash receipts from customers | $22,780 |  |
| Cash payments to suppliers | (10,512 | ) |
| Cash payments for salaries | (4,055 | ) |
| Cash payments for rent | (3,205 | ) |
| Cash payments for insurance | (1,113 | ) |
| Cash payments for utilities | (850 | ) |
| Cash payments for bond interest | (450 | ) |
| Net cash provided by operating activities | $2,595 |  |

Req. 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| OMEGA COMPANY Cash Flows from Operating Activities Indirect Method | | | | |
| **Cash flows from operating activities:** |  |  |  |  |
| Net loss |  |  | $ (220 | ) |
| Adjustments to reconcile net loss to net cash |  |  |  |  |
| provided by operating activities: |  |  |  |  |
| Depreciation expense | $2,000 |  |  |  |
| Loss on sale of investments | 650 |  |  |  |
| Decrease in accounts receivable | 180 |  |  |  |
| Increase in merchandise inventory | (85 | ) |  |  |
| Increase in accounts payable | 73 |  |  |  |
| Increase in salaries payable | 15 |  |  |  |
| Decrease in rent payable | (6 | ) |  |  |
| Decrease in prepaid rent | 1 |  |  |  |
| Increase in prepaid insurance | (13 | ) |  |  |
| Total adjustments |  |  | 2,815 |  |
| Net cash provided by operating activities |  |  | $2,595 |  |

**P12–5.**

Req. 1

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Related Cash | **Balance sheet at December 31** | |  | |  | |  | | |  | | |
| Flow Section |  | **2014** | **2013** | | **Change** | | | | |  | | |
| Δ in Cash | Cash | $ 34,000 | $ 29,000 | | +5,000 | | | 10 | | | Net increase in cash | | |
| O | Accounts receivable | 35,000 | 28,000 | | +7,000 | | | 3 | | | Subtract from net income the increase in A/R | | |
| O | Merchandise inventory | 41,000 | 38,000 | | +3,000 | | | 4 | | | Subtract from net income the increase in Inventory | | |
| I | Property and equipment | 121,000 | 100,000 | | +21,000 | | | 7 | | | Payment in cash for equipment $31,000  Original cost of equipment sold ($10,000) | | |
| O | Less: Accumulated depreciation | (30,000) | (25,000) | | -5,000 | | | 2 | | | Accumulated depreciation on equipment sold $7,000  Add back $12,000 to NI because depreciation expense does not affect cash | | |
|  |  | $201,000 | $170,000 | |  | | |  | | |  | | |
| O | Accounts payable | $ 36,000 | $ 27,000 | | +9,000 | | | 5 | | | Add to net income the increase in Accounts payable | | |
| O | Wages payable | 1,200 | 1,400 | | -200 | | | 6 | | | Subtract from net income the decrease in Wages  payable | | |
| F | Note payable, long-term | 38,000 | 44,000 | | -6,000 | | | 8 | | | Cash used for repayment of note principal | | |
| F | Contributed capital | 88,600 | 72,600 | | +16,000 | | | 9 | | | Issuance of stock for cash | | |
| O, F | Retained earnings | 37,200 | 25,000 | | +12,200 | | | 1 | | | Increased for net income amount | | |
|  |  | $201,000 | $170,000 | |  | | |  | | |  | | |
|  |  |  |  | |  | | |  | | |  | | |
|  | **Income statement for 2014** | |  | |  | | |  | | |  | | |
|  | Sales | $120,000 |  | |  | | |  | | |  | | |
|  | Gain on sale of equipment | 1,00010 | |  | |  | | |  | | |  | | |
|  | Cost of goods sold | 70,000 |  | |  | | |  | | |  | | |
|  | Other expenses | 38,800 |  | |  | | |  | | |  | | |
|  | Net Income | $ 12,200 |  | | | |  | | |  | | |

**P12–5. (continued)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| XS Supply Company | | | | | | | | | |
| Statement of Cash Flows | | | | | | | | | |
| For the Year Ended December 31, 2014 | | | | | | | | | |
|  |  |  | |  | |  | |
| **Cash flows from operating activities:** |  | |  | |  | |  | |
| Net income |  | |  | | $12,200 | | 1 | |
| Adjustments to reconcile net income to net cash provided by operating activities: |  | |  | |  | |  | |
| Depreciation expense | $ 12,000 | | 2 | |  | |  | |
| Gain on sale of equipment | (1,000) | | 10 | |  | |  | |
| Increase in accounts receivable | (7,000) | | 3 | |  | |  | |
| Increase in merchandise inventory | (3,000) | | 4 | |  | |  | |
| Increase in accounts payable | 9,000 | | 5 | |  | |  | |
| Decrease in wages payable | (200) | | 6 | | 9,800 | |  | |
| Net cash provided by operating activities |  | |  | | 22,000 | |  | |
| **Cash flows from investing activities:** |  | |  | |  | |  | |
| Cash payments to purchase equipment | (31,000) | | 7 | |  | |  | |
| Cash received from sale of equipment | 4,000 | |  | |  | |  | |
| Net cash used by investing activities |  | |  | | (27,000) | |  | |
| **Cash flows from financing activities:** |  | |  | |  | |  | |
| Cash payments on long-term note | (6,000) | | 8 | |  | |  | |
| Cash receipts from issuing stock | 16,000 | | 9 | |  | |  | |
| Net cash provided by financing activities |  | |  | | 10,000 | |  | |
| Net increase in cash during the year |  | |  | | 5,000 | | 10 | |
| Cash balance, January 1, 2014 |  | |  | | 29,000 | |  | |
| Cash balance, December 31, 2014 |  | |  | | $34,000 | |  | |

Req. 2

There was an increase in cash for XS Supply Company this year of $5,000. Operating activities provided a positive cash flow of $22,000. This inflow of cash from operating activities, combined with the $4,000 proceeds from sale of equipment and the stock issuance for $16,000 cash, allowed the company to invest $31,000 in new equipment and pay down a long-term note by $6,000.

**P12–6.**

Req.1

****



**P12–6. (continued)**

Req. 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| HANKS COMPANY Statement of Cash Flows For the Year Ended December 31, 2016 | | | | |
|  |  |  |  |  |
| **Cash flows from operating activities:** |  |  |  |  |
| Net income |  |  | $7,000 |  |
| Adjustments to reconcile net income to net cash  provided by operating activities: |  |  |  |  |
| Depreciation expense | $ 4,000 |  |  |  |
| Decrease in accounts receivable | 2,000 |  |  |  |
| Increase in merchandise inventory | (3,000) |  |  |  |
| Increase in accounts payable | 6,000 |  |  |  |
| Increase in wages payable | 500 |  |  |  |
| Total adjustments |  |  | 9,500 |  |
| Net cash provided by operating activities |  |  | 16,500 |  |
| **Cash flows from investing activities:** |  |  |  |  |
| Cash payments to purchase fixed assets |  |  | (12,000 | ) |
| **Cash flows from financing activities:** |  |  |  |  |
| Cash payments on long-term note | (6,000 | ) |  |  |
| Cash receipts from issuing stock | 18,500 |  |  |  |
| Cash payments for dividends | (2,000 | ) |  |  |
| Net cash provided by financing activities |  |  | 10,500 |  |
| Net increase in cash during the year |  |  | 15,000 |  |
| Cash balance, January 1, 2016 |  |  | 18,000 |  |
| Cash balance, December 31, 2016 |  |  | $33,000 |  |

Req. 3

There were no noncash investing and financing activities during 2016.

**ALTERNATE PROBLEMS**

**AP12–1.**

Req. 1

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Related Cash | **Balance sheet at December 31** | |  |  |  |  |
| Flow Section |  | **2015** | **2014** | **Change** | |  |
| Δ in Cash | Cash | $34,000 | $29,000 | +5,000 | 10 | Net increase in cash |
| O | Accounts receivable | 45,000 | 28,000 | +17,000 | 3 | Subtract from net income the increase in A/R |
| O | Merchandise inventory | 32,000 | 38,000 | –6,000 | 4 | Add to net income the decrease in Inventory |
| I | Property and equipment | 121,000 | 100,000 | +21,000 | 7 | Payment in cash for equipment |
| O | Less: Accumulated depreciation | (30,000) | (25,000) | –5,000 | 2 | Add back to NI because depreciation expense does not affect cash |
|  |  | $202,000 | $170,000 |  |  |  |
| O | Accounts payable | $36,000 | $27,000 | +9,000 | 5 | Add to net income the increase in Accounts payable |
| O | Wages payable | 2,200 | 1,400 | +800 | 6 | Add to net income the increase in Wages payable |
| F | Note payable, long-term | 40,000 | 46,000 | –6,000 | 8 | Cash used for repayment of note principal |
| F | Contributed capital | 86,600 | 70,600 | +16,000 | 9 | Issuance of stock for cash |
| O,F | Retained earnings | 37,200 | 25,000 | +12,200 | 1 | Increased for net income of $27,200 and decreased for dividends declared and paid of $15,000 |
|  |  | $202,000 | $170,000 |  |  |  |
|  |  |  |  |  |  |  |
|  | **Income statement for 2015** | |  |  |  |  |
|  | Sales | $135,000 |  |  |  |  |
|  | Cost of goods sold | 70,000 |  |  |  |  |
|  | Other expenses | 37,800 |  |  |  |  |
|  | Net Income | $ 27,200 |  | |  |  |

**AP12–1.(continued)**

|  |  |  |  |
| --- | --- | --- | --- |
| Ingersol Construction Supply Company | | | |
| Statement of Cash Flows | | | |
| For the Year Ended December 31, 2015 | | | |
|  |  |  |  |
| **Cash flows from operating activities:** |  |  |  |
| Net income |  |  | $27,200  1 |
| Adjustments to reconcile net income to net cash provided by operating activities: |  |  |  |
| Depreciation expense | $ 5,000 | 2 |  |
| Increase in accounts receivable | (17,000) | 3 |  |
| Decrease in merchandise inventory | 6,000 | 4 |  |
| Increase in accounts payable | 9,000 | 5 |  |
| Increase in wages payable | 800 | 6 | 3,800 |
| Net cash provided by operating activities |  |  | 31,000 |
| **Cash flows from investing activities:** |  |  |  |
| Cash payments to purchase fixed assets |  |  | (21,000) 7 |
| **Cash flows from financing activities:** |  |  |  |
| Cash payments for dividends | (15,000) | 1 |  |
| Cash payments on long-term note | (6,000) | 8 |  |
| Cash receipts from issuing stock | 16,000 | 9 |  |
| Net cash provided by financing activities |  |  | (5,000) |
| Net increase in cash during the year |  |  | 5,00010 |
| Cash balance, January 1, 2015 |  |  | 29,000 |
| Cash balance, December 31, 2015 |  |  | $34,000 |

Req. 2

There was an increase in cash for Ingersol Construction Supply Company this year of $5,000. Operating activities provided a positive cash flow of $31,000. This inflow of cash from operating activities, combined with the stock issuance for $16,000 cash, allowed the company to invest $21,000 in fixed assets, pay down a long-term note by $6,000, and pay dividends of $15,000.

**AP12–2.**

Req.1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Related Cash | **Balance sheet at December 31** | | |  |  |  |  |
| Flow Section |  | **2016** | | **2015** | **Change** |  |  |
| Δ in Cash | Cash | $64,000 | | $65,000 | -1,000 | 10 | Net decrease in cash |
| O | Accounts receivable | 15,000 | | 20,000 | -5,000 | 3 | Add to net income the decrease in A/R |
| O | Inventory | 22,000 | | 20,000 | +2,000 | 4 | Subtract from net income the increase in Inventory |
| I | Property and equipment | 210,000 | | 150,000 | +60,000 | 7 | Payment in cash for equipment |
| O | Less: Accumulated depreciation | (60,000) | | (45,000) | -15,000 | 2 | Add to NI because depreciation expense does not affect cash |
|  |  | $251,000 | | $210,000 |  |  |  |
| O | Accounts payable | $8,000 | | $19,000 | -11,000 | 5 | Subtract from net income the decrease in Accounts payable |
| O | Taxes payable | 2,000 | | 1,000 | +1,000 | 6 | Add to net income the increase in Taxes payable |
| F | Note payable, long-term | 86,000 | | 75,000 | +11,000 | 8 | Borrow additional note principal |
| F | Contributed capital | 75,000 | | 70,000 | +5,000 | 9 | Issuance of stock for cash |
| O,F | Retained earnings | 80,000 | | 45,000 | +35,000 | 1 | Increased for net income ($40,000) / decreased for dividends ($5,000) |
|  |  | $251,000 | | $210,000 |  |  |  |
|  |  |  | |  |  |  |  |
|  | **Income statement for 2016** | | |  |  |  |  |
|  | Sales | | $190,000 |  |  |  |  |
|  | Cost of goods sold | | 90,000 |  |  |  |  |
|  | Other expenses | | 60,000 |  |  |  |  |
|  | Net Income | | $40,000 |  | |  |  |

**AP12–2. (continued)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Audio House Inc. | | | | |
| Statement of Cash Flows | | | | |
| For the Year Ended December 31, 2016 | | | | |
|  |  |  |  |  |
| **Cash flows from operating activities:** |  |  |  |  |
| Net income |  |  | $40,000 | 1 |
| Adjustments to reconcile net income to net cash provided by operating activities: |  |  |  |  |
| Depreciation expense | $15,000 | 2 |  |  |
| Decrease in accounts receivable | 5,000 | 3 |  |  |
| Increase in inventory | (2,000) | 4 |  |  |
| Decrease in accounts payable | (11,000) | 5 |  |  |
| Increase in taxes payable | 1,000 | 6 | 8,000 |  |
| Net cash provided by operating activities |  |  | 48,000 |  |
| **Cash flows from investing activities:** |  |  |  |  |
| Cash payments to purchase fixed assets |  |  | (60,000) | 7 |
| **Cash flows from financing activities:** |  |  |  |  |
| Cash receipts from borrowing on long-term  note | 11,000 | 8 |  |  |
| Cash receipts from issuing stock | 5,000 | 9 |  |  |
| Cash dividends paid | ( 5,000) | 1 |  |  |
| Net cash provided by financing activities |  |  | 11,000 |  |
| Net decrease in cash during the year |  |  | ( 1,000) | 10 |
| Cash balance, January 1, 2016 |  |  | 65,000 |  |
| Cash balance, December 31, 2016 |  |  | $64,000 |  |

Req. 2

There was an overall decrease in cash of $1,000. This resulted from an inflow of $48,000 from operating activities, borrowing on a long-term note of $11,000, and a stock issuance of $5,000. A large percentage of the cash inflow was invested in equipment ($60,000) and $5,000 was paid as dividends.

**AP12–3.**

Req. 1

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Related Cash | **Balance sheet at December 31** | |  |  |  |  |
| Flow Section |  | **2015** | **2014** | **Change** | |  |
| Δ in Cash | Cash | $34,000 | $29,000 | +5,000 | 10 | Net increase in cash |
| O | Accounts receivable | 45,000 | 28,000 | +17,000 | 3 | Subtract from sales to compute collections from customers |
| O | Merchandise inventory | 32,000 | 38,000 | -6,000 | 4 | Subtract from CGS to compute payments to suppliers |
| I | Property and equipment | 121,000 | 100,000 | +21,000 | 7 | Payment in cash for equipment |
| O | Less: Accumulated depreciation | (30,000) | (25,000) | -5,000 | 2 | Depreciation expense does not affect cash |
|  |  | $202,000 | $170,000 |  |  |  |
| O | Accounts payable | $36,000 | $27,000 | +9,000 | 5 | Subtract from CGS to compute payments to suppliers |
| O | Wages payable | 2,200 | 1,400 | +800 | 6 | Subtract from Wage expense to compute payments for wages |
| F | Note payable, long-term | 38,000 | 44,000 | -6,000 | 8 | Cash used for repayment of note principal |
| F | Contributed capital | 88,600 | 72,600 | +16,000 | 9 | Issuance of stock for cash |
| O,F | Retained earnings | 37,200 | 25,000 | +12,200 | 1 | Increased for net income of $27,200 and decreased for dividends declared and paid of $15,000 |
|  |  | $202,000 | $170,000 |  |  |  |
|  |  |  |  |  |  |  |
|  | **Income statement for 2015** | |  |  |  |  |
|  | Sales | $135,000 |  |  |  |  |
|  | Cost of goods sold | 70,000 |  |  |  |  |
|  | Other expenses | 37,800 |  |  |  |  |
|  | Net Income | $27,200 |  | |  |  |

**AP12–3. (continued)**

|  |  |  |  |
| --- | --- | --- | --- |
| Ingersol Construction Supply Company | | | |
| Statement of Cash Flows | | | |
| For the Year Ended December 31, 2015 | | | |
|  |  |  |  |
| **Cash flows from operating activities:** |  |  |  |
| Collections from customers ($135,000 – $17,000) | $118,000 | 3 |  |
| Payments to suppliers ($70,000 – $6,000 – $9,000) | (55,000) | 4,5 |  |
| Payments for wages ($20,000 – $800) | (19,200) | 6 |  |
| Payments for other expenses | (6,800) |  |  |
| Payments for taxes | (6,000) |  |  |
| Net cash provided by operating activities |  |  | 31,000 |
| **Cash flows from investing activities:** |  |  |  |
| Cash payments to purchase fixed assets |  |  | (21,000) 7 |
| **Cash flows from financing activities:** |  |  |  |
| Cash payments for dividends | (15,000) | 1 |  |
| Cash payments on long-term note | (6,000) | 8 |  |
| Cash receipts from issuing stock | 16,000 | 9 |  |
| Net cash provided by financing activities |  |  | (5,000) |
| Net increase in cash during the year |  |  | 5,00010 |
| Cash balance, January 1, 2015 |  |  | 29,000 |
| Cash balance, December 31, 2015 |  |  | $34,000 |

Req. 2

There was an increase in cash for Ingersol Construction Supply Company this year of $5,000. Operating activities provided a positive cash flow of $31,000. This inflow of cash from operating activities, combined with the stock issuance for $16,000 cash, allowed the company to invest $21,000 in fixed assets, pay down a long-term note by $6,000, and pay dividends of $15,000.

CASES AND PROJECTS

### ANNUAL REPORT CASES

**CP12–1.**

Req. 1:

Depreciation and amortization was the largest item. The $143,156 expense was added to net income in the reconciliation because it is a noncurrent deferred expense which does not cause a cash outflow when it is recorded.

The increase in merchandise inventory was the largest change in operating assets or liabilities. The increase of $77,311 was subtracted from net income in the reconciliation because cash payments for inventory were more than the amount recorded for the cost of goods sold (included as “Cost of sales” on the income statement).

Req. 2:

American Eagle Outfitters’ three largest investing and financing uses of cash over the past three years have been investment purchases (available-for-sale securities), capital expenditures for property-plant-and equipment, and a cash dividend. The two major sources of cash for these activities has been cash flow provided by operating activities and sales of investments.

Req. 3: Free Cash Flow was $53,529 thousand, calculated as (in thousands):

|  |  |
| --- | --- |
|  |  |
| Cash Flows from Operating Activities | $239,256 |
| less Dividends | (85,592) |
| less Capital Expenditures (purchase of PPE) | (100,135) |
| Free Cash Flow | $53,529 |

This implies that the company has financial flexibility to consider additional capital expenditures or other means of expansion without increasing its debt.

**CP12–2.**

Req. 1 The company uses the indirect method.

Req. 2 Tax payments of $120,847 thousand were made (located near the bottom of the Statement of Cash Flows).

Req. 3 “Share-based compensation” is an expense paid with common stock rather than cash. Since it does not use cash, it is added back to net income to determine cash flows from operations. Depreciation and amortization are also expenses that do not involve a cash outflow as they are incurred. Thus, both of these expenses are added back to net income to determine the cash flow from operations.

Req. 4 The company has not paid cash dividends during the last three years, or in any year since its initial public offering. (Any dividends paid would be a financing cash outflow.) This information can be found under the “Dividend Policy” heading in the section of the annual report entitled “Item 5. Market for Registrant’s Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities”.

Req. 5 Free Cash Flow was $92,692 thousand, calculated as (in thousands):

|  |  |
| --- | --- |
|  |  |
| Cash Flows from Operating Activities | $282,702 |
| less Dividends | 0 |
| less Capital Expenditures | (190,010) |
| Free Cash Flow | $92,692 |

**CP12–3.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Req. 1 |  |  |  | **American Eagle Outfitters** | | | | | **Urban Outfitters** | | | | |
| Quality of | = | Cash flow from operations |  |  | $239,256 | = | 1.58 |  |  | $282,702 | = | 1.53 |  |
| income ratio |  | Net income |  |  | $151,705 |  |  |  |  | $185,251 |  |  |  |

American Eagle Outfitters has a higher, and therefore better, quality of income ratio than does Urban Outfitters.

|  |  |  |  |
| --- | --- | --- | --- |
| Req. 2 | **Industry  Average** | **American Eagle Outfitters** | **Urban Outfitters** |
| Quality of Income = | 1.81 | 1.58 | 1.53 |

Both Urban Outfitters and American Eagle have a solid but lower than average quality of income ratio.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Req. 3 |  |  |  | **American Eagle Outfitters** | | | | | **Urban Outfitters** | | | | |
| Capital | = | Cash flow from operations |  |  | $239,256 | = | 2.39 |  |  | $282,702 | = | 1.49 |  |
| acquisitions ratio |  | Cash paid for plant & equipment |  |  | $100,135 |  |  |  |  | $190,010 |  |  |  |

Urban Outfitters has a lower capital acquisitions ratio than does American Eagle Outfitters. This implies that American Eagle has a greater ability to fund additional capital expenditures from the cash flow provided by its operating activities.

|  |  |  |  |
| --- | --- | --- | --- |
| Req. 4 | **Industry  Average** | **American Eagle Outfitters** | **Urban Outfitters** |
| Capital Acquisitions = | 2.62 | 2.39 | 1.49 |

American Eagle’s capital acquisitions ratio is lower and Urban Outfitter’s is significantly lower than the industry average. This implies their relative ability to fund their current levels of capital expenditures from the cash flow provided by their operating activities compared to the average company in the industry.

### FINANCIAL REPORTING AND ANALYSIS CASES

**CP12–4.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ROCKY MOUNTAIN CHOCOLATE FACTORY, INC. Statement of Cash Flows For the Quarter Ended May 31 | | | | |
|  |  |  |  |  |
| **Cash flows from operating activities:** |  |  |  |  |
| Net income | $ 163,837 |  |  |  |
| Add (deduct) to reconcile net income to net cash flow: |  |  |  |  |
| Depreciation expense | 276,304 |  |  |  |
| Amortization expense | 5,901 |  |  |  |
| Accounts receivable increase | (138,681) |  |  |  |
| Inventories increase | (243,880) |  |  |  |
| Other current assets increase | (357,507) |  |  |  |
| Accounts payable increase | 280,935 |  |  |  |
| Accrued liabilities increase | 164,087 |  |  |  |
| Income taxes payable decrease | (43,031) |  |  |  |
| Long-term accounts receivable decrease | 11,382 |  |  |  |
| Net cash inflow from operating activities |  |  | $ 119,347 |  |
|  |  |  |  |  |
| **Cash flows from investing activities:** |  |  |  |  |
| Fixed assets purchased | (1,081,121) |  |  |  |
| Other assets decrease | 50,055 |  |  |  |
| Net cash outflow from investing activities |  |  | (1,031,066) |  |
|  |  |  |  |  |
| **Cash flows from financing activities:** |  |  |  |  |
| Repayment of short-term debt | (1,000,000) |  |  |  |
| Repayment of long-term debt | (2,355,029) |  |  |  |
| Issuance of long-term debt | 4,659,466 |  |  |  |
| Net cash inflow from financing activities |  |  | 1,304,437 |  |
| Net increase in cash during the quarter |  |  | 392,718 |  |
| Cash, February 29 |  |  | 528,787 |  |
| Cash, May 31 |  |  | $ 921,505 |  |

**CP12–5.**

Date: (today’s date)

To: Supervising Analyst

From: (your name)

Re: Evaluation of Carlyle Golf, Inc.’s Planned Expansion

While many companies experience losses and negative cash flows during the early years of their operations, the cash situation for Carlyle Golf is a major concern. The company has announced plans to increase inventory by $2.2 million but there is no obvious source to finance the acquisition of this inventory. The statement of cash flows shows that the company has to make cash deposits with its suppliers. It is unlikely that these suppliers will be a major source of financing for Carlyle's inventory. The company obviously does not have enough cash on hand to finance its expansion of inventory.

The planned expansion of inventory has additional implications. The company must have plans to expand its sales volume. There is no information in the company's report concerning whether this expansion will require additional expenditures, such as increased advertising or hiring new sales people. In any case, the expansion will most likely require an increase in accounts receivable. Most companies underestimate the amount of resources that must be tied up in inventory and accounts receivable when they expand sales volume.

Carlyle should seek additional capital to support an increased level of operations. Without this extra capital, it is unlikely that Carlyle can continue in business.

**Instructor's note**: Subsequent to this date, Carlyle sought new financing through an initial public offering. However, the company was unable to develop a niche in this very competitive market and was subsequently liquidated.

### CRITICAL THINKING CASES

**CP12–6.**

Req. 1

The payment from Merrill Lynch to Enron does not automatically make the Nigerian barge transaction a sale. When a loan is established between a lender and borrower, a similar cash payment is made between the two parties. Two other features of the Nigerian barge transaction resemble a loan. First, the requirement that Enron arrange for Merrill Lynch to be paid only six months after the “sale” is similar to a possible requirement that a borrower repay a lender six months after a borrower receives cash in conjunction with signing a promissory note. Second, the “hefty fee” paid by Enron for temporarily obtaining the use of Merrill Lynch’s funds is similar to interest that is paid by a borrower for temporarily obtaining the use of a lender’s funds.

The four revenue recognition criteria discussed in Chapter 3 are:

1. delivery has occurred or services have been rendered,
2. there is persuasive evidence of an arrangement for customer payment,
3. the price is fixed or determinable, and
4. collection is reasonably assured.

Without knowing about the secret side deal, it’s not obvious which of the four criteria have not been fulfilled. Knowing about the side deal, however, makes it clear that the first criterion has not been fulfilled. At the time of the initial transaction (and receipt of cash from Merrill Lynch) Enron had a continuing obligation to ensure that Merrill Lynch was repaid six months later. In other words, Enron had not performed all of the acts promised to Merrill Lynch.

Req. 2

By recording the transaction as a regular sale, Enron reports the cash received as a cash inflow from an operating activity. Had the transaction been recorded as a loan, Enron would have reported the cash received as a cash inflow from a financing activity.

Req. 3

Most financial statement users view cash flows from operating activities as recurring sources of cash into the future. If $100,000 of cash is generated from operations this year, it’s often reasonable to expect that a similar amount will be generated next year and the year after that and the year after that. Financing activities, on the other hand, are not as readily recurring in the future, particularly as a company takes on more and more debt. Eventually, lenders will stop lending if a company’s liabilities grow too large. Given these different perceptions, financial statement users attach more value to cash generated from operating activities than from financing activities. Thus, when the transaction is recorded as a sale, financial statement users will perceive the company’s value as greater than when the transaction is recorded as a loan.

*FINANCIAL REPORTING AND ANALYSIS PROJECTS*

**CP12–7.**

The solutions to this case will depend on the company and/or accounting period selected for analysis.

**CONTINUING CASE**

**CC12.**

