# Chapter 12: Financial Liabilities and Provisions

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*W The solution to this assignment is on the text website, Connect. The solution is marked **WEB.**

## Cases

### Case 12-1
### Ski Incorporated

To: Members of Board of Directors
From: Accounting Advisor

*Overview*

Ski Incorporated (SI) is a public company therefore you are using IFRS. The bank loan has a minimum current ratio so you will need to be careful and watch for any impacts on the ratio. You have had a tough year this year with a taxable loss so the bank financing is critical to your operations. Management will be concerned with their bonus based on net income but this will not be a concern this year with the taxable loss since there will not be any bonus.

*Issues*

1. Taxable loss
2. Revenue recognition memberships
3. Revenue recognition guests
4. Special promotions
5. Coupons
6. Dealer Loan
7. Lawsuit
8. Lease
9. Gasoline storage tanks

*Analysis and Recommendations*

1. Taxable loss

SI had a taxable loss of $400,000 in 20X5. Since this is the first ever taxable loss the loss would be carried back for up to three years to recover past taxes paid at the tax rates in those years. Usually you would want to go back three years first so that if you incur another loss next year you can still go back to the other two years if there is taxable income remaining. This will result in an income tax receivable which will increase current assets and have a positive impact on your current ratio.

2. Revenue recognition memberships

The contract with the customer is for the membership in the club. This would be a written agreement between the member and SI. There is one performance obligation, the promised service is membership in the ski club. There is no transfer of the service until the membership is provided. The contract price is $10,000. The non-refundable deposit is an advance payment towards this initiation fee and is part of the overall transaction price. The performance obligation for the initiation fee is satisfied over the period of time that the member belongs to the club. The $10,000 would be recognized over the average period a member belongs. There should be enough historical data available to come up with a reasonable estimate. There would be no cash collection risk since the amount is paid upfront.

The annual fee is a written agreement between the member and SI. There is again one performance obligation the service for this year. The fee of $2,000 is the total contract price and is received in 20X5 for the 20X6 ski season. This would be unearned revenue when received. Assuming the ski season goes from Dec 1 until March 31 $500 would be recognized in 20X5 and the remainder in 20X6 which would be the period in which the service is performed. There would be no cash collection risk since the amount is paid upfront.

3. Revenue recognition guests

The contract with the guest is the written contract when they receive the ticket to ski not when the reservation is made since this reservation could be cancelled. The performance obligation is the right to ski that day. The overall contract price is the price of the ski ticket. The performance would be the right to ski on that day. There is no cash collection risk since the guest pays by credit card when they purchase the ticket.

4. Special promotions

The contract with the customer is the written contract when they receive the ticket and the right to a future lesson. There are two separate performance obligations the right to ski and the right to the lesson. The total contract price is $100. This price would need to be allocated to the two separate performance obligations based on their relative fair value.

| | |
|---|---|
| Fair value ski pass | 80 = 61.5% x 100 = $61.50 |
| Fair value lesson | 50 = 38.5% x 100 = $38.50 |
| Total fair value | 130 |

The $61.50 for the ski pass the performance obligation would be satisfied on the day that they ski. For the $38.50 the performance obligation would be satisfied on the day they take the lesson. There would be no cash collection risk assuming a credit card is used to purchase the special pass.

5. Coupons

It must be determined if an economic loss would occur for the coupons. The coupons are for $5 and the price of a ski pass is $80. This is a minor amount compared to the price of the ski pass so SI would still be selling the ski pass at a profit. Therefore, the coupons should only be recognized as a cost when they are redeemed.

6. Dealer Loan

The manufacturer of the ski lift has provided a 0% interest loan. This is often referred to as a dealer loan. The loan is either measured in FVTPL or other liabilities. Most liabilities are measured in other liabilities and since there is no mismatch I recommend this loan be recorded in other liabilities. SI is required to record the loan at fair value using the market rate of interest which would be their incremental borrowing rate of 8%. Therefore, the loan would be recorded at $2.5 million (2 periods, 8%) = $2,143,350. The loan would then be amortized using the effective interest method and interest expense of $171,468 would be recorded in 20X5. This would not impact the current ratio in 20X5 because the full amount would be presented as long term.

7. Lawsuit

It must be determined if the lawsuit is probable and if the amount can be measured. The Board has decided to settle the lawsuit therefore it is probable there will be a payment. The amount will be based on managements best estimate. Since there is a range this would be the midpoint of the range or $250,000 should be accrued as a provision. In addition, there would be note disclosure on the details of the lawsuit. This liability would be current if the payment is made next year which would have a negative impact on the current ratio.

8. Lease

The lease would be an onerous contract since the costs exceed the benefits since the leased property will not be used by SI. A provision should be set up for the $10,000 – 5,000 = $5,000 x 24 months = $120,000. The current portion of the provision would have a negative impact on the current ratio.

9. Gasoline storage tanks

The gasoline storage tanks would be set up as an item of property, plant and equipment and depreciated over the 15 years. The costs to remove the tanks would be a legal obligation and would need to be set up as a decommissioning provision. The provision would be set up at the present value of the $2.5 million. The PV would be $2.5 million (15 periods, 8%) = $788,100. This amount would be debited to the gasoline storage tanks and credited to the provision. Since the life of the storage tanks and the decommission provision are the same the $10,788,100 would be depreciated over the 15 years which would be $719,207 of depreciation expense in 20X5. Interest expense of $63,048 would also be recognized in 20X5 which would increase the decommissioning provision. The asset would be a long term asset and the decommissioning provisions would be a long term liability so this would not impact the current ratio.

**Case 12-2**
**Prescriptions Depot Limited**

*Overview*

Prescriptions Depot Limited (PDL) is a large private company with revenues of $5.4 billion and earnings of $295 million. The company complies with IFRS, and is contemplating a public offering in the medium term. GAAP compliance is therefore important. Reporting objectives are to report growth in sales, especially year-over-year same-store sales growth, and stable earnings. Because of possible analyst interest, sales measurement is of critical importance. **Ethical** reporting choices are critical, given the possibility for increased scrutiny in the future; sudden changes in accounting policy at a later date may not be viewed with favor by analysts. Reporting objectives are meant to support a public offering.

*Issues*

1. Loyalty points program
2. Decommissioning obligations
3. Cash refund program
4. Coupon program

*Analysis and recommendations*

1. Loyalty points program

PDL operates a loyalty points program, which will impact on the measurement of sales revenue, important for analysts.

Currently, a sale transaction with point value attached is recognized as a sale entirely in the current period. An expense and liability for the cost – not sales value – of goods to be redeemed in the future is recognized in the same time period as the sale.

This policy maximizes the sales value recorded with the initial transaction. It does not reflect the substance of the transaction, though, which is that PDL has rendered multiple deliverables in sale: both the initial sale, and the subsequent sale based on points value are being sold.

Accordingly, PDL must consider an alternate approach to its loyalty point program:

1. The sale in the store is a contract with the customer but there are two separate performance obligations. There is the sale of the goods now and the future redemption of points. This loyalty program provides the customer with a material right. On a sale that involves issuance of points, the consideration

received must be allocated between the sale of the product and the points on a relative stand alone basis. The value of points to be redeemed in the future is recorded as unearned revenue.

2. As is now the case, careful measurement of the amount - unearned revenue, now - includes analysis of redemption, bonus offers, breakage, expiry, and the like.
3. When points are redeemed, the sales value of the redemption transaction is recorded as sales revenue and cost of goods sold reflects the merchandise purchased.

This approach defers sales revenue and gross profit to later periods.

As a result, current earnings (and sales) are lower, but future periods show higher sales and earnings. Trends may be affected. Analysts will react better to accurate information, and there is time for this to be assessed since plans to offer shares to the public are described as "medium term".

2. Decommissioning obligation

PDL has an obligation to remove its customized, specialized pharmacy installations in leased premises. This is a future obligation based on a past action, and represents a provision in the financial statements. It is not now recorded. This is essentially a decommissioning obligation, and standards require recognition.

Accordingly, PDL must estimate the cost to restore premises, removing the custom set-up. PDL must also estimate when restoration is likely to happen; lease renewal must be assessed. Finally, a borrowing rate for the appropriate term and amount must be estimated, and a discounted liability calculated.

The discounted liability is recognized as an asset and a liability. The asset is depreciated over the life of the leased premises. Interest is accrued annually on the liability. These two charges will decrease earnings, but represent appropriate accounting measurement.

Note also that estimates must be revised, and any changes in estimate are reflected in a revised present value and asset balance.

3. Cash refund program

The cash refund program is now accounted for when the refund takes place, recording a reduction to cash and a reduction to sales.

Since the promotion involves a cash refund, an obligation exists to pay cash in the future, based on a past transaction.

If there was a refund period open over the end of a reporting period, this accounting policy would not capture the obligation to provide refunds. That is, if the six week documentation window were open, after a given promotion, there would be refunds to be made based on recorded sales of the period. This obligation to provide refunds would not be reflected in the financial statements.

Therefore, PDL must estimate the extent of cash refunds waiting to be filed and record them as a liability when the promotion weekend ends. Estimates can be based on past practice.

The amount refunded to customers should be reported as a sales discount (a contra-sales account), not as a direct decrease to sales. It should also not be recorded as a promotion expense, as it is a reduction in sales value. Recording the amounts as a sales discount is preferable to directly reducing sales, because it may help preserve information about the extent of program use for internal tracking. Analyses of sales trends may focus on net sales, so this accounting treatment may not improve sales trends, a corporate reporting objective.

The policy will record refunds earlier, and may decrease earnings in the short term. Over time, there will be no cumulative difference to earnings.

4. Coupon program

The coupon program is now accounted for by recording sales at the amount of cash received from customers. PDL then reduces inventory – and thus cost of goods sold - for manufacturer rebates given for coupons redeemed. (i.e., debit accounts payable, and credit inventory which becomes cost of goods sold). This has the correct impact on gross profit (give or take some timing issues of inventory sale), but understates sales.

Since PDL is increasingly concerned with correct measurement of sales, the accounting policy for coupons must be revisited. The correct treatment:

1. Sales is measured at the retail price, regardless of whether the value is received from customers ($20,000, in the case example) or from the manufacturer in the form of coupons ($5,000). The coupons are in essence an account receivable, used to reduce an account payable.
2. Merchandise is recorded at the invoice cost ($98,000) not the amount of cash paid ($93,000).

Using the existing accounting policy, sales are recorded at $20,000, and cost of goods sold (for many products, one assumes) at $93,000. With the revised system, sales are $25,000 and cost of goods sold is $98,000.

There is no overall change to earnings, but sales are more accurately stated, which is preferable for PDL.

*Conclusion*

Any company with an eye on public markets must carefully assess its reporting practices and ensure appropriate accounting is followed. PDL has several policies, for loyalty points, cash refunds and coupon transactions that impact on reporting of sales and timing of earnings. In addition, they have unrecorded decommissioning obligations. Appropriate accounting demonstrates the ethical commitment of management.

**Case 12-3**
**Camani Corporation**

*Overview*
Camani Corporation has been negatively affected by economic conditions, and the 20X3 financial results are under particular scrutiny to determine the viability of the existing strategic model. The executive team will receive a "return to profitability" bonus if 20X3 earnings are positive. Under these circumstances, there is obvious pressure to shade reporting policies and estimates to support higher earnings. There are significant **ethical** pressures on all stakeholders in the company, but especially management.

*Issues*

1. Calculate cash from operating activities, based on current draft financial statements.
2. Analyse reporting implications of identified estimated financial statements elements: legal issues, depreciation policy, technology contract, inventory valuation, restructuring and environmental liability.
3. Re-calculate cash from operating activities, based on revised financial statements

**Analysis and conclusions**

1. Cash flow from operating activities, existing draft financial statements

Exhibit 1 shows that cash flow from operating activities is a negative, at ($1,721). Earnings of $1,535 reflect cash flows of ($800), and dividends on common shares are another ($921). The negative operating cash flows are caused by large build-ups in account receivable and inventory. The increase in accounts payable and accrued liabilities works to mitigate this, but is not as large as the inventory build-up.

This is contrary to a return to profitability implied by positive earnings, and calls into question the declaration of common dividends.

2. Analysis of accounting policies and estimates

a. Legal issues

The accrual has been made based on one set of expected values, resulting in the accrual of $830. If a different, less optimistic set of probabilities is used, the accrual is $1,110:

| Total payment (in 000's) | Alternate probability | Expected value (000's) |
|---|---|---|
| $ 100 | 0% | 0 |
| 500 | 20 | $ 100 |
| 700 | 30 | 210 |
| 1,200 | 30 | 360 |
| 2,200 | 20 | 440 |
| | | $ 1,110 |

This is an additional liability and expense of $280 (See Exhibit 2).

b. Depreciation policy

Retaining prior years' estimates for depreciation amounts would result in $200 additional depreciation. (See Exhibit 2).

c. Technology services

CC had recorded $1,200 as an estimate for technology services rendered; if the $4,000 contract is considered 45% complete (rather than 30%), another $600 (15%) must be recorded. This is a liability and presumably an expense. (See Exhibit 2).

d. Inventory valuation

Retaining prior years' estimates for inventory valuation would result in $775 additional write-down ($3,125 - $2,350.) Note that inventory levels are higher in 20X3, which is not consistent with less need for a valuation adjustment. Much might depend on the state of the economy, though, and a thorough review of the analysis the CC has prepared. (See Exhibit 2).

e. Restructuring

No accrual has yet been recorded for a restructuring. The plan has not been announced or approved, and the plan is not formal the plan at this stage. Only a formal plan, once communicated, would meet the requirements of a constructive liability. At this stage, recording is premature, and no accrual has been recorded.

f. Environmental liability

If the liability had been recorded at 5%, rather than 7%, $329 ($400, 4 years, 5%) would have been recorded, rather than $306. Interest would have been $16, not $21 (a $5 difference), and depreciation, over four years, would have been $82, rather than $77 (a $5 difference). These adjustments are minor, and are summarized in Exhibit 2.

Effect on financial performance

The adjustments indicated by these areas have been included in the revised draft statement of financial position and financial performance shown in Exhibit 3. The statement of earnings now reflects a loss of $320. This would eliminate any return to profitability bonus, and means that the operating strategy of the company needs to be assessed.

3. Cash flow from operating activities, revised draft financial statements

The reported loss of $320 is more consistent with the negative cash flow from operating activities. Exhibit 4 shows the revised operating activities section of the SCF. Cash used by operating activities is unchanged, at ($1,721). This demonstrates the reason that many focus on the SCF, since it is unaffected by estimates that underlie earnings measurement.

*Conclusion*

Additional information should be requested by the audit committee in each these areas, to gather evidence to support the accrual that has been made, or suggest a more appropriate amount. Since profits are marginal and there is significant incentive for management to show profit in 20X3, very careful evaluation of these areas is warranted.

Exhibit 1
Operating activities, SCF
Existing draft summarized financial statements

*Camani Corporation*
*Operating Activities Section of the Statement of Cash Flow*
*Year ended 31 December 20x3*

| | | |
|---|---|---|
| *Operating Activities:* | | |
| Net income | $1,535 | |
| Adjustments for non-cash items: | | |
| Depreciation | 3,900 | |
| Interest | 21 | |
| | 5,456 | |
| Changes in current assets and current liabilities: | | |
| Increase in accounts receivable | (3,740) | |
| Increase in inventory | (6,950) | |
| Increase in prepaids | (87) | |
| Increase in accounts payable and accrued liabilities | 4,521 | |
| | | (800) |
| Cash paid for common dividends ($1,535 + $643 = $2,178- $1,257) | | (921) |
| Net cash provided (used) by operations | | $(1,721) |

Exhibit 2
Camani Corporation
Adjustments based on estimated amounts

| | | | |
|---|---|---|---|
| 1) | Expense ($1,110 - $830) | 280 | |
| | Accrued liabilities | | 280 |
| 2) | Depreciation Expense ($4,100 - $3,900) | 200 | |
| | Plant and equipment (net) | | 200 |
| 3) | Expense | 600 | |
| | Accrued liabilities | | 600 |
| 4) | Expense ($3,125 - $2,350) | 775 | |
| | Inventory | | 775 |
| 5) | None | | |
| 6) | Depreciation expense ($82 - $77) | 5 | |
| | Asset ($329-$306) less $5 extra depreciation | 18 | |
| | Interest expense ($21 - $16) | | 5 |
| | Accrued liabilities ($329 - $306) less $5 change in interest | | 18 |

Exhibit 3
Camani Corporation
REVISED Summarized Draft 20X3 Financial Statements

REVISED Summarized Draft Statement of Financial Position
At 31 December (in 000's)

| | 20X3 | 20X2 |
|---|---|---|
| *Assets* | | |
| Cash | $ 2,340 | $ 1,680 |
| Accounts receivable | 16,780 | 13,040 |
| Inventory (-$775) | 61,145 | 54,970 |
| Prepaids | 542 | 455 |
| Land | 5,860 | 5,860 |
| Plant and equipment (net) (-$200 +$18) | 19,538 | 18,650 |
| Other assets | 650 | 290 |
| Total debits | $106,855 | $94,945 |
| *Liabilities* | | |
| Accounts payable and accrued liabilities(+$280 + $600) | 48,268 | 42,867 |
| Long-term debt (+$18) | 53,545 | 46,200 |
| *Equity* | | |
| Common shares | 5,640 | 5,235 |
| Retained earnings ($643 -$320 loss - $921 divs) | (598) | 643 |
| Total credits | $106,855 | $94,945 |

REVISED Summarized Draft Statement of Earnings
For the year ended 31 December 20X3

| | |
|---|---|
| Sales revenue | $104,910 |
| Cost of goods sold (+$775) | (67,005) |
| Depreciation expense (+$200 + $5) | (4,105) |
| Operating, administration and marketing (+$280 + $600 - $5) | (34,120) |
| Earnings and comprehensive income | $ (320) |

Exhibit 4
REVISED Operating activities, SCF
Revised draft summarized financial statements

*Camani Corporation*
*Operating Activities Section of the Statement of Cash Flow*
*Year ended 31 December 20x3*

| | | |
|---|---|---|
| *Operating Activities:* | | |
| Net income (loss) | ( $320) | |
| Adjustments for non-cash items: | | |
| Depreciation | 4,105 | |
| Interest | 16 | |
| | 3,801 | |
| Changes in current assets and current liabilities: | | |
| Increase in accounts receivable | (3,740) | |
| Increase in inventory | (6,175) | |
| Increase in prepaids | (87) | |
| Increase in accounts payable and accrued liabilities | 5,401 | |
| | | (800) |
| Cash paid for common dividends (unchanged) | | (921) |
| Net cash provided (used) by operations | | $(1,721) |

## Technical Review

### Technical Review 12-1

1. T
2. F – The effective interest method is required in IFRS.
3. F – The gain or loss is recognized in earnings.
4. T – if each point in the range is equally likely
5. F – the refinancing must be completed by the year-end date for the mortgage to be classified as long term

### Technical Review 12-2

1. F – only legal obligations are included not constructive obligations
2. T
3. T
4. F – if each point in the range is equally likely the lower end of the range not the midpoint would be used
5. T

**Technical Review 12-3**

| *Case* | *Most likely outcome* | *Expected value* | *To record* |
|---|---|---|---|
| 1. | Most likely outcome is 0, p = 70% | Expected value is (\$100,000 x 10%) + (\$200,000 x 10%)+ (\$300,000 x 5%)+ (\$400,000 x 5%) = \$65,000.<br><br>(Still less than one payout) | No accrual based on most likely outcome |
| 2. | Likely (90%)<br>The most likely payout is \$200,000 | Expected value is (\$100,000 x 10%) + (\$200,000 x 60%)+ (\$300,000 x 5%)+ (\$400,000 x 15%) = \$205,000.<br><br>(Very close to most likely outcome) | Accrual of \$200,000, most likely outcome |
| 3. | Likely (90%)<br>The most likely payout is \$100,000 | Expected value is (\$100,000 x 30%) + (\$200,000 x 20%)+ (\$300,000 x 20%)+ (\$400,000 x 20%) = \$210,000.<br><br>(NOT close to most likely outcome) | Accrual of \$210,000<br><br>60% chance that payout is higher than \$100,000 so accrual of most likely outcome is not adequate. |

**Technical Review 12-4**

A guarantee is measured at its fair value. It would be measured at \$300,000 x 30% = \$90,000.

**Technical Review 12-5**

*Requirement 1*

Warranty expense in April, $24,750 ($550,000 × 4.5%)

*Requirement 2*

Balance in the warranty provision account at the end of April is $18,450
($16,400 + $24,750 – $8,700 – $14,000)

**Technical Review 12-6**

1) The Canadian equivalent of the payable when it is first recorded is US $150,000 x Cdn @ .75 = $112,500. The inventory would be valued at $112,500.

2) The amount in the exchange gain or loss account at the end of the year would be year end US $150,000 x Cdn @ .72 = $108,000. Therefore, the difference of $112,500 – 108,000 = 4,500 would be in the exchange gain or loss account. The $4,500 represents a foreign exchange gain (credit to the account).

**Technical Review 12-7**

| | | |
|---|---|---|
| *1 October 20x6* | | |
| Cash | 120,000 | |
| Note payable | | 120,000 |
| *31 December 20x6* | | |
| Interest expense ($120,000 x 9% x 3/12) | 2,700 | |
| Interest payable | | 2,700 |
| *30 September 20x7* | | |
| Interest expense ($120,000 x 9% x 9/12) | 8,100 | |
| Interest payable | 2,700 | |
| Cash (120,000 x 9%) | | 10,800 |
| *31 December 20x7* | | |
| Interest expense ($120,000 x 9% x 3/12) | 2,700 | |
| Interest payable | | 2,700 |
| *30 September 20x8* | | |
| Interest expense ($120,000 x 9% x 9/12) | 8,100 | |
| Interest payable | 2,700 | |
| Cash (120,000 x 9%) | | 10,800 |
| Note payable | 120,000 | |
| Cash | | 120,000 |

**Technical Review 12-8**

*Requirement 1*

| | |
|---|---|
| Principal \$250,000 (P/F, 7%, 2) = \$250,000 × (0.87344) ...................................... | \$218,360 |
| Interest \$5,000 (P/A, 7%, 2) = \$5,000 × (1.80802) ................................................ | 9,040 |
| | \$227,400 |

*Requirement 2*

| (1) Opening Net Liability | (2) Interest Expense 7% Market Rate | (3) Interest Paid | (4) Discount Amortization (2) – (3) | (5) Closing Net Liability (1) + (4) |
|---|---|---|---|---|
| \$227,400 | \$15,918 | \$5,000 | \$10,918 | \$238,318 |
| 238,318 | 16,682 | 5,000 | 11,682 | 250,000 |

**Technical Review 12-9**

*Requirement 1*

Present value $420,000 (P/F, 6%, 10) = $420,000 × (0.55839) ............................$234,524

*Requirement 2*

| (1) Opening Net Liability | (2) Interest Expense @ Market Rate (1) × 6% | (3) Closing Net Liability (1) + (2) |
|---|---|---|
| $234,524 | $14,071 | $248,595 |
| 248,595 | 14,916 | 263,511 |
| 263,511 | 15,811 | 279,322 |

(three years only)

*Requirement 3*

Revised present value $490,000 (P/F, 8%, 7) = $490,000 × (0.58349).................$285,910

Interest expense, 20X8 (line 3 of table above)....................................................... $ 15,811

Adjustment to asset and obligation ($285,910 less $279,322 (Table, above)) ....... $ 6,588

**Technical Review 12-10**

1. Current
2. Current
3. Current
4. Non-current
5. Current

## Assignments

### Assignment 12-1

*Requirement 1*

| | | Debit | Credit |
|---|---|---|---|
| a. | Office supplies inventory | 5,200 | |
| | Accounts payable | | 5,200 |
| b. | Cash | 30,000 | |
| | Note payable | | 30,000 |
| c. | Inventory | 143,000 | |
| | Accounts payable | | 143,000 |
| d. | Utilities expense | 2,600 | |
| | Accounts payable | | 2,600 |
| e. | Dividends, preferred (or retained earnings) | 6,000 | |
| | Dividends, common (or retained earnings) | 5,000 | |
| | Dividends payable | | 11,000 |
| f. | Accounts payable | 35,200 | |
| | Inventory | | 35,200 |
| g. | Accounts payable | 53,900 | |
| | Cash ($143,000 - $35,200) x 50% | | 53,900 |
| h. | Interest expense ($30,000 x 10 % x 1/12) | 250 | |
| | Interest payable | | 250 |
| i. | Rent expense | 2,400 | |
| | Accounts payable | | 2,400 |

Note: Students may record utilities and rent is separate payable accounts, or in accounts payable. Both are acceptable.

*Requirement 2*

| | | |
|---|---|---|
| Accounts payable | 64,100 cr. | (1) |
| Note payable | 30,000 cr. | |
| Interest payable | 250 cr. | |
| Dividends payable | 11,000 cr. | (1) |

(1) See note above; utilities and rent may be in separate payables accounts. Similarly, dividends payable may be two accounts, one for common and one for preferred.

**Assignment 12-2**

| | | |
|---|---|---|
| a. Cash | 3,780,000 | |
| Sales revenue | | 3,600,000 |
| GST payable ($3,600,000 x 5%) | | 180,000 |
| b. Cash | 13,020,000 | |
| Sales revenue | | 12,400,000 |
| GST payable ($12,400,000 x 5%) | | 620,000 |
| c. Equipment | 1,250,000 | |
| GST payable ($1,250,000 x 5%) | 62,500 | |
| Cash | | 1,312,500 |
| d. Salaries expense | 85,800 | |
| Employee income tax payable | | 7,400 |
| EI payable | | 1,400 |
| CPP payable | | 1,200 |
| Cash | | 75,800 |
| e. Cash | 2,940,000 | |
| Sales revenue | | 2,800,000 |
| GST payable ($2,800,000 x 5%) | | 140,000 |
| f. Inventory (or purchases) | 12,200,000 | |
| GST payable ($12,200,000 x 5%) | 610,000 | |
| Cash | | 12,810,000 |
| g. Salaries expense | 85,800 | |
| Employee income tax payable | | 7,400 |
| EI payable | | 1,400 |
| CPP payable | | 1,200 |
| Cash | | 75,800 |
| h. Salary expense | 6,320 | |
| CPP payable ($1,200 x 2) | | 2,400 |
| EI payable ($1,400 x 2 x 1.4) | | 3,920 |
| i. Employee income tax payable | 14,800 | |
| EI payable ($1,400 x 2) + $3,920 | 6,720 | |
| CPP payable | 4,800 | |
| Cash | | 26,320 |

| | | |
|---|---|---|
| j. GST payable | 267,500 | |
| Cash | | 267,500 |

Balance: ($180,000 + $620,000 + $140,000) – ($62,500 + $610,000) = $267,500

**Assignment 12-3**

Liabilities:

| | |
|---|---|
| GST payable (1) | $122,000 |
| Income tax deductions payable (2) | 47,400 |
| CPP payable (3) | 13,500 |
| EI payable (4) | 13,280 |

(1) $43,000 + $708,000 – ($1,920,000 x 5%) – $533,000 = $122,000
(2) $2,600 + $21,400 + $23,400 = $47,400
(3) $1,900 + $2,800 + $3,000 + employer, $5,800= $13,500
(4) $800 + $2,400 + $2,800 + employer, ($5,200 x 1.4) = $13,280

## Assignment 12-4 (WEB)

| | | | |
|---|---|---|---|
| a) | Inventory (70,000 x $2.11) | 147,700 | |
| | Accounts payable | | 147,700 |
| b) | Inventory (150,000 x $1.11) | 166,500 | |
| | Accounts payable | | 166,500 |
| c) | Inventory (20,000 x $2.13) | 42,600 | |
| | Accounts payable | | 42,600 |
| d) | Accounts payable | 166,500 | |
| | Foreign exchange loss | 9,000 | |
| | Cash (150,000 x $1.17) | | 175,500 |
| e) | Accounts payable | 42,600 | |
| | Foreign exchange loss | 1,400 | |
| | Cash (20,000 x $2.20) | | 44,000 |
| f) | Accounts payable | 147,700 | |
| | Foreign exchange loss | 4,200 | |
| | Cash (70,000 x $2.17) | | 151,900 |

**Assignment 12-5**

*Requirement 1*

| | | |
|---|---|---|
| Cash | 1,029,000 | |
| Sales revenue | | 980,000 |
| GST payable | | 49,000 |
| | | |
| Salary expense | 117,000 | |
| EI payable | | 3,800 |
| CPP payable | | 2,200 |
| Employee income tax payable | | 12,200 |
| Cash | | 98,800 |
| | | |
| Salary expense | 7,520 | |
| EI payable ($3,800 x 1.4) | | 5,320 |
| CPP payable | | 2,200 |
| | | |
| Inventory | 1,520,000 | |
| GST payable ($1,520,000 x 5%) | 76,000 | |
| Accounts payable | | 1,596,000 |
| | | |
| Cash | 3,297,000 | |
| Sales revenue | | 3,140,000 |
| GST payable ($3,140,000 x 5%) | | 157,000 |
| | | |
| Accounts receivable ($176,000 x $1.03) | 181,280 | |
| Sales revenue | | 181,280 |

The US customer has been billed in US dollars, and $176,000 is owing.

| | | |
|---|---|---|
| Cash ($140,000 x $1.07) | 149,800 | |
| Accounts receivable ($140,000 x $1.03) | | 144,200 |
| Foreign exchange gains and losses | | 5,600 |
| | | |
| GST Payable | 192,800 | |
| Cash ($62,800 + $49,000 + $157,000 - $76,000) | | 192,800 |
| | | |
| Accounts payable | 957,600 | |
| Cash (60% of $1,596,000) | | 957,600 |
| | | |
| Accounts receivable | 1,080 | |
| Foreign exchange gains and losses | | 1,080 |

($176,000 - $140,000) = $36,000 still owing. Recorded at $1.03; now worth $1.06
$36,000 x $.03 = $1,080

*Requirement 2*

| | | |
|---|---|---|
| Accounts receivable | 38,160 dr. | (1) |
| Accounts payable | 638,400 cr. | (2) |
| CPP payable | 8,300 cr. | (3) |
| EI payable | 14,320 cr. | (4) |
| Income tax deductions payable | 28,520 cr. | (5) |

(1) $181,280 - $144,200 + 1,080
(2) $1,596,000- $957,600
(3) $3,900 + $2,200 + $2,200
(4) $5,200 + $3,800 + $5,320
(5) $16,320 + $12,200

## Assignment 12-6

| *Item* | *Accounting treatment* |
|---|---|
| a. | Record; specific plan that has been communicated in a substantive way |
| b. | Record; cash rebate is a required payout; liability for 65% x 500 x $10 |
| c. | Do not record; plans not yet concrete. |
| d. | Record; legislative requirement; amount has to be estimated and discounted for the time value of money |
| e. | Record; announced intent that can be relied on by outside parties; amount has to be estimated and discounted for the time value of money |
| f. | Do not record; executory contract until time passes. Disclosure as commitment. |
| g. | Record when tower is built; remediation required under contract; amount has to be discounted for the time value of money |
| h. | Do not record; no firm offer or acceptance of out-of-court settlement. Disclosure. |
| i. | Do not record; no obligation is established because the case has not been settled and the company will likely successfully defend itself. Disclosure unless probability of payment is remote. |
| j. | Record; obligation for the expected value of $4 million |
| k. | Record; some might claim that the expectation of successful defense means that the amount might simply be disclosed, and this is an acceptable response. However, the author is pessimistic about the success of appeals on CRA rulings and thus suggests recording. |

## Assignment 12-7 (WEB)

| *Item* | *Accounting treatment* |
|---|---|
| a. | Do not record; executory contract until goods are delivered. |
| b. | Loss and liability recognized; record $40,000 loss from decline in market value (onerous contract.) |
| c. | Liability for $105,000 at year-end; originally recorded at $110,000 Cdn. amount received and $5,000 foreign exchange gain recognized to reflect change in exchange rate. |
| d. | Probable that there will be payout<br>Record loss and liability at most likely outcome of $500,000. Expected value; $425,000($2 million x 5%) + ($500,000 x 65%); appropriate to record higher value of $500,000, reflecting payout. |
| e. | Record loss and liability at expected value; company stands ready to make payment in the event of default; amount is $300,000 x 10%.<br><br>Note: because this is a financial instrument, expected value or fair value is used for valuation. Most likely outcome is not used for valuation. |
| f. | Record loss and liability at expected cash outflow; obligation to make payment; amount is $10,000 ( $100 x 1,000 x 10%). |
| g. | Record as a liability; part of initial sales price allocated to liability; Amount is expected fair value of merchandise to be distributed. |

## Assignment 12-8

| *Item* | *Accounting treatment* |
|---|---|
| A. | Constructive obligation: Record costs of recall; may be an additional \$1,800,000 expense and liability (\$1,200,000 ÷ 0.4 x 0.6) if costs are linear with progress.<br>Company likely liable for any settlements or lawsuits for product damages, but testing must be completed to ascertain if there is indeed a problem with existing product. |
| B. | Not recorded; all that can be recorded is loss events of the year; no amount can be recorded to smooth out losses expected |
| C. | Record at expected value; a warranty expense and a warranty provision are recorded at the expected \$100,000 outflow. Subsequent payments reduce the provision. |
| D. | Record since the company has decided to settle to avoid negative publicity. Since there is a range and no amount in the range is more likely than another, the midpoint of the range \$375,000 would be managements best estimate. |
| E. | Record at expected value; company is required by legislation to remediate the site. Amount must be estimated, both timing and amount, even though uncertain. Amount to be discounted for interest rate over correct risk and term. |

## Assignment 12-9

| *Claim* | *Outcome* |
|---|---|
| 1. | Not likely; <50% probability of payout; no accrual. Disclosure. |
| 2. | Likely<br>Accrual at best estimate, which is the most likely payout informed by expected value<br>$ 5,000,000  recorded |
| 3. | Likely<br>Accrual at best estimate, which is the most likely outcome informed by expected value.<br><br>Combined odds:<br>40% settlement<br>(60% x 30%) = 18% court dismissed<br>(60% x 70%) = 42% court payout<br><br>Overall, most likely outcome (42%) is $1,600,000 payout.<br>Expected value is ($1,000,000 x 40%) + ($1,600,000 x 42%) = $1,072,000.<br>More information about the success of the settlement offer should be obtained before the financial statements are issued, but an accrual of $1,000,000 or $1,600,000 is supportable based on the information provided. |

## Assignment 12-10

| *Product* | *Outcome* |
|---|---|
| 1. | Probability of payout, therefore accrual needed<br>75 claims x (1/3) x $1,000 x 90%<br>25 claims x $5,000 x 70%<br>25 claims x 12,000 x 60%<br>=<br>$290,000 |
| 2. | Nothing recorded for the eight claims to be dismissed<br>Claim #9 is likely to be paid (60%)<br>Accrued at most likely outcome, $50,000 |
| 3. | Payout is not likely (60% chance of dismissal)<br><br>No accrual; most likely outcome |

**Assignment 12-11**

*Requirement 1*

31 December 20x5—Adjusting entry to accrue vacation salaries not yet taken or paid:

| | | |
|---|---|---|
| Salary expense | 6,000 | |
| Liability for compensated absences | | 6,000 |

During 20x6—Vacation time carryover taken and paid:

| | | |
|---|---|---|
| Liability for compensated absences | 6,000 | |
| Cash (included in payroll entry) | | 6,000 |

*Requirement 2*

Total wage expense:
20x5: $700,000 + $6,000 = $706,000
20x6: $740,000 - $6,000 = $734,000

20x5 statement of financial position:
Current liabilities:
Liability for compensated absences ........................ $6,000

Retained earnings would have decreased by $6,000.

**Assignment 12-12**

*Requirement 1*

A provision is a liability of uncertain timing or amount.

*Requirement 2*

The warranty is both current and non current since about half was utilized this year and about half is remaining.

*Requirement 3*

A constructive liability is one that is not caused by contract or legislation. Instead, it arises because of a pattern of past action, established policy, or public statement upon which others rely. For a warranty, a constructive liability might arise because the company has announced a repair program in excess of current warranty requirements.

*Requirement 4*

The $1,164 of additional provision created is the expense for the year, the warranty expense associated with sales or actions of the period.

*Requirement 5*

The $1,164 of current expense is based on the best estimate of cost to be incurred in the future. This is an expected value for a large population.

*Requirement 6*

The $690 utilized during the year is the amount spent on warranty work during the year.

*Requirement 7*

The $80 unwinding of the discount is the interest expense for the year. The provision for warranty must be a discounted amount, reflecting a multi-year warranty.

## Assignment 12-13

*Requirement 1*

*20X5*

| | | |
|---|---|---|
| Cash, accounts receivable | 4,600,000 | |
| Sales revenue | | 4,600,000 |
| | | |
| Warranty expense (6% of sales) | 276,000 | |
| Provision for warranty | | 276,000 |
| | | |
| Provision for warranty | 31,000 | |
| Inventory | | 9,000 |
| Cash | | 22,000 |

*20X6*

| | | |
|---|---|---|
| Cash, accounts receivable | 6,100,000 | |
| Sales revenue | | 6,100,000 |
| | | |
| Warranty expense (6% of sales) | 366,000 | |
| Provision for warranty | | 366,000 |
| | | |
| Provision for warranty | 415,000 | |
| Inventory | | 126,000 |
| Cash | | 289,000 |
| | | |
| Warranty expense (8% - 6% of total 20X5 and 20X6 sales) | 214,000 | |
| Provision for warranty | | 214,000 |
| | | |
| Warranty expense (1% of total 20X5 and 20X6 sales) | 107,000 | |
| Provision for warranty | | 107,000 |

*Requirement 2*

*31 December 20x5*

Provision for warranty ($145,000 + 276,000 - $31,000) .............. $390,000

*31 December 20x6*

Provision for warranty ($390,000 + $366,000 - $415,000
+ $214,000 + $107,000) .............. $662,000

**Assignment 12-14**

*Requirement 1*

*20X5*

| | | |
|---|---|---|
| Cash, accounts receivable ($610 x 700 units) | 427,000 | |
| Sales revenue | | 427,000 |
| | | |
| Warranty expense ($75 x 700 units) | 52,500 | |
| Cash | | 52,500 |
| | | |
| Cash, accounts receivable ($700 x 600 units) | 420,000 | |
| Sales revenue | | 420,000 |
| | | |
| Warranty expense (10% of sales) | 42,000 | |
| Provision for warranty | | 42,000 |
| | | |
| Provision for warranty | 10,000 | |
| Inventory, cash, etc. | | 10,000 |

*20X6*

| | | |
|---|---|---|
| Cash, accounts receivable ($660 x 1,000 units) | 660,000 | |
| Sales revenue | | 660,000 |
| | | |
| Warranty expense ($75 x 1,000 units) | 75,000 | |
| Cash | | 75,000 |
| | | |
| Cash, accounts receivable ($750 x 800 units) | 600,000 | |
| Sales revenue | | 600,000 |
| | | |
| Warranty expense (10% of sales) | 60,000 | |
| Provision for warranty | | 60,000 |
| | | |
| Provision for warranty | 31,600 | |
| Inventory, cash, etc. | | 31,600 |

*20X7*

| | | |
|---|---|---|
| Provision for warranty | 42,000 | |
| Inventory, cash, etc. | | 42,000 |

*Requirement 2*

| | 20x5 | 20x6 | 20x7 |
|---|---|---|---|
| Warranty expense | | | |
| Line A | $ 52,500 | $ 75,000 | |
| Line B | 42,000 | 60,000 | |
| Total | $ 94,500 | $135,000 | nil |

*Requirement 3*

*31 December 20x5*
Provision for warranty ($42,000 - $10,000) ................................. $32,000

*31 December 20x6*
Provision for warranty ($32,000 + $60,000 - $31,600) ................ $60,400

*31 December 20x7*
Provision for warranty ($60,400 - $42,000) ................................ $18,400

*Requirement 4*

At the end of 20X7, the company obligations for Line B warranty work are as follows:

20X5 - some year 3 warranty obligation for goods sold in (later) 20X5
20X6 - some year 2 warranty obligation and all the year 3 warranty obligation

**Assignment 12-15**

*Requirement 1*

No, Bay Lake Mining Ltd does not have a no-interest loan. The substance of the transaction is that part of the amount they pay in three years' time is interest, and part is principal. The value of the equipment is overstated at $425,000.

*Requirement 2*

Present value:
$425,000 (P/F, 6%, 3) = $425,000 × (0.83962).................................................... $356,839

*Requirement 3*

The discount rate should be a borrowing rate for similar amount, term and security.

(If the equipment had a determinable cash fair value (i.e., what amount of cash would have to be paid to buy the equipment outright in 20X6), then this could be used as a discounted amount, and then the interest rate could be imputed.)

*Requirement 4*

| **(1)** **Opening Net Liability** | **(2)** **Interest Expense @ Market Rate** **(1) × 6%** | **(3)** **Closing Net Liability** **(1) + (2)** |
|---|---|---|
| $356,839 | $21,410 | $378,249 |
| 378,249 | 22,695 | 400,944 |
| 400,944 | 24,056 | 425,000 |

*Requirement 5*

| | | |
|---|---|---|
| *1 August 20x6* | | |
| Equipment | 356,839 | |
| Discount on note payable | 68,161 | |
| Note payable | | 425,000 |
| *31 December 20x6* | | |
| Interest expense ($21,410 x 5/12) | 8,921 | |
| Discount on note payable | | 8,921 |
| *31 July 20x7* | | |
| Interest expense ($21,410 x 7/12) | 12,489 | |
| Discount on note payable | | 12,489 |
| *31 December 20x7* | | |
| Interest expense ($22,695 x 5/12) | 9,456 | |
| Discount on note payable | | 9,456 |

*Requirement 6*

| | | |
|---|---|---|
| *31 December 20x6* | | |
| Note payable | $425,000 | |
| Less: Discount ($68,161 - $8,921) | (59,240) | $365,760 |
| *31 December 20x7* | | |
| Note payable | $425,000 | |
| Less: Discount ($59,240 - $12,489 - $9,456) | (37,295) | $387,705 |

## Assignment 12-16 (WEB)

*Requirement 1*

| | |
|---|---|
| Principal $90,000 (P/F, 8%, 2) = $90,000 × (0.85734) ........................................ | $77,161 |
| Interest $1,800 (P/A, 8%, 2) = $1,800 × (1.78326) ................................................ | 3,209 |
| | $80,370 |

*Requirement 2*

| (1) Opening Net Liability | (2) Interest Expense 8% Market Rate | (3) Interest Paid | (4) Discount Amortization (2) – (3) | (5) Closing Net Liability (1) + (4) |
|---|---|---|---|---|
| $80,370 | $6,430 | $1,800 | $4,630 | $85,000 |
| $85,000 | 6,800 | 1,800 | 5,000 | 90,000 |

*Requirement 3*

| | | |
|---|---|---|
| *1 September 20x7* | | |
| Inventory.......................................................................... | 80,370 | |
| Discount on note payable............................................................ | 9,630 | |
| Note payable .......................................................................... | | 90,000 |
| *31 December 20x7* | | |
| Interest expense ($6,430 x 4/12)................................................... | 2,143 | |
| Discount on note payable ($4,630 x 4/12) ........................ | | 1,543 |
| Interest payable ($1,800 x 4/12)...................................... | | 600 |
| *31 August 20x8* | | |
| Interest expense ($6,430 x 8/12) .................................................. | 4,287 | |
| Interest payable .................................................................... | 600 | |
| Discount on note payable ($4,630 x 8/12) ........................ | | 3,087 |
| Cash .................................................................................. | | 1,800 |
| *31 December 20x8* | | |
| Interest expense ($6,800 x 4/12)................................................... | 2,267 | |
| Discount on note payable ($5,000 x 4/12) ........................ | | 1,667 |
| Interest payable ($1,800 x 4/12)...................................... | | 600 |
| *31 August 20x9* | | |
| Interest expense ($6,800 x 8/12) .................................................. | 4,533 | |
| Interest payable .................................................................... | 600 | |
| Discount on note payable ($5,000 x 8/12) ........................ | | 3,334 |
| Cash .................................................................................. | | 1,800 |
| Note payable ........................................................................ | 90,000 | |
| Cash ................................................................................ | | 90,000 |

**Assignment 12-17**

*Requirement 1*

| | |
|---|---|
| Principal \$1,600,000 (P/F, 6%, 3) = \$1,600,000 × (0.83962) | \$1,343,392 |
| Interest \$32,000 (P/A, 6%, 3) = \$32,000 × (2.67301) | 85,536 |
| | \$1,428,928 |

*Requirement 2*

| | Debit | Credit |
|---|---|---|
| 1 January 20x9 | | |
| Cash | 1,428,928 | |
| Discount on notes payable | 171,072 | |
| Notes payable | | 1,600,000 |
| | | |
| 31 December 20x9 | | |
| Interest expense (\$1,428,928 × .06) | 85,736 | |
| Discount on notes payable | | 53,736 |
| Cash | | 32,000 |
| | | |
| 31 December 20x10 | | |
| Interest expense (\$1,428,928 + \$53,736 = \$1,482,664) × .06 | 88,960 | |
| Discount on notes payable | | 56,960 |
| Cash | | 32,000 |
| | | |
| 31 December 20x11 | | |
| Interest expense (\$1,482,664 + \$56,960 = \$1,539,624) × .06 | 92,376 | |
| Discount on notes payable | | 60,376 |
| Cash | | 32,000 |

(rounding in 20x9 and 20x10 causes \$1 difference in 20x11 rounded down)

| | | |
|---|---|---|
| Notes payable | 1,600,000 | |
| Cash | | 1,600,000 |

## Assignment 12-18

*Requirement 1*

Discounting is required to reflect the substance of the transaction. Because the time period is longer than one year and there is no stated interest rate, the eventual payment is partially principal and partly interest. The two elements must be separately recognized.

*Requirement 2*

Present value $500,000 (P/F, 7%, 2) = $500,000 × (0.87344) ..............................$436,720

*Requirement 3*

The discount rate should be a borrowing rate for similar amount, term and security.

*Requirement 4*

| **(1)**<br>**Opening**<br>**Net Liability** | **(2)**<br>**Interest Expense @ Market Rate**<br>**(1) × 7%** | **(3)**<br>**Closing Net Liability**<br>**(1) + (2)** |
|---|---|---|
| $436,720 | $30,570 | $467,290 |
| 467,290 | 32,710 | 500,000 |

*Requirement 5*

| | | |
|---|---|---|
| *30 September 20x6* | | |
| Loss on legal issue (expense, etc.) | 436,720 | |
| Provision for legal loss | | 436,720 |
| *31 December 20x6* | | |
| Interest expense ($30,570 x 3/12) | 7,643 | |
| Provision for legal loss | | 7,643 |
| *30 September 20x7* | | |
| Interest expense ($30,570 x 9/12) | 22,927 | |
| Provision for legal loss | | 22,927 |
| *31 December 20x7* | | |
| Interest expense ($32,710 x 3/12) | 8,178 | |
| Provision for legal loss | | 8,178 |
| *30 September 20x8* | | |
| Interest expense ($32,710 x 9/12) | 24,532 | |
| Provision for legal loss | | 24,532 |
| Provision for legal loss | 500,000 | |
| Cash | | 500,000 |

*Requirement 6*

| | |
|---|---|
| *31 December 20x6* | |
| Provision for legal loss ($436,720 + $7,643) | $444,363 |
| *31 December 20x7* | |
| Provision for legal loss ($444,363 + $22,927 + $8,178) | $475,468 |

*Requirement 7*

The provision would not be discounted if there was significant uncertainty about amounts or timing. It would be recorded at its undiscounted amount.

**Assignment 12-19**

*Requirement 1*

Present value \$2,700,000 (P/F, 8%, 5) = \$2,700,000 × (0.68058) .........................$\underline{\underline{\$1,837,566}}$

*Requirement 2*

| **(1)** **Opening Net Liability** | **(2)** **Interest Expense @ Market Rate** **(1) × 8%** | **(3)** **Closing Net Liability** **(1) + (2)** |
|---|---|---|
| \$1,837,566 | \$147,005 | \$1,984,571 |
| 1,984,571 | 158,766 | 2,143,337 |
| 2,143,337 | 171,467 | 2,314,804 |
| 2,314,804 | 185,184 | 2,499,988 |
| 2,499,988 | 200,012 * | 2,700,000 |

* Adjusted by \$12 to balance

*Requirement 3*

Revised present value \$3,400,000 (P/F, 8%, 3) = \$3,400,000 × (0.79383)............\$2,699,022

Interest expense, 20x6 (line 2 of table above) .......................................................\$ 158,766

Adjustment to asset and obligation (\$2,699,022 less \$2,143,337 (Table, above)) .\$ 555,685

Table

| (1) Opening Net Liability | (2) Interest Expense @ Market Rate (1) × 8% | (3) Closing Net Liability (1) + (2) |
|---|---|---|
| \$2,699,022 | \$215,922 | \$2,914,944 |
| 2,914,944 | 233,196 | 3,148,140 |
| 3,148,140 | 251,860* | 3,400,000 |

* Adjusted by \$9 to balance

*Requirement 4*

Revised present value \$2,900,000 (P/F, 7%, 1) = \$2,900,000 × (0.93458)............\$2,710,282

Interest expense, 20x8 (line 2 of table above) .......................................................\$ 233,196

Adjustment to asset and obligation (\$2,710,282 less \$3,148,140 (Table, above)) .\$ (437,858)

*Requirement 5*

Balance in decommissioning obligation, 31 December:

| | |
|---|---|
| 20X5 | \$1,984,571 |
| 20X6 | \$2,699,022 |
| 20X7 | \$2,914,944 |
| 20X8 | \$2,710,282 |

**Assignment 12-20**

*Requirement 1*

| | | |
|---|---|---|
| *January 20x2* | | |
| Mine site 1 ........................................................................ | 408,150 | |
| Decommissioning obligation, mine site 1......................... | | 408,150 |
| $500,000 (P/F, 7%, 3) | | |
| | | |
| *30 September 20x2* | | |
| Mine site 2 ........................................................................ | 855,588 | |
| Decommissioning obligation, mine site 2......................... | | 855,588 |
| $1,200,000 (P/F, 7%, 5) | | |
| | | |
| *31 December 20x2* | | |
| Interest expense ($408,150 x 7%) ................................................ | 28,570 | |
| Decommissioning obligation, mine site 1 ........................ | | 28,570 |
| Balance: $408,150 + $28,570 = $436,720 | | |
| | | |
| Interest expense ($855,588 x 7% x 3/12) ..................................... | 14,973 | |
| Decommissioning obligation, mine site 2 ........................ | | 14,973 |
| | | |
| *30 September 20x3* | | |
| Interest expense ($855,588 x 7% x 9/12) ..................................... | 44,918 | |
| Decommissioning obligation, mine site 2 ........................ | | 44,918 |
| Balance: $855,588 + $14,973 + $44,918 = $915,479 | | |
| | | |
| *31 December 20x3* | | |
| Interest expense ($436,720 x 7%) ................................................ | 30,570 | |
| Decommissioning obligation, mine site 1 ........................ | | 30,570 |
| Balance: $436,720 + $30,570 = $467,290 | | |
| | | |
| Mine site 1 ........................................................................ | 100,446 | |
| Decommissioning obligation, mine site 1......................... | | 100,446 |
| $500,000 (1.3) = $650,000(P/F, 7%, 2) = $567,736 versus $467,290 | | |
| | | |
| Interest expense ($915,479 x 7% x 3/12) ..................................... | 16,021 | |
| Decommissioning obligation, mine site 2 ........................ | | 16,021 |
| | | |
| *30 September 20x4* | | |
| Interest expense ($915,479 x 7% x 9/12) ..................................... | 48,063 | |
| Decommissioning obligation, mine site 2 ........................ | | 48,063 |
| Balance: $915,479 + $16,021 + $48,063 = $979,563 | | |

| | | |
|---|---|---|
| Decommissioning obligation, mine site 2 | 193,467 | |
| Mine site 2 | | 193,467 |

$900,000 (P/F, 7%, 2) = $786,096 versus $979,563

*31 December 20x4*

| | | |
|---|---|---|
| Interest expense ($567,736 x 7%) | 39,742 | |
| Decommissioning obligation, mine site 1 | | 39,742 |

Balance: $567,736 + $39,742 = $607,478

| | | |
|---|---|---|
| Interest expense ($786,096 x 7% x 3/12) | 13,757 | |
| Decommissioning obligation, mine site 2 | | 13,757 |

*Requirement 2*

*31 December 20x2*

Decommissioning obligation ($436,720 + $855,588 + $14,973 ) . $1,307,281

*31 December 20x3*

Decommissioning obligation ($567,736 + $915,479 + $ 16,021) $1,499,236

*31 December 20x4*

Decommissioning obligation ($607,478 + $786,096 + $13,757) .. $1,407,331

**Assignment 12-21**

*Requirement 1*

| | **Classification** |
|---|---|
| Trade accounts payable | Current liability* |
| Dividends payable | Current liability* |
| Provision for restructuring | Current liability; 20X6 payment |
| Provision for coupon refunds | Current liability* |
| Decommissioning obligation | Long-term liability; 20X9 payment |
| Note payable, 8% | Current liability; refinancing negotiations not complete. Refinancing must be completed by year end to be classified as non current. |
| Note payable, net, 6% | Long-term** |

*Most logical assumption is 20X6 payment
** Multi-year note payable issued in 20X5; not yet current.

*Requirement 2*

SFP items:

| Classification | Item | Amount |
|---|---|---|
| Operating | Increase in accounts payable | $ 283,300 |
| Financing | Paid dividends | (90,000) |
| Operating | Add back: non-cash restructuring | 260,000 |
| Operating | Add back: increase in coupon liability | 35,000 |
| Operating | Add back: non-cash interest expense | 6,000 |
| Financing | Borrowed under note payable | 400,000 |
| Operating | Add back: non-cash interest expense | 4,000 |

Note: the non-cash $89,000 acquisition of equipment would be included in the disclosure notes.

**Assignment 12-22**

SFP items:

| Classification | Item | Amount |
|---|---|---|
| Operating | Decrease in accounts payable | $ (193,300) |
| Financing | Paid dividends* | (115,000) |
| Operating | Add back: non-cash litigation expense | 160,000 |
| Operating | Add back: non-cash interest expense | 6,700 |
| Financing | Repaid note payable | (200,000) |
| Operating | Add back: non-cash interest expense | 4,400 |

*(25,000 balance in 20X1 + 100,000 declared – 10,000 closing balance)

## Assignment 12-23 ASPE

*Requirement 1*

Under IFRS, the loan would be short-term. Classification is based on the legal status on the balance sheet date, and refinancing agreement is not complete at that point.

*Requirement 2*

Under IFRS, the $200,000 donation commitment would be recorded as a provision, because there has been a public announcement which is being relied upon. This is a constructive liability.

*Requirement 3*

Under ASPE, the loan would be long-term. Classification is based on the legal status when the statements are finalized, and the refinancing agreement was completed in January before the financial statements were released.

The $200,000 commitment would not be recorded as a liability under ASPE, since it is a constructive obligation, not a legal liability. Constructive obligations are not recorded under ASPE.

**Assignment 12-24 ASPE (WEB)**

*Requirement 1*

Present value (unchanged from 12-16)

| | |
|---|---|
| Principal \$90,000 (P/F, 8%, 2) = \$90,000 × (0.85734) ........................................ | \$77,161 |
| Interest \$1,800 (P/A, 8%, 2) = \$1,800 × (1.78326) ............................................... | 3,209 |
| | \$80,370 |

Discount: (\$90,000 - \$80,370) = \$9,630
Allocated evenly over two years = \$4,815 per year

Table:

| (1) Opening Net Liability | (2) Interest Expense | (3) Interest Paid | (4) Discount Amortization | (5) Closing Net Liability (1) + (4) |
|---|---|---|---|---|
| \$80,370 | \$6,615 | \$1,800 | \$4,815 | \$85,185 |
| \$85,185 | 6,615 | 1,800 | 4,815 | 90,000 |

*Entries:*

*1 September 20x7*

| | | |
|---|---|---|
| Inventory ........................................................................... | 80,370 | |
| Discount on note payable............................................................ | 9,630 | |
| Note payable .......................................................................... | | 90,000 |

*31 December 20x7*

| | | |
|---|---|---|
| Interest expense (\$6,615 x 4/12).................................................. | 2,205 | |
| Discount on note payable (\$4,815 x 4/12) ........................ | | 1,605 |
| Interest payable (\$1,800 x 4/12)...................................... | | 600 |

*31 August 20x8*

| | | |
|---|---|---|
| Interest expense (\$6,615 x 8/12) ................................................ | 4,410 | |
| Interest payable ....................................................................... | 600 | |
| Discount on note payable (\$4,815 x 8/12) ........................ | | 3,210 |
| Cash .................................................................................. | | 1,800 |

*31 December 20x8*

| | | |
|---|---|---|
| Interest expense ($6,615 x 4/12)................................................... | 2,205 | |
| Discount on note payable ($4,815 x 4/12) ........................ | | 1,605 |
| Interest payable ($1,800 x 4/12)....................................... | | 600 |

*31 August 20x9*

| | | |
|---|---|---|
| Interest expense ($6,615 x 8/12) .................................................. | 4,410 | |
| Interest payable ............................................................................. | 600 | |
| Discount on note payable ($4,815 x 8/12) ........................ | | 3,210 |
| Cash ................................................................................... | | 1,800 |
| Note payable ................................................................................. | 90,000 | |
| Cash ........................................................................................ | | 90,000 |

*Requirement 2*

The effective interest method is the more accurate measure of interest expense, because it provides a constant yield on the opening liability balance. ASPE allows straight-line amortization because it is simple, and the restricted user group is felt to be adequately served by the policy.

**Assignment 12-25 ASPE**

*Requirement 1*

Present value (unchanged from 12-17)

| | |
|---|---|
| Principal $1,600,000 (P/F, 6%, 3) = $1,600,000 × (0.83962) | $1,343,392 |
| Interest $32,000 (P/A, 6%, 3) = $32,000 × (2.67301) | 85,536 |
| | $1,428,928 |

Entries:

| | Dr. | Cr. |
|---|---|---|
| 1 January 20x9 | | |
| Cash | 1,428,928 | |
| Discount on notes payable | 171,072 | |
| Notes payable | | 1,600,000 |
| | | |
| 31 December 20x9 | | |
| Interest expense | 89,024 | |
| Discount on notes payable ($171,072 / 3) | | 57,024 |
| Cash | | 32,000 |
| | | |
| 31 December 20x10 | | |
| Interest expense | 89,024 | |
| Discount on notes payable ($171,072 / 3) | | 57,024 |
| Cash | | 32,000 |
| | | |
| 31 December 20x11 | | |
| Interest expense | 89,024 | |
| Discount on notes payable ($171,072 / 3) | | 57,024 |
| Cash | | 32,000 |
| | | |
| Notes payable | 1,600,000 | |
| Cash | | 1,600,000 |

*Requirement 2*

The effective interest method is the more accurate measure of interest expense, because it provides a constant yield on the opening liability balance. ASPE allows straight-line amortization because it is simple, and the restricted user group is felt to be adequately served by the policy.