

Solution Manual for

Intermediate Accounting Volume 2 8th Edition Thomas H. Beechy, Joan E. Conrod, Elizabeth Farrell, Ingrid McLeod-Dick, Kayla Tomulka, Romi-Lee Sevel

Chapter 12-22

Chapter 12: Financial Liabilities and Provisions

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Suggested Time

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Winter Fun Incorporated

To: Members of Board of Directors

From: Accounting Consultant

RE: Winter Fun Incorporated

Overview

Winter Fun Incorporated (WFI) uses IFRS for financial reporting. 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 and faced a loss so the bank financing is critical to your operations.

Issues

1. Revenue recognition memberships
2. Revenue recognition guests
3. Special promotions
4. Coupons
5. Manufacturer Loan
6. Lawsuit
7. Warranty
8. Gasoline storage tanks
9. Foreign currency payables
10. Compensated absences

Analysis and Recommendations

1. Revenue recognition memberships

Following the 5 step IFRS model:

Initiation fee

Step 1: The contract with the customer is for the membership in the club. This would be a written agreement between the member and WFI.

Step 2: 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.

Step 3: 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.

Step 4: No allocation since there is only one performance obligation.

Step 5: 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.

Annual fee

Step 1: The annual fee is a written agreement between the member and WFI.

Step 2: There is again one performance obligation, the service for this year.

Step 3: 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.

Step 4: There is no allocation since there is only one performance obligation.

Step 5: 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.

2. Revenue recognition guests

Following the 5 step IFRS model:

Step 1: 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.

Step 2: The performance obligation is the right to ski that day.

Step 3: The overall contract price is the price of the ski ticket.

Step 4: There is no allocation since there is only one performance obligation.

Step 5: 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.

3. Special promotions

Following the 5 step IFRS model:

Step 1: The contract with the customer is the written contract when they receive the ticket and the right to a future lesson.

Step 2: There are two separate performance obligations the right to ski and the right to the lesson.

Step 3: The total contract price is \$100.

Step 4: 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\% \times 100 = \61.50 |
| Fair value lesson | $\underline{50} = 38.5\% \times 100 = \38.50 |
| Total fair value | <u>130</u> |

Step 5: The \$61.50 allocated to the performance obligation for the ski pass 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.

4. 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 WFI would still be selling the ski pass at a profit. Therefore, the coupons should only be recognized as a cost when they are redeemed.

5. Manufacturer 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 and not to elect FVPL. WFI 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.

6. 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 management's best estimate. Since there is a range, this would be the midpoint of the range or \$250,000 should be accrued as a provision, assuming each point is equally likely. In addition, there would be note disclosure on the details of the lawsuit. This liability would be current if the payment is expected to be made next year, which would have a negative impact on the current ratio.

7. Warranty

The warranty is not a separate performance obligation – it is an assurance warranty (also known as a standard warranty). In the period in which the skis are sold, a warranty provision should be set up for the estimated costs to be incurred to service the skis as long as the warranty costs are considered probable. If historically costs are low, the provision may be small.

The provision is set up with a debit to warranty expense and credit to the provision for warranty. Subsequently, when costs are incurred, the warranty provision is debited, and cash, parts or other materials is credited.

Since the warranty provides a lifetime guarantee, at least a portion would likely be a non-current liability. The portion that is expected to relate to the following year, would be reported as a current liability at the reporting date. Any current portion would affect the current ratio negatively.

8. 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 (the \$788,100 is added to the \$10M) would be depreciated over the 15 years which would be \$719,207 of depreciation expense in 20X5. Interest expense of \$63,048 ($\$788,100 \times 8\%$) 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.

9. Foreign currency payables

The following entries are required for the foreign currency inventory purchase:

| | |
|-----------------------------------|---------|
| Inventory (150,000 x \$1.11)..... | 166,500 |
| Accounts payable..... | 166,500 |
| Accounts payable..... | 166,500 |
| Foreign exchange loss..... | 12,000 |
| Cash (150,000 x 1.19)..... | 178,500 |

The payable has been settled by year-end, therefore there is no impact on the current ratio.

10. Compensated absences

WFI must record a provision for compensated absences at the December 31, 20X5 year-end through an adjusting entry.

The calculation is as follows:

7 employees x \$22 x 7.5 hours x 11 days = \$12,705

14 employees x \$22 x 7.5 hours x 9 days = \$20,790

Total: \$33,495

| | |
|---|--------|
| Salary expense..... | 33,495 |
| Provision for compensated absences..... | 33,495 |

Since the carried forward vacation must be used the following year, the provision for compensated absences is a current liability. Recording the provision therefore negatively impacts the current ratio.

Case 12-2 (LO12.2, LO12.5)

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, a measure important for analysts.

Currently, a sales 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 currently 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 filled 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 (LO12.5, LO12.10)

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 select 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

Based on the information provided in the question, a statement of cash flows may be prepared to determine cash flow from operations (Refer to Exhibit I in the solution). 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 | <u>440</u> |
| | | \$ 1,110 |

This is an additional liability and expense of \$280 (\$1,110 calculation per above less \$830 current accrual; Refer to Exhibit 2).

b. Depreciation policy

Retaining prior years' estimates for depreciation amounts would result in \$200 additional depreciation. (Depreciation was recorded for \$3,900 but if prior year estimates and amounts had been used, depreciation would be \$4,100, an additional \$200. Refer to 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. ($\$4,000 \times 30\% = \$1,200$ versus $\$4,000 \times 45\% = \$1,800$, a difference of \$600. Refer to 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.

Overall 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

| | | |
|---|--------------|------------------|
| <i>Operating Activities:</i> | | |
| Net income | \$1,535 | |
| Adjustments for non-cash items: | | |
| Depreciation..... | 3,900 | |
| Interest | <u>21</u> | |
| | 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..... | <u>4,521</u> | |
| | | (800) |
| Cash paid for common dividends (\$1,535 + \$643 = \$2,178- \$1,257) | | <u>(921)*</u> |
| Net cash provided (used) by operations | | <u>\$(1,721)</u> |

*assuming dividends are recorded as operating activities and not as financing activities in IFRS

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

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) | <u>(34,120)</u> |
| Earnings and comprehensive income | <u>\$ (320)</u> |

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 | <u>16</u> | |
| | 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..... | <u>5,401</u> | |
| | | (800) |
| Cash paid for common dividends (unchanged)..... | | <u>(921)</u> |
| Net cash provided (used) by operations | | <u><u>\$(1,721)</u></u> |

Technical Review

Technical Review 12-1 (LO12.1, LO12.2, LO12.3, LO12.4, LO12.5, LO12.8)

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 (LO12.1, LO12.2, LO12.3, LO12.4, LO12.5, LO12.8)

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 (LO12.5)

| <i>Case</i> | <i>Most likely outcome</i> | <i>Expected value</i> | <i>To record</i> |
|-------------|--|--|---|
| 1. | Most likely outcome is 0, p = 30% | Expected value is $(\$100,000 \times 10\%) +$ $(\$200,000 \times 10\%) +$ $(\$300,000 \times 5\%) +$ $(\$400,000 \times 5\%) =$ \$65,000. (Still less than the amount of one payout) | No accrual based on most likely outcome, which is less than 50%. |
| 2. | The most likely payout is \$200,000 (60% chance of two payouts at \$100,000 each) | Expected value is $(\$100,000 \times 10\%) +$ $(\$200,000 \times 60\%) +$ $(\$300,000 \times 5\%) +$ $(\$400,000 \times 15\%) =$ \$205,000. (Very close to most likely outcome) | Accrual of \$200,000 based on most likely outcome. |
| 3. | Likely (90%) chance of payout. The most likely payout is \$100,000 (30% chance of one payout). However, based on cumulative probabilities (20% chance of 2 payouts, 20% chance of 3 payouts, 20% chance of 4 payouts), there is a 60% chance that at least two will be paid out therefore the most likely payout is \$200,000. | Expected value is $(\$100,000 \times 30\%) +$ $(\$200,000 \times 20\%) +$ $(\$300,000 \times 20\%) +$ $(\$400,000 \times 20\%) =$ \$210,000. (NOT close to most likely outcome) | Accrual of \$210,000. 60% chance that payout is higher than \$100,000 so accrual of most likely outcome is not adequate. However, expected value is close to the cumulative probabilities. |

Technical Review 12-4 (LO12.2)

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

Technical Review 12-5 (LO12.2)

Requirement 1

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

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 (LO12.3)

- 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 (LO12.2)

1 October 20x6

| | | |
|--------------------|---------|---------|
| Cash | 120,000 | |
| Note payable | | 120,000 |

31 December 20x6

| | | |
|---|-------|-------|
| Interest expense ($\$120,000 \times 9\% \times 3/12$) | 2,700 | |
| Interest payable | | 2,700 |

30 September 20x7

| | | |
|---|-------|--------|
| Interest expense ($\$120,000 \times 9\% \times 9/12$) | 8,100 | |
| Interest payable | 2,700 | |
| Cash ($120,000 \times 9\%$)..... | | 10,800 |

31 December 20x7

| | | |
|---|-------|-------|
| Interest expense ($\$120,000 \times 9\% \times 3/12$) | 2,700 | |
| Interest payable | | 2,700 |

30 September 20x8

| | | |
|---|---------|---------|
| Interest expense ($\$120,000 \times 9\% \times 9/12$) | 8,100 | |
| Interest payable | 2,700 | |
| Cash ($120,000 \times 9\%$)..... | | 10,800 |
| Note payable | 120,000 | |
| Cash | | 120,000 |

Technical Review 12-8 (LO12.6)

Requirement 1

Principal \$250,000 (P/F, 7%, 2) = $\$250,000 \times (0.87344)$ \$218,360
Interest \$5,000 (P/A, 7%, 2) = $\$5,000 \times (1.80802)$ 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 (LO12.6)

Requirement 1

Present value \$420,000 (P/F, 6%, 10) = $\$420,000 \times (0.55839)$ \$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) = $\$490,000 \times (0.58349)$ \$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 (LO12.8)

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

Assignments

Assignment 12-1 (LO12.1, LO12.2, LO12.11)

Requirement 1

| Liability | Financial or non-financial liability | Explanation |
|------------------|---|---|
| A | Non-financial liability | The liability relates to future delivery/provision of goods or services |
| B | Financial liability | There is another party with a financial asset; there is a contract in place |
| C | Non-financial liability | There is no contract in place |
| D | Financial liability | Contract in place; Will be settled in cash |
| E | Non-financial liability | There is no contract in place |
| F | Financial liability | Contract in place; Will be settled in cash |
| G | Financial liability | Contact in place or constructive obligation; Will be settled in cash |
| H | Non-financial liability | There is no contract in place; not payable in cash |

Requirement 2

IFRS recognizes both legal and constructive obligations. Under ASPE only legal obligations are recognized.

Assignment 12-2 (LO12.2, LO12.11)

Requirement 1

| | |
|----|--|
| a. | Dr. Purchases \$256,000 Cr. Accounts payable \$256,000 |
| b. | Dr. vehicle \$25,000 Cr. Cash \$5,000 Cr. Note payable \$20,000 To accrue interest for October: $20,000 \times 6\% / 12 = 100$ Dr. Interest expense \$100 Cr. interest payable \$100 |
| c. | Dr. Accounts payable \$64,000 (256,000 x 25%) Cr. Cash \$64,000 |
| d. | Dr. Dividends Declared (or retained earnings) \$20,000 Cr. Dividends payable \$20,000 |
| e. | Dr. Cash \$3,000 Cr. Customer deposit liability \$3,000 |
| f. | Dr. Property tax expense \$250 Cr. Property tax payable \$250 (Accounts payable is acceptable as well) |
| g. | Dr. Salaries and wages expense \$7,200 Cr. Salaries and wages payable \$7,200 (Accounts payable is acceptable as well) |
| h. | Dr. Utilities expense \$1,555 Cr. Accounts payable (or Utilities payable) \$1,555 |
| i | No entry required since loan guarantees are not recorded if there is a 0% chance of payout. Note that loan guarantees that are recorded are financial liabilities of the guarantor. |

Requirement 2

None of the liabilities are non-financial.

Assignment 12-3 (LO12.2)

Requirement 1

| | | |
|--|---------|---------|
| 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 12-4 (LO12.2)

| | | |
|---|------------|------------|
| a. Cash | 3,780,000 | |
| Sales revenue | | 3,600,000 |
| GST payable ($\$3,600,000 \times 5\%$) | | 180,000 |
| b. Cash | 13,020,000 | |
| Sales revenue | | 12,400,000 |
| GST payable ($\$12,400,000 \times 5\%$) | | 620,000 |
| c. Equipment | 1,250,000 | |
| GST payable ($\$1,250,000 \times 5\%$) | 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 ($\$2,800,000 \times 5\%$) | | 140,000 |
| f. Inventory (or purchases) | 12,200,000 | |
| GST payable ($\$12,200,000 \times 5\%$) | 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 ($\$1,200 \times 2$) | | 2,400 |
| EI payable ($\$1,400 \times 2 \times 1.4$) | | 3,920 |
| i. Employee income tax payable | 14,800 | |
| EI payable ($\$1,400 \times 2$) + $\$3,920$ | 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 12-5 (LO12.2)

Liabilities:

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

(1) $\$43,000 + \$708,000 - (\$1,920,000 \times 5\%) - \$533,000 = \$122,000$

(2) $\$2,600 + \$21,400 + \$23,400 = \$47,400$

(3) $\$1,900 + \$2,800 + \$3,000 + \text{employer, } \$5,800 = \$13,500$

(4) $\$800 + \$2,400 + \$2,800 + \text{employer, } (\$5,200 \times 1.4) = \$13,280$

Assignment 12-6 (LO12.3)

Requirement 1

1)

| | | |
|----------------------------------|--------|--------|
| Inventory (50,000 x \$1.09)..... | 54,500 | |
| Accounts payable..... | | 54,500 |

2)

| | | |
|-----------------------------------|---------|---------|
| Inventory (200,000 x \$1.29)..... | 258,000 | |
| Accounts payable..... | | 258,000 |

3)

| | | |
|----------------------------------|--------|--------|
| Inventory (75,000 x \$1.18)..... | 88,500 | |
| Accounts payable..... | | 88,500 |

4)

| | | |
|----------------------------|--------|--------|
| Accounts payable..... | 54,500 | |
| Foreign exchange loss..... | 2,000 | |
| Cash (50,000 x 1.13)..... | | 56,500 |

5)

| | | |
|----------------------------|---------|---------|
| Accounts payable..... | 258,000 | |
| Cash (200,000 x 1.09)..... | | 218,000 |
| Foreign exchange gain..... | | 40,000 |

6)

| | | |
|----------------------------|--------|--------|
| Accounts payable..... | 88,500 | |
| Cash (75,000 x 1.09)..... | | 81,750 |
| Foreign exchange gain..... | | 6,750 |

Note: one account may be used for foreign exchange gains and losses.

Requirement 2

Historical cost is determined by the exchange rate at the date of the purchase transaction. Changes in foreign currency exchange rates after the date of the initial purchase transaction do not affect the amount initially recorded to inventory as the cost of the inventory.

Requirement 3

At reporting dates, foreign currency payables outstanding must be translated at the reporting date exchange rate (since the foreign currency payables are monetary items).

The adjustment to the payable account will result in either a foreign exchange gain or loss (note that the inventory account is unaffected by the change in exchange rate). Subsequently, when the liability is settled, a further exchange gain or loss may be recorded.

Assignment 12-7 (LO12.3)

| | | | |
|----|------------------------------------|---------|---------|
| 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 12-8 (LO12.2, LO12.5)

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 12-9 (LO12.4)

| <i>Item</i> | <i>Accounting treatment</i> |
|-------------|---|
| 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 12-10 (LO12.4, LO12.5)

| <i>Item</i> | <i>Accounting treatment</i> |
|-------------|---|
| 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 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%. 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%). |

Assignment 12-11 (LO12.4, LO12.5)

| <i>Item</i> | <i>Accounting treatment</i> |
|-------------|---|
| A. | Constructive obligation: Record costs of recall; may be an additional \$1,800,000 expense and liability ($\$1,200,000 \div 0.4 \times 0.6$) if costs are linear with progress. 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 12-12 (LO12.5)

| <i>Claim</i> | <i>Outcome</i> |
|--------------|---|
| 1. | Not likely; <50% probability of payout; no accrual. Disclosure. |
| 2. | Likely Accrual at best estimate, which is the most likely payout informed by expected value \$ 5,000,000 recorded |
| 3. | Likely Accrual at best estimate, which is the most likely outcome informed by expected value. Combined odds: 40% settlement $(60\% \times 30\%) = 18\%$ court dismissed $(60\% \times 70\%) = 42\%$ court payout Overall, most likely outcome (42%) is \$1,600,000 payout. Expected value is $(\$1,000,000 \times 40\%) + (\$1,600,000 \times 42\%) = \$1,072,000$. 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 12-13 (LO12.5)

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

Assignment 12-14 (LO12.5)

Requirement 1

December 31 20X7

Adjusting entry to accrue vacation salaries not yet taken or paid:

| | | |
|---|--------|--------|
| Salary expense..... | 10,000 | |
| Provision for compensated absences..... | | 10,000 |

During 20X8

Entry for vacation time carryover taken and paid:

| | | |
|---|--------|--------|
| Provision for compensated absences..... | 10,000 | |
| Cash..... | | 10,000 |

Requirement 2

If only part of the carried over vacation time was taken and paid, only that portion would be debited to the provision for compensated absences and credited to cash. The rest would be lost. The provision would need to be debited for the untaken/unpaid portion that employees lost to clear out the provision with a related credit recorded, taken into income.

Requirement 3

If employees are not able to carry over vacation entitlements, there is no provision for compensated absences recognized.

Assignment 12-15 (LO12.5, LO12.8)

Requirement 1

31 December 20X5—Adjusting entry to accrue vacation salaries not yet taken or paid:

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

During 20X6—Vacation time carryover taken and paid:

| | | |
|--|-------|-------|
| Provision 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: $\$740,000 - \$6,000 = \$734,000$

Requirement 3

20X5 statement of financial position:

Current liabilities:

| | |
|---|---------|
| Provision for compensated absences..... | \$6,000 |
|---|---------|

Retained earnings would have decreased by \$6,000.

Assignment 12-16 (LO12.4, LO12.5, LO12.8)

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 resulting in a decrease in the provision.

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 12-17 (LO12.5)

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 12-18 (LO12.5)

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 | <u>42,000</u> | <u>60,000</u> | |
| 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 obligations for goods sold in (later) 20X5

20X6 - some year 2 warranty obligations and all the year 3 warranty obligations

Assignment 12-19 (LO12.6)

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:

$$\$425,000 (P/F, 6\%, 3) = \$425,000 \times (0.83962) \dots\dots\dots \underline{\underline{\$356,839}}$$

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) | <u>(59,240)</u> | \$365,760 |

31 December 20x7

| | | |
|--|-----------------|-----------|
| Note payable | \$425,000 | |
| Less: Discount (\$59,240 - \$12,489 - \$9,456) | <u>(37,295)</u> | \$387,705 |

Assignment 12-20 (LO12.6)

Requirement 1

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

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 ($\$6,430 \times 4/12$) | 2,143 | |
| Discount on note payable ($\$4,630 \times 4/12$) | | 1,543 |
| Interest payable ($\$1,800 \times 4/12$) | | 600 |

31 August 20x8

| | | |
|--|-------|-------|
| Interest expense ($\$6,430 \times 8/12$) | 4,287 | |
| Interest payable | 600 | |
| Discount on note payable ($\$4,630 \times 8/12$) | | 3,087 |
| Cash | | 1,800 |

31 December 20x8

| | | |
|--|-------|-------|
| Interest expense ($\$6,800 \times 4/12$) | 2,267 | |
| Discount on note payable ($\$5,000 \times 4/12$) | | 1,667 |
| Interest payable ($\$1,800 \times 4/12$) | | 600 |

31 August 20x9

| | | |
|--|--------|--------|
| Interest expense ($\$6,800 \times 8/12$) | 4,533 | |
| Interest payable | 600 | |
| Discount on note payable ($\$5,000 \times 8/12$) | | 3,334 |
| Cash | | 1,800 |
| Note payable | 90,000 | |
| Cash | | 90,000 |

Assignment 12-21 (LO12.6)

Requirement 1

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

Requirement 2

| | | |
|--|-----------|-----------|
| 1 January 20x9 | | |
| Cash | 1,428,928 | |
| Discount on notes payable | 171,072 | |
| Notes payable..... | | 1,600,000 |
| 31 December 20x9 | | |
| Interest expense ($\$1,428,928 \times .06$)..... | 85,736 | |
| Discount on notes payable | | 53,736 |
| Cash | | 32,000 |
| 31 December 20x10 | | |
| Interest expense ($\$1,428,928 + \$53,736 = \$1,482,664 \times .06$ | 88,960 | |
| Discount on notes payable | | 56,960 |
| Cash | | 32,000 |
| 31 December 20x11 | | |
| Interest expense ($\$1,482,664 + \$56,960 = \$1,539,624 \times .06$ | 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 12-22 (LO12.5, LO12.6)

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) = $\$500,000 \times (0.87344)$ \$436,720

Requirement 3

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

Requirement 4

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

Requirement 5

| | | |
|---|---------|---------|
| <i>30 September 20x6</i> | | |
| Loss on legal issue (expense, etc.)..... | 436,720 | |
| Provision for legal loss..... | | 436,720 |
| <i>31 December 20x6</i> | | |
| Interest expense ($\$436,720 \times 0.07 = \$30,570 \times 3/12$) | 7,643 | |
| Provision for legal loss | | 7,643 |
| <i>30 September 20x7</i> | | |
| Interest expense ($\$30,570 \times 9/12$)..... | 22,927 | |
| Provision for legal loss | | 22,927 |
| <i>31 December 20x7</i> | | |
| Interest expense ($\$32,710 \times 3/12$)..... | 8,178 | |
| Provision for legal loss | | 8,178 |
| <i>*$\\$436,720 + \\$7,643 + 22,927 = \\$467,290$</i> | | |
| <i>$\\$467,290 \times 0.07 = \\$32,710$</i> | | |
| <i>30 September 20x8</i> | | |
| Interest expense ($\$32,710 \times 9/12$)..... | 24,532 | |
| Provision for legal loss | | 24,532 |
| | | |
| Provision for legal loss | 500,000 | |
| Cash..... | | 500,000 |

Requirement 6

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

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 12-23 (LO12.5, LO12.6)

Requirement 1

Present value \$2,700,000 (P/F, 8%, 5) = $\$2,700,000 \times (0.68058)$ \$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) = $\$3,400,000 \times (0.79383)$\$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) = $\$2,900,000 \times (0.93458)$\$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 | <u>\$1,984,571</u> |
| 20X6 | <u>\$2,699,022</u> |
| 20X7 | <u>\$2,914,944</u> |
| 20X8 | <u>\$2,710,282</u> |

Assignment 12-24 (LO12.5, LO12.6)

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 12-25 (LO12.8, LO12.10)

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 12-26 (LO12.10)

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 12-27 ASPE (LO12.8, LO12.11)

Requirement 1

Under IFRS, the loan would be short-term. Classification is based on the legal status on the balance sheet date, and the 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 12-28 ASPE (LO12.6, LO12.11)

Requirement 1

Present value

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

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

31 August 20x8

| | | |
|--|-------|-------|
| Interest expense $(\$6,615 \times 8/12)$ | 4,410 | |
| Interest payable | 600 | |
| Discount on note payable $(\$4,815 \times 8/12)$ | | 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 12-29 ASPE (LO12.6, LO12.11)

Requirement 1

Present value

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

Entries:

| | | | |
|----|---|-----------|-----------|
| 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.

Assignment 12-30 (LO12.4, LO12.11)

| | IFRS | ASPE |
|----|--|---|
| a) | This is a contingent asset that can be recognized if virtually certain. Since Willow Corp. has won the appeal, there is no higher level of appeal and both Willow Corp. and the supplier are in the jurisdiction, it is virtually certain. A contingent asset may be recorded in the amount of \$99,000 and there is no evidence to suggest that the amount will NOT be paid. | No entry required. Contingent assets are never recognized under ASPE. |
| b) | Both legal and constructive obligations are recognized. Although the warranty period for all defective units manufactured and sold has lapsed, Meerange has announced via social media that all customers are eligible for a replacement. As long as the amount can be reasonably measured, Meerange Inc. would record a provision. | No entry required. Constructive obligations are not recognized, only legal obligations. |
| c) | No entry required. Even if probable that Tamin Corp. will win (75% > 50% so probable) and the amount can be estimated (\$100,000), no amount is recorded. Can only be recorded if virtually certain (90% threshold or more). | No entry required. Contingent assets are never recognized under ASPE. |
| d) | The environmental remediation is required by legislation therefore a provision must be recorded. Peruta Corporation must record a liability at the expected value. The amount and timing must be estimated even though uncertain. The amount would be discounted unless the timing of cash flows is highly uncertain. | The environmental remediation is required by legislation therefore a contingent liability must be recorded. Peruta Corporation must record the likely outcome based on its current estimate. |
| e) | Both legal and constructive obligations are recognized. Rulo Inc. would record a provision for \$5M. Discounting is required. | No entry required. There is no legislation which requires environmental remediation. Constructive obligations are not recognized, only legal obligations. |

| | | |
|----|---|---|
| f) | The best estimate in the range should be recorded. If each point in the range is equally likely, the midpoint of the range should be recognized: $(\$60,000 + \$86,000)/2 = \$73,000$ | If no estimate in the range is better than another, the lowest point in the range should be recognized: \$60,000. |
|----|---|---|

Assignment 12-31 (LO12.5, LO12.7)

In 20X3, 20X4 and 20X5 the provision is 6% of sales.

In 20X6 and 20X7 the provision is 8% of sales.

Pilo Corp. changed its estimate from 6% to 8% in 20X6.

The costs incurred as a % of sales in 20X3, 20X4, 20X5, 20X5, 20X6 and 20X7 are 4%, 2%, 1%, 1% and 0% respectively.

Therefore, the provision is growing while the costs incurred are becoming lower.

The question states that customers are satisfied with quality of the product and the graph shows that costs incurred are decreasing. Therefore, the increase in provision in 20X6 seems unexplained.

The provision appears to be too high in comparison with actual costs. Therefore, Pilo Corp. needs to revise its estimated provision to be more in line with actual costs incurred.

Assignment 12-30 (LO12.5, LO12.7)

When the program began it was heavily promoted. It served its purpose in enticing sales.

The percentage of coupons redeemed in 20X3 was 65% versus the estimated provision of 70%. The estimate was somewhat reasonable.

The provision remained flat at 70% in 20X4, 20X5 and 20X6 however the actual coupons redeemed declined to 50%, 40% and 35% in 20X4, 20X5 and 20X6.

It appears therefore that the provision compared to the coupons redeemed is too high.

It appears that when the rebate program was promoted, more coupons were redeemed.

Therefore, if the program is promoted in 20X7, similar to 20X3, the provision may be appropriate, otherwise it should be lowered to better match the expected number of coupons