# Solutions Manual for Intermediate Accounting Volume 2 CDN 7th Beechy

# 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*

| | | | |
|---|---|---|---|
| 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*

| | | |
|---|---|---|
| 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)** **Opening Net Liability** | **(2)** **Interest Expense @ Market Rate** **(1) × 7%** | **(3)** **Closing Net Liability** **(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) ........................\$1,837,566

*Requirement 2*

| **(1)**<br>**Opening Net Liability** | **(2)**<br>**Interest Expense @ Market Rate**<br>**(1) × 8%** | **(3)**<br>**Closing Net Liability**<br>**(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:

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

**Concept Review Solutions**

***CHAPTER 12: Financial Liabilities and Provisions***

**PAGE**

1. The three time periods inherent in the definition of a liability are:
   **a)** an expected *future* sacrifice of assets or services;
   **b)** constitutes a *present* obligation; and
   **c)** Is the result of a *past* transaction or event.

2. A **financial liability** (payables) is a financial instrument that requires some form of cash payment or asset transfer. It gives rise to a corresponding financial asset for another individual or company. A **non-financial liability** is any liability that is not a financial liability.

   Financial liabilities are further classified by how they will be subsequently measured. FVTPL are initially recorded at fair value and subsequently measured at fair value. Other financial liabilities are initially measured at fair value and subsequently at cost.

3. Liabilities of all categories must be valued at the present value of cash flows— commonly called discounting—where the time value of money has material impact on the value of the liability.

**PAGE**

**1.** A loan guarantee is measured at its fair value which is an expected value calculated multiplying the probability that a payment will be required times the amount of the guarantee. A 10% chance of having to be honoured is a positive fair value of 10% of the debt and would have to se recorded as such. A loan guarantee would not be recorded if there was a 0% probability.

**2.** The $8,000 of GST would not be included in the cost of inventory as this is a recoverable tax. In most cases PST is not levied on goods for resale, but in the event it was, it would be included in the cost of the inventory and the inventory cost would be $105,000.

**3.** In the case of employee withholdings, the employer acts as the government's agent in collecting and remitting these payroll taxes.

**PAGE**

1. When the capital asset is acquired it is recorded at the exchange rate in effect at the time (100,000 x 2.10= $210,000 Cdn). Subsequent changes in exchange rate lead to exchange gains or losses on the payment.

2. There would be an exchange gain of $15,000. (100,000 x (2.10-1.95)).

**PAGE**

1. A provision is defined as a liability of uncertain timing or amount. If here is sufficient certainty the liability is recorded for a provision. In the case of a contingency the likelihood of a liability falls beneath the threshold to be recorded.

2. A provision is recorded at the best estimate of the expenditure required to settle the present obligation – the expected value. In a large population this would be a statistical product of the possible outcomes and their probabilities. In a small population, judgment would be applied to obtain the best estimate.

3. These would not be discounted if the amount and timing of cash flows is highly uncertain.

**PAGE**

1. If the unavoidable costs of meeting a contract exceed the economic benefits under the contract, then the contract is classified an onerous contract**.** An example is when a company has vacated leased premises, but must continue to make payments on the lease until it matures. This contract is now onerous since there are no benefits to be received from these payments.

2. A warranty is either a legal or constructive obligation providing assurance that a product will operate to meet specifications. While there is uncertainty concerning the amount or timing of providing services under the warranty a provision can be recorded.

3. A provision for coupons is recorded when the coupon results in either a payment of cash (to the retailer or customer) or the product is sold at a loss, and the company cannot cancel the coupon at any time.

4. A provision for losses arising from self-insurance is recorded when a loss event has arisen prior to the reporting date even if the loss event is not yet known. However a provision cannot be made for self-insurance for future events.

**PAGE**

1. When an asset is acquired and all or part of the consideration is debt at a low rate of interest or no interest, then the cost of the asset will be reduced to reflect the fair value of the low cost debt.

2. Discounting is the practice of revaluing future cash flows to reflect time and interest. The difference in the nominal value of cash flows and the discounted values of the cash flows is referred to as the discount. Over time this discount is amortized to reflect the effective interest cost of the transaction so to speak it is unwound.

**3.** The interest rate used to discount a low-interest note payable would be the equivalent rate that the party would experience to finance a similar transaction in the market place at arm's length-the market rate.

**4.** Two accounts that would be affected would be the capital value of the resource property and the future obligation for the resource property.

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**CHAPTER 12**

# LIABILITIES

## Learning Objectives

After you have studied this chapter, you should:

| | |
|---|---|
| LO-1 | Define the meaning of a liability and distinguish between financial, non-financial liabilities and constructive obligations. |
| LO-2 | Classify financial liabilities and explain the recognition and measurement requirements initially and in subsequent reporting periods. |
| LO-3 | Account for common financial liabilities. |
| LO-4 | Explain how provisions are measured. |
| LO-5 | Illustrate various examples of provisions and explain issues related to timing of recognition. |
| LO-6 | Explain the impact of discounting liabilities. |
| LO-7 | Demonstrate how liabilities are presented and disclosed in the statements |
| LO-8 | Compare and contrast the reporting and measurement of liabilities under ASPE and IFRS |

### 1. WHAT IS A LIABILITY? LIABILITY DEFINITION

The liabilities of a business are its obligations (debts). According to the conceptual framework, it is defined as a *present obligation arising from past events*, the settlement of which is expected to result in an *outflow* of economic benefits. Settlement could be through *future transfer or use of assets, provision of services, or other yielding of economic benefits.*
The characteristics of a liability are:

- an expected *future* sacrifice of assets or services,
- constituting a *present* obligation,
- the result of a *past* transaction or event.

There must be a past transaction that is **an obligating event**, which is an event that creates an obligation where there is no other realistic alternative but to settle the obligation.

**Constructive Obligations**
A constructive obligation is a liability because there is a pattern of past practice or established policy, unlike a legal obligation that is a liability arising from a contract or legislation. A constructive obligation can exist because if a company makes a public statement that it will accept certain responsibilities, the statement creates a valid expectation that the company will honour those responsibilities. Therefore a liability can be created when a company reacts to moral or ethical factors.

**Categories of Liabilities**
There are two basic types of liabilities, financial and non-financial.

**Financial liabilities** are financial instruments where a financial liability is a contract that gives rise to a financial liability of one party and a financial asset of another party. That is, one party has an accounts payable and the other party has an accounts receivable with the two transactions mirroring each other.

**Non-financial liabilities** are liabilities that do not meet the definition of a financial liability. Deferred revenues, or costs expected to arise in the future related to current periods are the common examples of non-financial liabilities. Decommissioning obligations such as the required repair of an asset after use are an example of a non-financial liability required to be recognized by the accounting standards.

**Provisions**, recorded only under IFRS standards, are liabilities of uncertain timing or measurement such as warranties included with the sale of goods or services.

## 2. CATEGORIES OF FINANCIAL LIABILITIES

Financial liabilities fall into two categories:

a. "Other" financial liabilities – includes most of the financial liabilities which are initially valued at fair value of the consideration received plus transaction costs and then are carried at this value over their lives. Examples are: bank indebtedness, trade and other payables, loans payable and long-term debt.

b. Fair value through profit or loss (FVTPL) –mostly for liabilities that will be sold in the short term - recorded at fair value initially and at subsequent valuations with gains and losses recorded to earnings.

**Discounting** – liabilities of all categories must be valued at the present value of cash flows, where the time value of money is material. The discount rate will reflect the risk-adjusted market rate.

## 3. COMMON FINANCIAL LIABILITIES

The financial liabilities discussed in this section are all classified as *other financial liabilities.* These financial liabilities are initially measured at fair value of the consideration received, plus transaction costs, and then carried at this value, cost or amortized cost, over their lives.

**Accounts Payable (also known as trade accounts payable)**

Accounts payable are obligations to suppliers arising from ongoing operations, which includes purchases of materials, supplies and services. Current payables, such as income tax payable and the current portion of long-term debt should be reported separate from accounts payable as they are not trade payables.

**Notes Payable**

Notes payable result from borrowing from a lender or supplier. They are a written promise to pay a specified amount at a specified future date. Notes payable can be either interest-bearing or non-interest-bearing. If they are short term they are recorded at the stated value. If the note is more than one year and the stated interest rate is not the same as the market interest rate, then present value is calculated to determine the value at which the note payable is recorded.

**Loan Guarantees**

A loan guarantee requires the guarantor to pay the loan if the borrower defaults. The financial instrument rules require these guarantees to be recorded at their fair value with the fair value considered against the probability of payout.. *Loan guarantees would not be recorded if there was a zero percent chance of payout.*

**Cash Dividends Payable**

Declared dividends are reported as a liability between the date of declaration and payment because declaration results in an enforceable contract. Undeclared dividends in arrears for preferred shares are not recorded as a liability as the obligation can be avoided.

**Monetary Accrued Liabilities**

Monetary accrued liabilities are recorded in the accounts by making adjusting entries at the end of the accounting period and include wages and benefits earned by employees, interest earned by creditors but not yet paid, and the costs of goods and services received but not yet invoiced by the supplier.

**Advances and Returnable Deposits**

These liabilities are reported as current or long-term, depending on the time involved between date of deposit and expected termination of the relationship. If they are interest bearing, accrual of interest expense is required to increase the liability.

**Taxes**

Current liabilities are recorded for collection of certain taxes from customers and employees, such as sales tax, payroll taxes ( income tax withheld from employees, CPP, EI, and Insurance premiums) and property taxes. Monthly property taxes require estimates as they are based on assessed value of the property which is set by the taxing authority partway through the fiscal year.

**Conditional Payments**

Some liabilities are established on the basis of a firm's periodic income. They are either legal liabilities or constructive liabilities, but as their amount cannot be firmly established until year-end, estimates are required for quarterly or monthly statements.

Examples of conditional payments include income tax payable and bonuses based on earnings.

## 4. FOREIGN CURRENCY PAYABLES

If a company has accounts or notes payable in foreign currencies, they must be restated to Canadian dollars at the year-end currency exchange rate. Any gains or losses that arise as a result of the exchange are offset or net over the period and recorded in earnings (through profit and loss).

## 5. NON-FINANCIAL LIABILITIES: PROVISIONS

Provisions are the major category of non-financial liabilities. **Provisions** can be caused by both legal and constructive obligations and are uncertain in timing or amount.

If they are *probable ("more likely than not")*, they are recognized as a liability called a provision. If *not probable*, they are a contingency and not recognized but the information about contingencies is included in the disclosure notes.

**Measurement of a Provision**

When a liability is characterized by a degree of uncertainty, the uncertainty often is centred on the amount involved. A provision is recorded at the best estimate. The **most likely outcome** (highest probability alternative) should be considered as a measurement option.

If there is a range of outcomes, the **expected value** is used (the sum of outcomes multiplied by their probability distribution).

A summary of measurement estimates is included in the textbook.

**Re-estimate Annually**

If a provision is estimated, the amounts are re-estimated at each reporting date.

**Discounting**

Liabilities, including provisions, must be discounted where the time value of money is material, using current market interest rates, and reflecting the risk level. An **exception** is if the amount and timing of cash flows is highly uncertain*, and discounting cannot be accomplished meaningfully*, then amounts are recorded on an undiscounted basis.

**Contingency**
In *rare* cases, it may not be possible to estimate a provision and thus the provision is reclassified as a contingency and disclosed only.

Contingencies exist when:

- The obligation is possible but not probable
- There is a present obligation but no economic resources are attached
- There is a present obligation but *rare circumstances* dictate that an estimate cannot be established.

**Contingent Assets**
When the contingency involves a possible future inflow rather than outflow, note that an asset is not recorded until a company is *virtually certain* of the related benefits to be obtained. At that point it is an asset not a contingent asset. *Virtual certainty i*s a much higher degree of certainty than just *certainty*. Contingent assets are usually disclosed.

**Prohibited Practices**
It is not permitted to use a provision set up for one purpose to offset expenditures for another purpose.

## 6. EXAMPLES OF PROVISIONS

**Lawsuits**
Based on the certainty of payout, an unsettled court case may result in a provision (probable payout) or a contingency (not probable).

Recorded provisions for lawsuits are often rare as defence teams are not often willing to admit their clients' likelihood in losing the case. Settlements, particularly if an announcement is made that they are being sought, may result in a recorded constructive obligation.

See summary chart in the textbook.

**Executory Contracts and Onerous Contracts**
Companies can have contracts that require them to pay another party in the future, after the other party has performed some service or obligation. These are **executory contracts** as they are not *liabilities* until they have been executed by one party or the other.

If the unavoidable costs of meeting the contract exceed the economic benefits under the contract, it is classified as an **onerous contract**. A *provision* must be recorded with respect to the onerous contract, for the lesser of the costs to fulfill the contract and the costs from cancellation.

An example is provided in the textbook.

**Restructuring**
A *provision for restructuring* is an estimate of the money that will be paid out in connection with a future restructuring program. A liability will be recorded if the entity has a detailed formal plan for the restructuring *and* has started to implement the plan.

**Warranty**
For warranties that provide assurance that the product will meet agreed-upon specifications and the warranty is not sold separately, there is no distinct service provided. The *cost deferral method* is used for these warranties. Warranties may also be in force as a *constructive obligation* based on a company's announced intentions. For example, in the case of a hazardous recall, the company may offer a refund to preserve its reputation.
**An example of the cost deferral method for warranties is in the textbook.**

**Restoration and Environmental Obligations**
If there are legislative remediation requirements, the cost must be estimated and accrued. If these are *pending*, the provision is accrued only if there is **virtual certainty** that the legislation will be enacted.

**Sales Returns and Refunds**
A company may allow merchandise to be returned for a cash refund or a credit on account. This may be a legal obligation, with stated return policies, or a constructive obligation based on past practice. If returns are predictable the obligation must be estimated and recorded at the time of the sale.

**Coupons and Gift Cards**
Coupons are often used as sales incentives. A provision for outstanding coupons may be recorded, but only in limited circumstances. The key to a coupon offer is whether economic benefits are transferred. A reliable measurement for the provision includes estimating the take-up rate for the coupons; the **breakage** (unused) rate can be estimated based on past history or other valid evidence.

An example is provided in the textbook.

**Loyalty Programs**
A common sales incentive is a customer loyalty program where the customer is awarded loyalty points. A loyalty program is an example of a sales contract involving multiple deliverables, as we saw in Chapter 6. No separate expense is recognized—*the loyalty program is an allocation of original revenue*. An unearned revenue account, or provision for rewards, is created, measured according to the value of the awards to the customer, not the cost of the goods to the company. The provision is reduced when the points are redeemed.

**Repairs and Maintenance**
These costs are expensed as incurred, not accrued which could smooth out earnings. They are not accrued as there has been no obligating event.

**Self-Insurance**
A provision for estimated losses must be established for *events (fire and theft) taking place prior to the reporting date*, but also for *loss events that have happened during the year but are not yet known,* such as undiscovered damage. Such damage might be discovered after the year-end, and it must be accrued. This allows for a reasonable delay based on known events. *A provision must be justified based on a loss event.* If there is no such event, no accrual can be made, even if the odds suggest that a future year will have heavier incidence of loss events.

**Compensated-Absence Liabilities**
Any expense due to employees compensated absences (paid vacations, holidays and medical leave) must be accrued in the year in which it is earned.

A **Summary** chart of these possible provisions and the recording considerations is provided in the textbook.

### 7. The Impact of Discounting

Liabilities must be discounted where the time value of money is material. Common examples are low-interest loans.

The **nominal interest rate** is the rate stated for a liability. The **effective interest rate**, or yield, is the market interest rate. The effective interest rate is used to calculate the present value of the debt (i.e. discount the liability).

If the liability pays the effective market interest rate, the discounted amount is equal to the maturity amount and there is no need to discount.

**WATCH!** To calculate the present value of the face value, use the appropriate table at the end of the textbook (Present Value of 1:P/F). Locate the appropriate "effective interest" column then follow it down to "number of periods". This will give you the factor you multiply the face value by.

**WATCH!** To calculate the present value of periodic interest payments, use the appropriate table at the end of the textbook (Present Value of an Ordinary Annuity: P/A, or Present Value of an Annuity Due: P/AD). Locate the "effective interest" column, then follow it down to the "number of periods". This will give you the factor you multiply the periodic interest payments by.

An example is provided in the textbook..

Also, an illustration follows:

***Illustration***
A company purchased inventory and agreed to pay the vendor sold $12,000 in 2-years, plus annual accrued interest of 4% . The market interest rate for similar term and security is 10%.

***Required***
Compute the present value of a note.

Present value = PV of maturity amount + PV of periodic interest payments.

Maturity amount = \$12,000

Periodic interest payments = \$12,000 × 4% = \$480

Effective interest rate =10%

Periods = 2

0, P/F, 10%, n = 2) + (\$480, P/A, 10%, n = 2)

+ \$833

The note is at a *discount* = (\$12,000 – \$10,750) = \$1,250.

**WATCH!** **Premium or Discount** on notes is the difference between the maturity amount and the present value of note.

**Measurement of Interest Expense**

**Premium or Discount Recognition**
If the nominal interest rate is different form the interest rate at the time the note is issued, the loan is issued above or below par, or at a premium or discount

When nominal and effective interest rates differ, this results in the debt being issued at discount or premium (compared to face value of debt). The premium or discount is amortized to income as an adjustment to the interest expense over the life of the debt using the *Effective interest method.* A constant effective rate of interest is maintained.

Several examples of present value calculations are provided in the textbook.

**Remeasurement of an obligation**
When an obligation will occur in the future it must be estimated. The estimation may change over time under the following conditions:

- A change in the amount or timing of the expected future obligation cash flows; or
- A change in the discount rate to reflect current market rates.

In these cases an adjustment to both the obligation and the related asset is required.

An example of the decommissioning liability with remeasurement is provided in the textbook.

## 8. CLASSIFYING LIABILITIES

Most companies segregate their liabilities between current and long-term. **A current liability** is one that is due or payable *within the next operating cycle or in the next fiscal year, whichever period is longer*. A **long-term liability** has a due date past this time window.

In North America, current liabilities normally are listed by descending order based on the strength of the creditor's claims. In other countries, this may be reversed.

**Classification of Notes Payable**

Notes payable may be long-term or current liabilities. Classification depends on the terms of the loan. They are current if they are loans due on demand or the loans are due within the next year. Long term debt that is in violation of debt covenants and can be called by the lender at any time is classified a current liability.

If there is a contractual arrangement at year-end to support restructuring a debt from current to long-term, then reclassification is permitted. Note disclosure may be appropriate.

**Classification of Provisions**

Provisions are classified as current or long term based on the timing of expected future cash flows. However, classification must be first based on the legal terms of the provision.

## 9. DISCLOSURE AND STATEMENT OF CASH FLOWS

**Disclosures for Financial Liabilities**

Extensive disclosure is required, including:

- carrying amounts of the debt,
- the fair value,
- components of each financial statement category
- legal terms of the liability such as maturity date and interest rate,
- any defaults or breaches,
- interest expense,
- any exposures to risk (credit risk, liquidity risk and market risk) and
- accounting policy information.

**Disclosures for Provisions and Contingencies**

Provisions must be shown in a separate category from other payables due to their nature of uncertainty and application of judgment in recording and measurement.

Companies must disclose a reconciliation, or *a continuity schedule* (opening balance to closing balance), that explains the movement in each class of provisions. Unrecorded amounts, or contingencies, must be described completely.

**Statement of Cash Flows**

- Changes in liabilities and provisions that are related to earnings are adjusted in operating activities.
- Cash changes in borrowings, both new loans and repayments, are reported in financing activities on the gross basis (cash proceeds and repayments presented separately).
- Non-cash changes in borrowings, such as notes payable issued for assets, are non-cash transactions and are excluded from the SCF. Non-cash transactions are described in disclosure notes.
- Interest that is represented by unwinding a discount is a non-cash expense and is added back in operating activities under both indirect and direct methods.
- Cash paid for interest can be reported either in operating activities or financing activities as long as the presentation is consistent, and excludes any portion of interest caused by unwinding a discount.

## 10. LOOKING AHEAD

As part of a review of the conceptual framework, the International Accounting Standards Board (IASB) is reconsidering the definition of financial elements, including the definition of a liability. The definition under consideration is that a liability is "a present obligation for which the entity is the obligor."

**Accounting Standards for Private Enterprises**

Accounting standards for private enterprise (ASPE) is similar to International Financial Reporting Standards (IFRS) for financial liabilities.

However, ASPE contain no comprehensive standards for non-financial liabilities. Liabilities are recognized when they meet the recognition criteria (definition, measureable and if future sacrifices are probable). This results in largely a consistent practice with IFRS.

The term "provision" is not used under ASPE which changes the recording and disclosure related to contingencies as well.

ASPE defines *contingent liabilities* as those that result in the outflow of resources only if another event happens. *A contingent liability is either recorded or disclosed.* Under IFRS, the liability is termed a contingency only if it is *disclosed and not recorded.* It is a *provision* if it is recorded. This is a different use of the word *contingency*. The grid used under ASPE is provided in the textbook.

Constructive obligations are defined as they are under IFRS and ASPE contains an additional definition of an equitable obligation which is an obligation recorded based on ethical or moral consideration.

Under ASPE, use of the effective-interest method is not required. The **straight-line method** can be used to amortize the discount and measure interest expense.

**Classification and disclosure**

A company may wish to reclassify liabilities from current to long term to improve the reported working capital position. Under ASPE, classification of such a loan as long term would be permitted if renegotiation resulted in agreement by the *date the financial statements are released*.

## PowerPoint Slides

The PowerPoint slides can be used in part or in their entirety in computer adapted classrooms.

Beechy, Conrod, and Farrell – *Intermediate Accounting*, Volume 2, 5e

Integrative Problems – Chapter 12 Issues

The first segment of the working trial balance that you wish to discuss with Jack and Joan is the liabilities section. They provide you with the following additional information.

Product warranty costs are estimated at 2% of sales, reliable information is scant, this Jack's best estimate based on his limited experience. Warranty costs are spread evenly over the two year period. Sales for the previous two years were; 09 - $1,400,000 and 08- $ 1,450,000. Actual warranty costs were; $32,000 in 08 and $35,500 in 09.

Current accounts payable include the following; $ 2,000 USD to Georgia Cotton and $3,000 EU To Swiss Fasteners. Neither of these amounts have been included in the records of the company, Phirst simply recorded these amounts when they were paid, that way he knew what the Canadian dollar cost was and did not have to be concerned with foreign currency issues. At the transaction date the following exchange rates existed, US$1= $0.98CDN and EU$1=1.37cDN. At the yearend date the following exchange rates were in existence. US$1= 1.01 CDN and EU$1=1.33

The company has an issue with a transport company and a shipment of its product to a customer in Winnipeg. One of these shipments was involved in a motor vehicle accident. The truck over turned, the shipment was destroyed and $10,000 in product was lost. The company had a $5,000 deposit on the shipment that had been recorded as a sale. The shipper contends the load was improperly placed at the company's plant, that this was the cause of the accident and has made a claim for $200,000 in damages against the company. The company had no insurance on the inventory and it contends that it is not responsible for the accident and as such has made no claim on its own insurance as a result. The company has a $5,000 deductible on its' own insurance policy.

The current mortgage debt is up for renewal. Jack and Joan would like to refinance and recapitalize the operation to permit expansion. The proposal is to remortgage the $ 350,000 at a prime plus 1% floating rate with an amortization period of 15 years. The company would have to maintain a debt coverage ratio of 1.5 times earnings. Prime rate is currently 3%. The company has plans to acquire new manufacturing equipment and to do renovations to the plant They would like to complete a private placement bond issue to provide the cash they will need to support the proposal. The bond issue will have a face value of $200,000, carry a 6% interest rate and mature in 5 years. The comparable market rate for such a private placement is 8%.

Jack and Joan would like you to make any adjustments you feel are required to make the accounting records more closely follow ASPE – GAAP and to indicate what the accounting impact would be for the proposed refinancing/bond issue. Discuss how these would compare to IFRS.

Beechy, Conrod, and Farrell – *Intermediate Accounting*, Volume 2, 5e

Integrative Problems – Chapter 12 Solutions

**1.0 Warranty costs**

In the prior years the company did not accrue warranty costs, rather they expensed these costs as incurred. A simple method of accounting for warranty expenses and one that does not give a true representation of the costs associated with those sales. The matching principal would suggest that these costs should be accrued as the sales are made.

| Year | Sales | Actual warranty costs incurred | Costs as a percentage of sales |
|---|---|---|---|
| 2008 | $ 1,450,000 | $ 32,000 | 2.2% |
| 2009 | $ 1,400,000 | $ 35,500 | 2.5% |
| 2010 | $ 1,500,000 | $ 15,000 | |

Warranty costs related to a particular year's sales occur over a two year period including the year of the sale.

Management estimates this cost to be 2% of sales. Managements estimate appears to be somewhat less than the actual experience to date. A more conservative estimate of the warranty costs would be 2.5%.

The recognition criteria of ASPE accounting recommendations at Section 1000 indicates that the accrual of warranty costs is the correct approach. ASPE accounting recommendations at Section 1506 indicates that this change in accounting policy should be applied retrospectively. The related IFRS standard s IAS-1 and IAS -8 are largely convergent. The IAS pronouncements will exempt the retrospective application on the grounds of impracticality.

| | | |
|---|---|---|
| Warranty accrual prior periods (1,450,000+1,400,000@2.5%) | = | 71,250 |
| Warranty costs prior periods actual ( 32,000+35,500) | = | (67,500) |
| Current warranty accrual 1,500,000@ 2.5% | = | 37,500 |
| Current warranty expenses | | (15,000) |
| | | |
| Accrued warranty liability | | 26,250 |

JE 12.04

| | | | |
|---|---|---|---|
| Warranty expenses | (37,500 – 15,000) | 22,500 | |
| Retained earnings | ( 71,250-67,500) | 3,750 | |
| Accrued Warranty costs | | | 26,250 |

Other issues.

We don't have access to the 2007 sales, presumably some of these warranty costs (actual) relate to that year. Similar to real life situations, accountants often do not have complete information to work with and some judgment is required. These are estimated expenses and actual results will vary from that estimate, this fact does not remove the need to make the estimate in the first place. Also if the students use the management estimate for warranty costs and this practice conflicts with prior years' actual costs this will make retrospective application of this accounting policy difficult.

**2.0 Foreign Currency Payables**

The company has failed to record it's foreign currency denominated payables. This is a violation of GAAP and understates the liabilities of the company. The company must record the liabilities at the transaction date using the exchange rates applicable to the transaction date ( spot rate at that date).

$2,000USD @ 0.98 = $1,960 CDN
$3,000EU @1.37 = $4,110 CDN

JE 12.05

| | | | |
|---|---|---|---|
| Purchases | (1,960+4,110) | 6,070 | |
| Accounts Payable | | | 6,070 |

These are monetary liabilities and at the yearend date they must be reflected in the Balance Sheet at the current exchange rate(s). Any increase or decrease in the liability is recorded as an exchange gain or loss.

$2,000USD @1.01 = 2,020

$3,000EU @1.33 = 3,990

6,010

Net gain (6,070 – 6,010 ) = 60

JE 12.06

| | | |
|---|---|---|
| Accounts Payable | 60 | |
| Exchange Gain | | 60 |

Alternatively the students could reflect separately a gain of $120 on the EU payable and a loss of $60 on the USD.

The purchase or sale is viewed as a separate and distinct transaction from the ultimate settlement. The cost or sales price is firmly established at the date of the transaction. The subsequent translation adjustment is viewed as an exchange gain or loss. IAS 21 pgs 21 and 23. This is consistent with the ASPE approach 1651.13

**3.0 Contingent Liabilities and Unearned revenue.**

The company has $5,000 deposit on a sale recorded as a revenue. With the loss of the shipment, the company has to replace the product and incur additional costs to do so, or refund the deposit. In either case the question becomes what to do with the deposit when the company has failed to complete its' obligations to the customer. If the assumption is made that the product will be replaced to complete the transaction then the amount should be removed form sales and recorded as unearned revenue.

JE 12.07

| | | |
|---|---|---|
| Sales | 5,000 | |
| Unearned Revenue | | 5,000 |

The accountant for the company must also decide if a liability should be reflected in the records of the company with respect to the claim made on it by the Shipper.

ASPE at 3290 indicates that the amount of a contingent loss shall be accrued in the financial statements by a charge to income when both of the following conditions are met:
(a) it is likely that a future event will confirm that an asset had been impaired or a liability incurred at the date of the financial statements; and
(b) the amount of the loss can be reasonably estimated.

IAS 37 provides the IFRS direction with respect to contingencies.

This section differentiates between provisions, where the liability is recognized and recorded and contingencies, where the liability is disclosed but not recorded in the financial statements. " In a general sense, all provisions are contingent because they are uncertain in timing or amount. However, within this Standard the term 'contingent' is used for liabilities and assets that are not recognised because their existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity. In addition, the term 'contingent liability' is used for liabilities that do not meet the recognition criteria."

We have a claim in the amount of $200,000, however the company indicates it has insurance and the deductible on same is $5,000. The question then becomes is the amount the $200,000 or the $5,000?

The next question is then, what is the probability that the claim against the company will succeed.

Where there is uncertainty surrounding the confirming event, ASPE at 3290 indicates that disclosure of the claim would be made but an accrual would not be made.

At a minimum, the note disclosure would include:
(a) the nature of the contingency;
(b) an estimate of the amount of the contingent loss or a statement that such an estimate cannot be made; and
(c) any exposure to loss in excess of the amount accrued.

IFRS at IAS 37 is largely convergent with the ASPE section 3290, when the loss is recognized it is treated as a provision. If the loss is not recognized it is disclosed as a contingency and it is not recorded

Given the above, no accrual is recommended but disclosure of the claim would be required.

**4.0 Long Term Debt Issues**

Two concerns

How will the bond issue be recorded and what will be the accounting impact in future years.

What impact will this have on the debt convenent?

PV of Bond Principal@8%@5yrs

200,000(0.68058) = 136,116

PV of bond interest payments

200,000@6%= 12,000

12,000@8%@5yrs

12,000@3.99271= 47,913

PV 136,116+47,913 = 184,029

JE 12.08

| | | |
|---|---|---|
| Cash | 184,029 | |
| Discount on bond | 15,971 | |
| Bond | | 200,000 |

Year 1

| | | |
|---|---|---|
| Interest expense 184,029@8% | 14,722 | |
| Discount on bond | | 2,722 |
| Cash | | 12,000 |

ASPE deals with long term liabilities at section 3210, IFRS deals with this in two separate sections, at IAS 32 - Financial Instruments: Disclosure and Presentation and IAS 39 Financial Instruments : Recognition and measurement. They are largely similar.

Debt service ratio's.

There are many different calculations to determine this and reference should be made to the lending agreement. A common one is the EBITDA ( earnings before interest and taxes and amortization) to debt service.

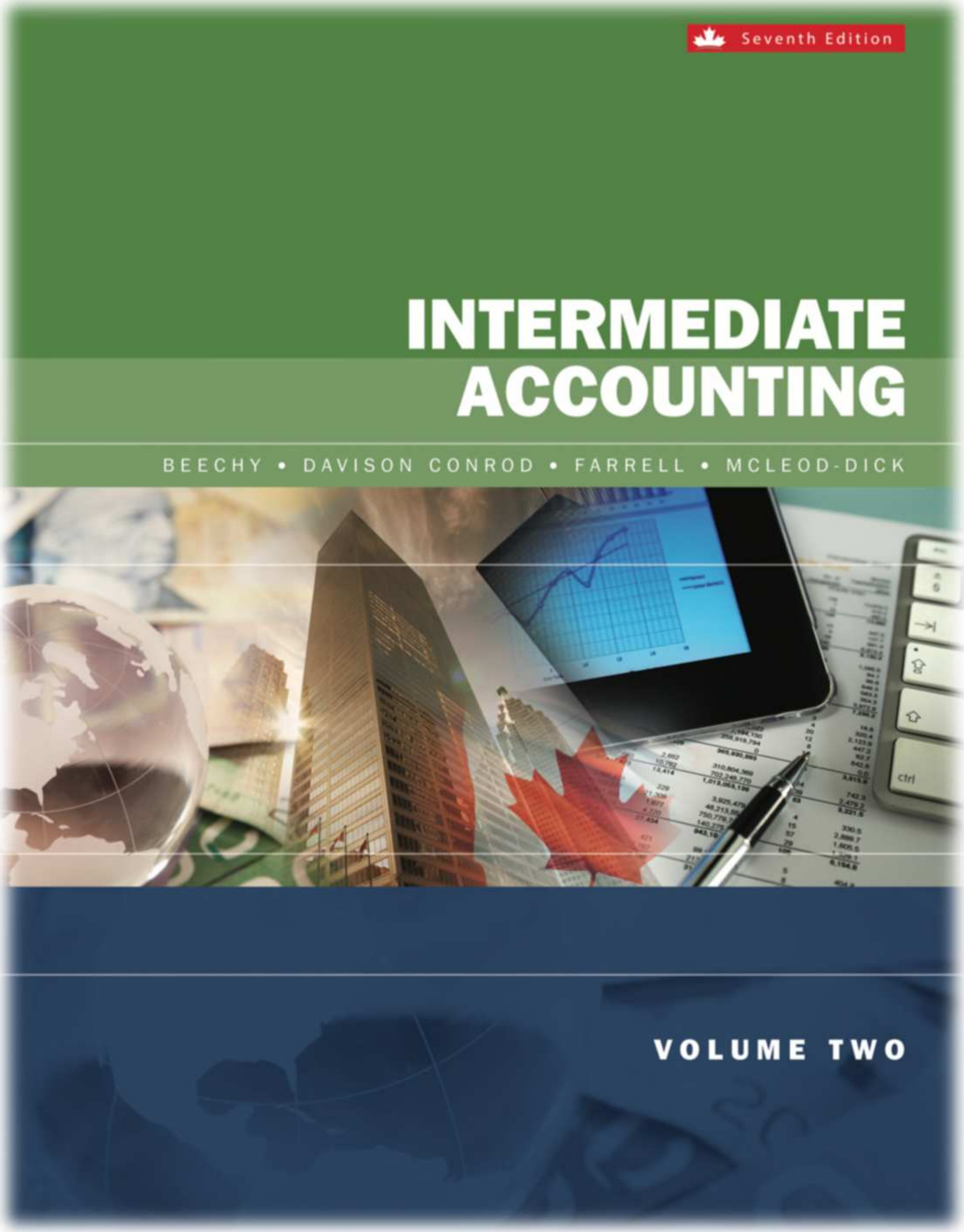
| | | |
|---|---|---|
| Income | 104,190 | |
| Adjustments | | |
| Taxes | 34,440 | |
| Interest | 14,000 | 350,000*4% |
| Amortization | 54,800 | |
| | | |
| EBITDA | 193,390 | |
| | | |
| Debt service | 31,100 | 350,000*4%/15years |

Debt service ratio    193,390/31,100 =    6.21

Bond debt service   52,000 ( amortize over 5 years, 200,000/5+12,000yr)

Revised debt service   193,390/31,100+52,000= 2.38

The bond principal is not due for 5 years, the above calculations assume a simple straight line amortization or sinking fund approach to the bond principal. While this ignores the time value of money it does provide an approximation.  The point here is simply to permit the students to recognize the impact of adding additional debt on the company's ability to handle that debt service and the need to deal with the bond principal within five years.




# CHAPTER 12: Financial Liabilities and Provisions

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# Introduction

- Many liability situations are straightforward from an accounting perspective.  However, when liabilities are estimated or uncertain, they can present accounting challenges.

# Introduction

- Examples of accounting challenges:
  - Does a liability exist if there is no legal liability, but the company has pronounced a commitment or plan of action?
  - How is a liability measured if the obligation is for services and not a fixed amount of cash?
  - How can a liability be measured if the amount of cash paid is based on future events?

# What is a Liability?

- **A liability** is defined as:

*A **present obligation** of entity, **arising from past events**, the settlement of which is expected to result in an **outflow of economic benefits**.*

# What is a Liability? (cont.)

- Characteristics  of a liability:
  - *is an expected **future** sacrifice of assets or services;*
  - *constituting a **present** obligation; and*
  - *is the result of a **past** transaction or event.*

# What is a Liability? (cont.)

- Legal obligations arise due to contract or legislation
  - Trade payables
  - Borrowings

- Constructive obligations arise due to a pattern of past practices or established policy
  - Company makes a statement that will accept certain responsibilities creating an expectation

# Categories of Liabilities

- There are two types of liabilities
  - *Financial liabilities*
  - *Non-financial liabilities*

# Categories of Liabilities

- A **financial liability** - a financial instrument - a *contract that gives rise to a financial asset of one party and a financial liability or equity instrument of another party*
  - Includes:  accounts payable; notes payable

# Categories of Liabilities

- A **non-financial liability -** any liability that is not a financial liability i.e. it has no offsetting financial asset on the books of the other party.
  - Includes:  unearned revenue; warranty liabilities
  - Provisions – liability with uncertain timing or amount

# Financial Liabilities

| Classification | Summarized Classification Criteria | Initial Valuation | Subsequent Valuation |
|---|---|---|---|
| 1. "Other" financial liabilities | Most financial liabilities; all those except those in category 2, below | Fair value, which is the transaction value and establishes the cost of the financial instrument<br>Capitalize:<br>Transaction costs, if any | Cost<br>(Amortized cost) |
| 2. Fair value through profit or loss (FVTPL) | May be FVTPL if:<br>a. The liability will be sold in the short term; or<br>b. Designated FVTPL by management to avoid an accounting mismatch (related/hedged financial instruments are FVTPL) | Fair value, which is the transaction value and establishes the cost of the financial instrument.<br>Expense transaction costs, if any. | a. Fair value; gains and losses in earnings<br>b. Fair value; change in fair value due to changes in credit risk in OCI remainder in earnings |

# Financial Liabilities

- **Discounting**: Financial liabilities must be valued at present value of future cash flows
  - Discounted value if liability is due beyond one year
    - Discounted at the current market (effective) interest rate specific to risk level
    - Interest is recorded as time passes
- If amount and timing highly uncertain – undiscounted amounts used.

# Financial Liabilities –Accounts Payable

- Trade accounts payable – obligations to suppliers arising from operations
  - Adjust for purchase discounts, allowances and returns
- Report separately –
  - Income taxes payable

# Financial Liabilities –Notes Payable

- Written promise to pay a specified amount (or series of amounts) at a specified date (or series of dates)
  - May be secured with collateral

- Sources:
  - Borrowing from lenders
  - Purchase agreements with suppliers
- Stated interest may be different from market interest rate

# Notes Payable

- The **stated interest rate**: *the interest rate stated in the loan agreement*
- The **market interest rate**, or yield: *the rate accepted by two parties for loans of equal amounts, identical credit risks and conditions.*

# Notes Payable

- **Interesting bearing** – specify a stated rate applied to face value
- **Non-interest bearing** – no stated rate, but get interest through difference between cash lent and the higher amount of cash repaid
- Notes with stated rates less than market rate may be used by suppliers as sales incentives.

# Notes Payable

- Initially record at fair value
  - Stated value if short term
  - Stated value if stated rate = market rate
  - Discounted value if stated rate is different from market rate
    - Market rate is used for discounting

# Notes Payable

- Example:
- Note payable issued May 1, 20X4 and due April 30, 20X6 for $120,000.
  - Stated rate is 4% which is equal to market rate
  - Interest is payable annually on April 30.
  - Company has Dec 31 year end

# Notes Payable

**Entries:**

May 1, 20X4 – Initial entry

| | | |
|---|---|---|
| Cash | 120,000 | |
| Notes payable | | 120,000 |

December 31, 20X4 Accrue interest - 120,000 x 4% x 8/12 = $3,200

| | | |
|---|---|---|
| Interest expense | 3,200 | |
| Accrued interest payable | | 3,200 |

April 30 Payment of annual interest - 120,000 x 4% = $4,800

| | | |
|---|---|---|
| Interest expense (4,800 x 4/12) | 1,600 | |
| Accrued interest payable (4,800 x 8/12) | 3,200 | |
| Cash | | 4,800 |

# Loan Guarantee

- Requires a guarantor to pay loan principal and interest if borrower defaults
- Record at fair value using probabilities
- Example: Loan guarantee of $500,000 has a 10% probability that it will have to be honoured
- Record:
  - Provision for $50,000 (= $500,000 X 10%)
- Extensive disclosure required

# Cash Dividends Payable

- **Cash Dividends payable –** dividends declared but not yet paid
  - Disclosure required for dividends in arrears for cumulative preferred shares

# Monetary Accrued Liabilities

- **Monetary Accrued Liabilities –**
  - Accrued wages and benefits
  - Accrued interest payable
  - Accrued goods and services received but not yet invoiced

# Advances and Returnable Deposits

- **Advances – cash deposits from customers – represent guarantees for**
  - future obligations
  - performance on contract or service
  - in case of non-collection
  - for possible damage to property

- **Returnable Deposits–** received from customers or employees
  - company property , club memberships,

# Advances and Returnable Deposits

- **Advances and returnable deposits**
  - Current or long-term depending on when the deposit is likely to be returned or the obligation or performance is completed
  - Terms of contract dictates what happens if the sale is not completed
  - Recorded as a **Customer Deposit Liability** when received

# Taxes

- Businesses collect taxes from customers and employees that are remitted to government
- **Sales taxes include: GST, PST, HST**
  - Revenues recorded net of taxes collected
  - Purchases recorded net of GST/HST recoverable (PST is part of costs)

# Taxes

- Example: Sales of $500,000 are made and GST (5%) collected $25,000 and PST (8%) collected of $40,000

| | | |
|---|---|---|
| Cash and accounts receivable | 565,000 | |
| Sales revenue | | 500,000 |
| GST payable | | 25,000 |
| PST payable | | 40,000 |

# Financial Liabilities- Taxes

- Company also purchased inventory for $300,000 including GST (5%) and PST at (8%)
- Entry to record purchase of inventory

| | | |
|---|---|---|
| Inventory (300,000 x 1.08) | 324,000 | |
| GST Payable (300,000 x 5%) | 15,000 | |
| Accounts payable | | 339,000 |

# Financial Liabilities- Taxes

- Company pays taxes collected

| | | |
|---|---|---|
| GST Payable (25,000 – 15,000) | 10,000 | |
| PST payable | 40,000 | |
| Cash | | 50,000 |

# Payroll Taxes

- **Payroll Taxes** – withheld from employees' pay and remitted to government (Exhibit 12-1)
  - **Personal income taxes** – employee's federal and provincial income taxes deducted and remitted to federal government
  - Canada Pension Plan (CPP)
  - Employment insurance (EI)
  - Insurance premiums – group insurance, medical insurance, pension plans

# Financial Liabilities- Other

- **Property Taxes** – based on assessed values
  - Estimate of  property tax accruals monthly as tax rates are set during the year
- **Conditional Payments** – may be legal or constructive liabilities
  - Estimated throughout year for interim reports and adjusted at year end as required
  - **Income taxes payable**
  - **Bonuses** - based on net income

# Foreign Currency Payables

- Payables denominated in a foreign currency must be restated to Cdn $ at the **current exchange rate** at year-end date
- Accounts payable when initially recognized is translated using spot rate on the date of the purchase
- At report date – must translate based on exchange rate at date of report
- When settled, an exchange gain or loss will be recognized

# Foreign Currency Payables

- Example:
- Purchase supplies for € 1,000 on September 30
- Year-end is October 31
- Payable is settled on November 15
- Rates of exchange:
- September 30 €1 = $1.50
- October 31 €1 = $1.80
- November 15 €1 = $1.90

# Foreign Currency Payables

**Journal Entries**:

September 30

| | | |
|---|---|---|
| Supplies € 1,000 x 1.50 | 1,500 | |
| Accounts payable | 1,500 | |

October 31 adjust Accounts payable to $1,800

| | | |
|---|---|---|
| Foreign exchange gain/loss | 300 | |
| Accounts payable | | 300 |

November 15 – Accounts payable is settled at $1,900

| | | |
|---|---|---|
| Accounts Payable | 1,800 | |
| Foreign exchange gain/loss | 100 | |
| Cash | | 1,900 |

# Nonfinancial Liabilities - Provisions

- A major category of non-financial liabilities are "**provisions**" - "*a liability of uncertain timing or amount*"
- Provisions caused by *legal* and *constructive* obligations

# Nonfinancial Liabilities - Provisions

- Terminology is different based on degree of certainty:

| Degree of Certainty | Classification |
|---|---|
| Completely certain | Financial liabilities: Payables, accruals (recorded) |
| Probable | Provision (recorded) |
| Not probable | Contingency (disclosed) |

# Nonfinancial Liabilities - Provisions

- Measurement of a provision
  - Recorded at the **best estimate** or **expected value**
  - If a range of outcomes is possible, determine expected value
    - the sum of the outcomes multiplied by their probability distribution:

      [(50 x 30% x $0) + (50 x 70% x 10,000)] = $350,000

# Nonfinancial Liabilities - Provisions

- Example of “most likely outcome”:
- The company has three legal claims outstanding against a company, each for $100,000. There is a 30% chance that the company will have to make a payment on one lawsuit, 50% chance for two payouts, and a 20% chance for three payouts.
- Using the most likely outcome the company would accrue $200,000
- The expected value would be $190,000 [(100,000 x 30%) + (200,000 x 50%) + (300,000 x 20%)]

# Nonfinancial Liabilities - Provisions

- **Provisions**
  - re-estimate annually
  - discount when the liability is due beyond one year
    - If amount and timing of cash flows is highly uncertain then record on undiscounted basis
  - If an estimate cannot be made – then this is a contingency and disclose only

# Nonfinancial Liabilities – Provisions Summary

| Population | Best Estimate | Adjusted For |
|---|---|---|
| Large population | Expected value | Discounted for time value of money |
| Small population | Most likely outcome, with judgement, considering:<br>1. Expected value; and<br>2. Cumulative probabilities | Discounted for time value of money |

# Contingencies

- Contingent liability exists when:
  - Obligation is possible but not probable
  - There is a present obligation but no economic resources attached; or
  - There is a present obligation but rare circumstances dictate than an estimate cannot be made
- Disclose only

# Contingent Assets

- Contingent assets – arise from past events, but existence is confirmed with a future event
  - are not recorded until *virtually certain*

# Examples of Provisions - Lawsuits

- Lawsuits – probability assessed by lawyers
  - *Certain* – probable – recorded as a provision
  - *Not probable* – contingency and disclose only
  - A constructive liability may still be present

| **First:** | **Then, Either/Or:** | |
|---|---|---|
| **Ability to Measure Degree of Certainty** | **Measurable** | **Not Measurable** |
| Certain (Probable) | Provision (recorded) | Contingency (disclosed) (rare situation) |
| Not certain (Not probable) | Contingency (disclosed) | Contingency (disclosed) |

# Examples of Provisions- Executory Contracts

- **Executory contracts** – contracts that become liabilities once they have been executed
  - A future commitment that is not a liability until the other party has performed a service

# Examples of Provisions- Onerous Contracts

- **Onerous contracts**
  - unavoidable costs of meeting a contract exceed the economic benefits – record a provision for the net loss
  - Example: Purchase contract to buy 10,000 kg of ore at \$1.00 per kg. The selling price is now \$0.80 per kg.
    - Record provision for: 10,000 kg X \$0.20 = \$2,000

# Examples of Provisions - Restructuring

- **Restructuring plan –** a plan of action controlled by management that will materially change the scope of business
- **Restructuring provision** - estimate of payments required under a future restructuring program
  - Recorded when the company has a detailed formal plan and has implemented or announced the commencement of the plan
    - Announcement must include specific facts and details

# Examples of Provisions - Warranties

- **Warranties** - assurance that the product will operate as intended and meet specification
  - May be legal or constructive
    - Constructive  because of actions by the company
  - Cost deferral method is used
    - Estimate of all expected future claims is recorded at time of sale:
      - Record *warranty expense* and *provision for warranty*
        - Adjust annually as estimates chan*ge*
      - As cash is paid out, reduce the provision for warranty

# Examples of Provisions

- **Restoration and environmental obligations**
  - May be constructive or legal (legislated)
  - If pending legislation – provision accrued only if virtually certain
- **Sales returns and refunds –**
  - May be constructive or legal
  - Estimate and record at time of sale
  - Review for reasonableness

# Examples of Provisions

- **Coupons, refunds and gift cards**
  - If coupon is redeemed in cash, or products are sold at a loss - record a provision for the estimated obligation
  - Estimate breakage (unused) rate of coupons or gift cards
  - Discount if the time period is long
- **Loyalty programs**
  - allocate portion of original sale that gives rise to the points and record as a *provision for rewards*

# Examples of Provisions

- **Repairs and maintenance**
  - May **not accrue** major overhaul repairs since not arising from a past event.

- **Self-insurance –**
  - Accrue a provision for estimated losses for loss events that have taken place during the year

# Examples of Provisions

- **Compensating-Absence Liabilities**
  - Used only when employees can carry over unused time to future years
  - Accrue in the year it is earned
  - Adjust at year-end all of the vacation and medical leave that can be carried over

# Impact of Discounting

- Discounting required when liabilities have terms greater  than one year
- Discounting not required for liabilities:
  - With initial term less than one year; or
  - If timing and amounts are uncertain and discounting is not practical.

# Impact of Discounting

- **Nominal interest rate** – interest rate stated for the liability
  - May be 0%
- **Effective interest rate = yield –** market interest rate for debt of similar term, security and risk
- Present value  - is the discounted amount of the future cash flows (both interest and maturity amounts) using the effective interest rate
- If nominal rate = effective rate, then PV is equal to maturity amount and there is no need to discount.

# Impact of Discounting

- **Example of No-Interest Note Payable**
- Purchase equipment for a note payable of $40,000 and note is due in 5 years with no additional interest.
- Company’s borrowing rate for a similar loan would have been 7% - effective interest rate
- PV of $40,000 for 5 years at 7% = $28,520

 

# Impact of Discounting

**Journal Entry to set up equipment:**

| | | |
|---|---|---|
| Equipment | 28,520 | |
| Note Payable | | 28,520 |

**Each year, record the interest – Year 1** (Years 2 – 5 will be similar)

| | | |
|---|---|---|
| Interest Expense | 1,996 | |
| Note Payable | | 1,996 |

**Year 5 – Pay off the loan**

| | | |
|---|---|---|
| Note Payable | 40,000 | |
| Cash | | 40,000 |

# Impact of Discounting

| Year | Interest paid | Interest expense 7% | Balance in Note Payable |
|---|---|---|---|
| Opening balance | | | $28,520 |
| Year 1 | 0 | 1,996 | 30,516 |
| Year 2 | 0 | 2,136 | 32,652 |
| Year 3 | 0 | 2,286 | 34,938 |
| Year 3 | 0 | 2,446 | 37,384 |
| Year 5 | 0 | 2,616 | 40,000 |

# Impact of Discounting

- **Example of Note Payable with Different market and Stated Rate**
- Purchase equipment for a note payable of $40,000 and note is due in 5 years with interest at 3%, payable annually (40,000 x 3% = $1,200)
- Company's borrowing rate for a similar loan would have been 7% - effective interest rate
- PV of $40,000 for 5 years at 7% with payment of $1,200
  - = $33,440

# Impact of Discounting

**Journal Entry to Set up the equipment:**

| | | |
|---|---|---|
| Equipment | 33,440 | |
| Note Payable | | 33,440 |

**Each year, record the interest – Year 1** (Year 2 – 5 will be similar)

| | | |
|---|---|---|
| Interest Expense | 2,341 | |
| Note Payable | | 1,141 |
| Cash | | 1,200 |

**Year 5 – Pay off the loan**

| | | |
|---|---|---|
| Note Payable | 40,000 | |
| Cash | | 40,000 |

# Impact of Discounting

| Year | Interest paid | Interest expense 7% | Balance in Note Payable |
|---|---|---|---|
| Opening balance | | | 33,440 |
| Year 1 | 1,200 | 2,341 | 34,581 |
| Year 2 | 1,200 | 2,421 | 35,802 |
| Year 3 | 1,200 | 2,506 | 37,108 |
| Year 3 | 1,200 | 2,598 | 38,506 |
| Year 5 | 1,200 | 2,694 | 40,000 |

# Impact of Discounting

- **Example of Provision for Lawsuit:** assume a provision of $200,000 is recorded for a lawsuit with the expectation that the amount will be paid in two years. Timing is estimated with certainty and the company can borrow at a rate of 8%. A discount account is not used; the provision is recorded net.

**Journal Entry for the discounted maturity amount [$200,000 x (P/F, 8%, 2)]:**

| | | |
|---|---|---|
| Loss on litigation | 171,468 | |
| Provision for litigation | | 171,468 |

**Record the interest and liability – Year 1**

| | | |
|---|---|---|
| Interest Expense (171,468 x 8%) | 13,717 | |
| Provision for litigation | | 13,717 |

**Record the interest and payment – Year 2**

| | | |
|---|---|---|
| Interest Expense [(171,468+13,717) x 8%] | 14,815 | |
| Provision for litigation | | 14,815 |
| Provision for litigation (171,468+13,717+14,815) | 200,000 | |
| Cash | | 200,000 |

# Impact of Discounting

- **Example of Provision with Estimate Change**
- A decommissioning liability related to equipment.
- Cost of removal is estimated to be $40,000 in 5 years
- Company's borrowing rate for a similar loan would have been 7% - effective interest rate
- PV of $40,000 for 5 years at 7% = $28,520

**Set up provision:**

| | | |
|---|---|---|
| Equipment | 28,520 | |
| Decommissioning obligation | | 28,520 |

(The cost of equipment plus the decommissioning obligation will be depreciated over 5 years.)

# Impact of Discounting

- **Example of Provision with Estimate Change:**
- Changes in amount or timing or discount rate of obligation must be recognized
- Record interest expense of the year and then recognize changes in estimates
- Assume market rate changes at end of  Year 3 to 6%.

 

# Impact of Discounting

| Year | Equipment adjustment | Interest paid | Interest expense 7% | Interest expense 6% | Balance in Obligation |
|---|---|---|---|---|---|
| Opening balance | | | | | $28,520 |
| Year 1 | | 0 | 1,996 | | 30,516 |
| Year 2 | | 0 | 2,136 | | 32,652 |
| Year 3 | | 0 | 2,286 | | 34,938 |
| Year 3 adjustment | 662 | | | | 35,600 |
| Year 4 | | 0 | | 2,136 | 37,736 |
| Year 5 | | 0 | | 2,264 | 40,000 |

# Impact of Discounting

- **Example of Decommissioning Obligation**

**<u>Each year, record the interest – Year 1</u>** (Year 2&3 will be similar)

| | | |
|---|---|---|
| Interest Expense | 1,996 | |
| Decommissioning Obligation | | 1,996 |

**<u>Year 3 – Adjust for change in interest</u>**

| | | |
|---|---|---|
| Equipment | 664 | |
| Decommissioning Obligation | | 664 |

# Classifying Liabilities

- **Current liability** – settled within the next operating cycle or the next 12 months
  - Operating cycle – time between purchase of materials for processing into inventory and collection of cash from sale
  - When operating cycle cannot be identified, then use 12 months
- **Long-term liability** – has a due date past the next operating cycle or the next 12 months

# Classification of Notes Payable

- **Notes Payable** that are classified as **current** include:
- **Loans due on demand** – Demand loans payable on demand (or short delay)
- **Loans due within the next year** – If loan has a due date within the next 12 months
- **Current portion of long-term notes payable** –a portion of the loan is due in the next 12 months
- **Long-term debt in violation of covenants and callable at any time**

# Short-Term Obligations & Refinancing

- A company may wish to reclassify liabilities from current to long term to improve the reported working capital position
- Intention to restructure a short-term loan as a long-term loan is not enough to justify reclassification
- A contractual arrangement may be relied on to support classification of short-term obligations as long-term debt, if it is a legal document
- This agreement must be in place at the year-end date
- If a short-term obligation is to be excluded from current liabilities under a future financing agreement, note disclosure of the details would be appropriate

# Classification of Provisions

- Provisions are classified as current or long-term based on timing of expected future cash flows
- However, classification must first be based on legal terms

# Disclosure for Financial Liabilities

- Disclose:
  - Carrying amounts in each category
  - Fair values and description of method used
  - Components of each category
  - Legal terms – maturity, interest rate, collateral
  - Any defaults or breaches and any resolution; and carrying amount
  - Various revenue and expense amounts, including interest expense
  - Financial risk exposure – credit, liquidity, market and objectives for managing risk
  - Related accounting policies

# Disclosure for Provisions

- Disclose:
  - Show in separate category
  - Explain the nature of each
  - Continuity schedule explaining movement for each class
  - Contingencies - describe completely – nature, estimate of financial effect

# Statement of Cash Flows

- On statement of cash flows, report:
  - Operating activities - changes in liabilities and provisions related to earnings
  - Financing activities – cash changes in borrowings
  - Interest paid – either operating or financing
  - Operating activity - interest due to unwinding a discount is a non-cash expense and is added back
- Non-cash transactions are excluded from SCF and disclosed

# Accounting Standards for Private Enterprises

- Does not use the term “provision”
- ASPE recognizes non-financial liabilities when:
  - *meet the definition of a liability, are measureable and if future economic sacrifices are probable*
  - Some differences in measuring these between IFRS and ASPE
  - Constructive liabilities are <u>not recorded</u> under ASPE
  - No ASPE standard for recording customer loyalty points – may use the IFRS approach or not.

# Accounting Standards for Private Enterprises

- Contingent liability – a liability that will result in the outflow of resources only if another event happens
  - *If likely* – record and disclose if measureable; if not measureable, disclose only
  - *If undeterminable* – disclose
  - *If not likely* – Do not record or disclose unless material

# Accounting Standards for Private Enterprises

- May use either effective-interest method or straight-line method to discount amortization
- **Example used earlier in the chapter:**
  - Purchase equipment for a note payable of $40,000 and note is due in 5 years with interest at 3%.
  - Company's borrowing rate for a similar loan would have been 7% - effective interest rate
  - PV of $40,000 for 5 years at 7% with payment of $1,200
    - = $33,440

# Impact of Discounting

## Using the Straight-line Method

| Year | Interest paid | Interest expense 7% | Balance in Note Payable |
|---|---|---|---|
| Opening balance | | | 33,440 |
| Year 1 | 1,200 | 2,512 | 34,752 |
| Year 2 | 1,200 | 2,512 | 36,064 |
| Year 3 | 1,200 | 2,512 | 37,376 |
| Year 3 | 1,200 | 2,512 | 38,688 |
| Year 5 | 1,200 | 2,512 | 40,000 |

# Accounting Standards for Private Enterprises

- Classification and Disclosure
  - If a long-term loan is coming due and a refinancing agreement is in place *by the end of the fiscal year* (the reporting date) then reclassification of this loan to long-term would be permitted.


# END OF CHAPTER 12:
# Financial Liabilities and Provisions

**Summary** → Liabilities are present obligations of a company resulting from past events, the settlement of which is expected to result in the outflow of economic benefits. Liabilities may be nonfinancial or financial and may result from legal obligations or constructive obligations. Provisions are recorded at the best estimate, discounted if needed, and are re-estimated each reporting period. Best estimate may be the expected value (large populations) or the most likely outcome informed by expected value and cumulative probability (small populations).