CGMA MANAGEMENT CASE STUDY NOVEMBER 2018 EXAM ANSWERS

Variant 3

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CIMA will not accept challenges to these answers on the basis of academic judgement.

Financial Reporting

The contamination occurred in the year ended 30 June 2018. There appear to be a number of issues resulting in expenditure that may need to be accounted for in the financial statements. The accounts have not been signed and so these will be adjusting events occurring after the period end in accordance with IAS 10. These are:

- Costs of replacing any contaminated equipment. These have been installed but they may not have been paid for yet.
- Impairment of unsold goods that may be contaminated and held as inventory in the warehouse.
- Returned/recalled goods from customers. This will include the transportation and disposal of contaminated waste as well as the issue of new inventory to customers.
- Costs of advertising the recall to reach all customers.
- Compensation to end-user customers for potential health issues.
- Compensation to retailers and airlines for loss of sales.

New Equipment

The only cost with certainty is the replacement of the equipment. This was installed before the year end and Grapple has received an invoice. The amount will be accounted for as a replacement non-current asset and a corresponding liability. The old equipment will be scrapped and a loss on disposal will be recorded in the statement of profit or loss for the year ended 30 June 2018. This should have been accounted for.

Impairment of inventory

There may be existing inventory in the warehouse that remains unsold. The batches that are contaminated should be identified and removed to be destroyed. This may incur costs (see later). The inventory will need to be valued at the lower of cost and net realisable value in accordance with IAS 2 Inventories. In this case the inventory cannot be sold and so has no value. The value of inventory in the cost of sales and the statement of financial position will be reduced for this impairment. This amendment reduces the profit for the period.

The remaining costs are going to be estimated as Grapple does not know what these are by the year end. The question is whether they constitute a provision or a contingent liability.

A provision is recognised if all of the following conditions are met:

1. There is a current legal or constructive obligation as a result of a past event; and
2. It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
3. A reliable estimate can be made of the amount of the obligation.

If the obligation is merely possible or we are unable to estimate the amount reliably then this expenditure is disclosed as a contingent liability.

Other expenditure

The event giving rise to the potential expenditure occurred before the year end. Grapple would need to establish the likelihood of the expenditure and then determine a reliable estimate of the costs. It seems more likely than not that the goods will need to be recalled and inventory redistributed to customers. The costs of organising and advertising the recall are also highly likely. Once the costs are estimated these would be considered a present obligation and a provision for the amount should be expensed in the statement of profit or loss for the year ended 30 June 2018 and a corresponding liability created.

Grapple has only received one letter indicating an intention to sue them for damages. Legal advice should be sought to determine whether there is a strong case from the customer concerned and if so, whether the amount of Z$1,200,000 is reasonable or whether it should be less. If it is considered more than likely then a provision should be accrued and the expenditure recorded in the statement of profit or loss for the year ended 30 June 2018. Our legal team should be able to advise on the amount.

If it is simply a possibility that the customer will be successful then Grapple should disclose a note about the event as a contingent liability.

Without notice of the intention to sue from other customers it would not be possible to account for any damages. Grapple may wait until up to the date the accounts are signed to determine whether any further correspondence has been received and at that point disclose further events.

Risks and risk management

The long- term risks to Grapple from the contamination include:

- Reputation damage for quality. Grapple has always prided itself as being a quality product. In a competitive market where there are other providers who will increase their market share there is a risk that Grapple will not gain the market share that it has gained over the last year. This may take several years to recover from.
- Reputation damage for poor leadership if the crisis is not handled well.
- Damage to the brand name.
- Environmental issues resulting from the contaminated product not being disposed of correctly
- Substantial financial losses and corporate failure
- Further contamination

Management of risk may be difficult as although the effect can be great the likelihood is not always known. There are four ways that the risks may be managed:

- Transfer
- Avoid
- Reduce
- Accept

Transferring risk may be achieved through insuring against losses. This may be possible in the future but now that an event has occurred any premiums paid would be substantial. The main risk to insure against would be financial losses.

Further contamination may be avoided through adequate training and internal control procedures to make sure that only the cleaning agents authorised by the maintenance team are used. The current procedures are clearly known by staff as there is a notice displayed but there needs to be rigorous application of the rules with someone taking responsibility for failures. The environmental issue may be avoided too in this way.

The risk of reputational damage on quality and leadership is difficult to manage. There needs to be communication with the stakeholders to make sure that they are informed about consequences and action. It may be sensible to engage a Public Relations consultant to help with this.

The financial losses will need to be avoided as their impact is significant and could lead to financial failure. From now on the way that the crisis is handled will determine the extent of the financial losses. Grapple needs to make sure that this does not happen again.

SECTION 2

Disciplinary

As an ethical employer, it is important to follow a set disciplinary procedure to ensure all employees get a fair and equitable hearing, regardless of the reason for the disciplinary case. Additionally, the lack of a clear and fair process could lead to a greater probability of a successful appeal, following a negative outcome, and the possibility of a grievance or an employment tribunal, all of which could affect our reputation as a good employer, and affect staff morale.

Although a disciplinary process can be determined by the individual organisation, there are statutory minimum guidelines to follow. We should, ideally, have published guidelines, but if not, I would recommend the following:

Gather evidence – As you have already carried out the investigation, no further evidence may be required, but I would recommend that you verify the facts. For example, you should determine what guidelines are available for purchasing of this product; Although there are clear guidelines to those doing the cleaning that they should only use a cleaning agent provided by the maintenance team, is it clearly stated what properties the cleaning agent should have for those doing the purchasing? If this is not obvious, it may be that there is no disciplinary to answer against Mark. The standard practice for quality testing seems fairly clear, "the first batch after any change e.g. set up, cleaning, maintenance is always tested". Is there any evidence of whether Jan undertook any testing at all, or, if not, why he did not do what was expected?

Provide a statement in writing – If you decide to continue with either disciplinary, this should explain to the employee the reason for the disciplinary process and the steps which will be followed. This could be presented at the informal talk or prior to it taking place.

Informal talk – This is an informal chat to lay out the process and the findings from evidence gathering and to see what the employees have to say about the situation. As there are two separate errors, they should be treated as separate disciplinary hearings. Both employees should be made aware of its purpose and asked if they want a representative to accompany them. The informal talk is an opportunity to lay down expectations and to hear the employee's explanation.

It may be, after this, that the action against the purchasing employee, Mark Taylor, need go no further, although I am not trying to influence your decision. If there were no guidelines and he didn't realise the consequences previously, he will certainly be aware of them after this chat.

If it appears that there is a case to answer for him or for Jan, then you need to *determine an appropriate response* for the severity of the issue. These range from an oral warning, through to dismissal. We need to check whether the range of options open to us has been published, and the potential consequences of actions are known by staff, or disproportionate punishment could lead to a tribunal. . For example, it may be that you consider dismissal or suspension of the Jan, as this appears to be gross misconduct or gross negligence if no extenuating factors are discovered.

At some point in the process, you will need to make both employees aware of their *right to appeal*, which is a right for all employees undergoing a disciplinary process.

Financial reporting

Generally, the results for the quarter ended 30 September 2018 are worse than for the year ended 30 June 2018. Those ratios that cover profitability (ROCE and total non-current asset turnover) cannot be directly compared as the time periods are different. For example, ROCE is calculated by dividing operating profit by the capital employed (equity plus non-current liabilities). The operating profit for the year ended 30 June 2018 is going to be greater than the operating profit for a three- month period and so the ratio is not comparable.

Gearing

Gearing ratio compares debt and equity at a point in time. This is not affected by the period of different lengths. The ratio shows that the debt has decreased slightly, possibly as some is being repaid. The provisions created for the contamination will not be included in the debt figures here as they are not associated with long-term debt finance. The contamination adjustments mentioned will have created some expenditure but the other figures suggest that profits have been made in the quarter and this explains the slight decrease in the ratio.

Interest cover

Interest cover is calculated as operating profit over finance costs. The ratio has decreased although there are substantial profits to cover the interest payable. The fact that the 4.3 times is based on three months and the 7.2 on a year still makes the figures comparable as they are relative. The decrease will be due to the costs that have been expensed for the provision, announcements and returns. Sales may also have been reduced because of the reputational damage and the resulting loss of sales.

ROCE

ROCE is not comparable for a three-month period and an annual one as discussed before. It would be expected to fall with the operating profits being 25% of the yearly figure and with seasonal fluctuations this could be worse. Also, the expenditure and reduction in sales will have further reduced the profit as mentioned before. The capital employed would be increased by the acquisition of replacement equipment and this would also cause the ratio to fall.

Total non-current asset turnover

This ratio is calculated by taking the revenue for the period and dividing it by the total non-current assets. There are two reasons why this ratio has reduced significantly. Firstly, the revenue for the period to September is only for three months and for the previous June it covers a year. But the reduction seems much greater than that and this could be because the revenue has reduced due to the poor reputation that Grapple is suffering. In addition, the acquisition of new equipment to replace the contaminated mixing drums will have increased the level of non-current assets causing a further reduction in the ratio.

SECTION 3

Total quality Management and the costs of quality

Total Quality Management (TQM) is an organisational approach which aims to get things 'right first time' across the entire business. However, just because things are done correctly, it doesn't mean they can't improve, so there is also a focus on continual improvement. For example, getting it right first time would mean introducing policies and procedures to ensure that errors such as the recent contamination would not happen again. However, continuous improvement might also include a change in the cleaning process so it is more efficient and effective.

There are four basic categories of quality costs, divided into two types; costs of compliance and costs of failure, as follows:

Cost of compliance	Costs of failure
Prevention costs	Internal failure costs
Appraisal costs	External failure costs

Prevention costs are those costs incurred in trying to prevent any quality failures; such as the training of production staff and the cleaning and maintenance of equipment, which you have stated come to Z$80,000 when combined. *Appraisal costs* would include all inspection costs, which seems to be the main use of quality control staff from note 2, and so would be Z$100,000 in your accounts. *Internal failure costs* are the costs of correcting any issues before they reach the customer or an external party. So, if your quality control team found an error, it would be the cost of dealing with this, either scrapping the product or re-working it. You have recognised Z$1,550,000 for scrapping of liquid, which would be categorised as an internal failure cost. Finally, and this is the least desirable expense, is the *external failure* cost of Z$4,500,000. This is the cost of dealing with any quality issues which have already affected the external environment or especially, the customer. If there is an expense in this category, it suggests that all other stages failed. This is the case with the recent contamination, and as you can see, can be very expensive to rectify.

TQM should be across the organisation and includes shared ownership. It seems, at the moment, that quality is seen as a production issue only. However, it would be necessary to have procedures in place in purchasing for example. Purchasing staff should be involved in a quality circle with production for example. Grapple is a drinks producer and therefore the external costs may be high especially for financial and reputational impacts.

With the 'right first time' ethos of TQM, prevention costs should see an increase as there would be a lot of activity towards preventing failure e.g. quality circles to discuss each business area, creation of policies and procedures to ensure good quality and training of staff. However, this should have a positive effect on the other costs of quality. If we do get it right, there should be no costs of failure at all. As costs of failure are usually disproportionate to what the costs would be to prevent failure, this should have a positive effect on the total costs of quality.

Over time, as the TQM initiative proves successful, it is also possible to reduce the costs of checking, as, if you have all the processes in place to 'get it right' then the checking becomes redundant. Given that our product is a food type, however, there will always be some mandatory quality checks.

Approaches to strategic development

Grapple has developed using something of an opportunistic approach in the past. *Freewheeling opportunism* is a reactive approach to strategy, but that does not mean that no planning takes place. For example, Dudley founded the company because he had been made redundant, not because he'd planned to. However, he has made a success of it, which now continues. Other examples of an opportunistic approach could be that he found he need to increase the workforce as the popularity of soft drinks grew and also the move into production.

However, it could also be argued that an *incremental* approach has also been used towards development, with new flavours being introduced each year for example and the continued organic growth over the years.

It may seem unusual to see a combination of these two approaches as an incremental approach is typically risk-averse, whereas and opportunistic approach may be considered the opposite. However, they can work well together, with the existing business being steadily and successfully built upon, whilst new opportunities are taken advantage of, without proving disastrous if they fail.

An advantage of the opportunistic approach followed is the ability to react rapidly, which is something our competitors may not have if they spend so much time in analysis before making a decision to act and determining how best to do so. This may explain why our growth has been so rapid. However, it is risky. If the move into production had proved unsuccessful, it could have affected the entire organisation.

The incremental approach allows our managers to be involved in how we develop and should ensure that our strategies are in line with our culture and our current strengths. However, this may be considered a little risk averse and could mean we move too slowly e.g. one new flavour a year may mean we are unable to compete with our major competitors on the range of our products.

Other approaches include the following:

Rational/planned - which Carnival appears to follow. This would require an assessment of the internal and external environments, carrying out a SWOT analysis, before determining how best to proceed. The approach can take a very long time but does take into consideration all that may affect the success of the strategy. It is often required if external funding is sought after to finance a new strategy or major investment. It is also often used in bigger companies, as more aspects need to be taken into consideration when determining the likely effect of a strategy on the rest of the firm. Carnival is much bigger than us, with revenue more than 4 times greater than ours in 2018. Thus, it is probably the most appropriate approach for them. As we grow, we may need to make more use of this approach.

It may be, that if we want to break further into the airline business, for example, which is currently a very small percentage of our sales, that we need a deliberate planned approach to do so.

Emergent – these strategies emerge from others which are planned initially, but a certain outcome was unexpected and unintended. So, for example, if we found that our drinks obtained a cult status because the packaging is so good, this might lead to an emergent strategy into producing packaging materials.

The advantage of an emergent strategy is that it tends to be successful, as it emerges because of a definite opportunity, or something which has already worked well for us, albeit unintentionally. Companies following this approach are also often prepared for change and can adapt rapidly as they are familiar with doing so. However, this could not be the only approach to strategy adopted, as you never know when something will 'emerge' for us to act upon.

I hope that's enough information for you? There are other approaches to strategy which we could have discussed, but I think that's enough to get your head round for now?

SECTION 4

Long-term investment decision-making considerations

As the investment is expected to be in place for a number of years it is important to consider the time value of money. The net cash flow (from T2 onwards) of Z$125,000 a year will not have the same value in today's terms in year 10 as it does in year 3 for example. The time value of money will determine the discount factor used to represent Grapple's cost of capital. There are three elements influencing this:

- Inflation – the discount factor must allow for a loss of purchasing power over time, as prices rise
- Risk – future cashflows are less certain to arise than present cashflows. There must be an attempt to allow for this risk within the discount factor
- Consumption preferences – there may be a preference to have the funds available now. The grandchildren hold 40% of the shares of Grapple between them but are not particularly interested in the company. It may be that there is a preference to receive dividends now, so the return on any investment must be sufficiently high to reward their patience.

Taking the time value of money into account will influence the investment appraisal method used to determine whether the investment is worth doing from a financial perspective. There are a number of appraisal methods available, as follows:

- Accounting Rate of Return – This provides a percentage return on the accounting profits of the investment. It can be compared against the expected returns of a target return. This method uses profit not cash and is therefore subjective
- Payback period – This is the time it will take to pay back the money invested in a project. It does not take into account the time value of money in its purest form although it may be amended to look at discounted payback
- Net Present Value - NPV is 'the difference between the sum of the projected cash inflows and outflows attributable to a capital investment or other long--term project' (Official CIMA Terminology). Any investment with a positive NPV is viable. This method uses discounting and so could be a valid method to use in this case. It is considered to be a superior method of investment appraisal as it is consistent with maximising shareholder wealth.
- Internal Rate of Return – The IRR is the rate of return that provides an NPV of zero. If the IRR is greater than the cost of capital the project is financially worth undertaking. This is less understood by non-financial managers and has some disadvantages. However, a key disadvantage, it's inability to deal with non-conventional cashflows, is not relevant here.

If the investment appraisal method suggests that an investment should be undertaken, it may be worth undertaking sensitivity analysis to determine how sensitive that decision would be to a change in cash flows. Simulations may also be undertaken to determine the effect of changes in different variables over the life of the project.

Non-financial factors in investment-decisions

The minutes of the meeting suggest that the new production method will improve the quality of output, increase the volume of output produced from the same inputs and reduce the likelihood of technical problems in production. Whilst all of these may have directly identifiable cash flows associated with them, there are also non-financial elements involved.

Improving the quality of the output could enhance the reputation of Grapple. This could indirectly influence future market share and competitive position. It could also indirectly influence the sales of other products. Whilst none of these may be measurable financial benefits, and hence would be excluded from the investment appraisal, they could enhance the position of Grapple in the future and should be considered. In Candy Drinks, product wastage is down 14% according to Drinks Manufacturing Monthly. It would be great if we achieved a similar outcome.

Increasing the volume of output is not necessarily a financial benefit, as it would depend upon the demand for the product. If demand exceeds supply this would be financial but even if not, there would be benefits ensuing. It could lead to greater flexibility in production, allowing for shorter production runs on each product.

The effect on output can lead to directly attributable benefits, such as reduction in staff, which has been accounted for. This, in turn, could lead to non-financial costs of the investment. It should be considered how the reduction in staff will affect the morale in the department and in the company as a whole. The Fruit Juices production line is already heavily automated, so to reduce staff even further may have a greater influence than such actions in other departments.

The reduction in the likelihood of technical problems can lead to financial benefits, such as the reduction in scrappage already accounted for, but other benefits from this may be difficult to measure so they would be excluded from the costs benefit analysis. This could include the amount spent on repairs and maintenance, and the downtime involved in this, for example.

The article in Drinks Manufacturing Monthly also mentioned saving space. This would be a real benefit if our production lines continue to grow, as we could fit in more production lines.

It should also be considered how an investment helps an organisation to meet its mission, or strategic objectives. The mission reads "*To combine the use of sustainable, high quality ingredients and expert manufacturing techniques to produce a unique soft drink experience" Roger Grapple, CEO.* This project would certainly help to achieve that and would also be in line with the continuous improvement culture currently being driven through Grapple.

Importance of planning stage of project

The planning stage of the project incorporates all the elements needed to implement a successful project. Carrying out extensive and well-thought-out plans reduces the likelihood of unforeseen problems during the execution of the project. This, itself, is in line with TQM (spending more time on planning will lead to less time and expense on correcting quality problems).

There is no fixed content for the planning stage of a project, but a good plan will include the following, in addition to budgeting for costs, which has already been addressed:

Project Quality Plan – This will be crucial to the final quality of the project outcomes, both in terms of meeting the objectives set (enhance quality, increase volume and reduce likelihood of technical difficulties). The project quality plan will consider both the scope of the project and the quality standards required throughout it. This will be very important in a production project, as the quality standards of the equipment and the layout will influence the final outcomes.

Human Resource Plan - This will ensure that the correct people with the correct skills are available at the required times during the project. Without planning for this, it may be that there is a delay in the project, or members of the project team have idle time whilst not required. It could also mean that people with lower level skills are used to replace absent team members and the effect on the project is one of lower final quality.

Activity Plan – Work Breakdown Structures and Network Diagrams can be used to break the whole project down into manageable activities, along with any dependencies. This will be important for time planning and to determine which activities are critical to timely completion of the project. For example, the de-construction of the old production machinery will not take place until the new equipment has been bought or delivered, and therefore the plan needs to take this into consideration.

Time Plan – Once the network diagram has been produced a time plan can be incorporated, with contingencies in place for any time slippage. This will be important to ensure on-time completion.

Risk Plan – A risk plan is essential in any project. In addition to recognising risks, it will also consider how to deal with them. This may include action to reduce risks, if they are likely to occur, or determine possible contingencies for should they occur.

Communication Plan – There are many stakeholders in a project. For example, this project will include the Fruit Juices production team, the quality control staff, all project team personnel, and the Board of Directors. It may also include the project sponsor. It is important to communicate the right information to the right people at the right time, in the right format. A communications plan will schedule meetings and determine all methods of communication to be used. This will be important to keep everyone updated so they know what to do (or what is being done) and when. This will ensure the project runs smoothly.

Overall, planning will ensure that the project runs as smoothly as possible, delivering the desired objectives on time, in budget and to the desired quality.