

I. Background and Qualifications

1. I, Christopher Jon Pleatsikas, am an economist, living in Santa Cruz, California. I am a Director at the Berkeley Research Group, an economic, litigation support services and business strategy consulting firm, headquartered in California.
2. I have been a Managing Director at LECG, LLC, a global economics and business strategy consulting firm. In addition, I held the position of Vice President at CRA International, another global economic and business strategy consulting firm, as co-Director of the firm's Asia-Pacific Competition Practice, based in Sydney. I have also been a Principal at Putnam, Hayes & Bartlett (now part of PA Consulting) and a Manager of the Economic Analysis Unit at Price Waterhouse (now part of PricewaterhouseCoopers). I have also been a Distinguished Lecturer in the Economics Department of the University of California, Santa Cruz.
3. I received a B.A. from the University of Pennsylvania, as well as an M.S. in Natural Resources from the University of Vermont and an M.A. and a Ph.D. in Regional Economic Analysis from the University of Pennsylvania. In addition to teaching industrial organization at the University of California, I have taught economics and quantitative methods at both the University of Pennsylvania and the University of Maryland.
4. My particular areas of expertise are industrial organization, competition policy, damages analysis, regulation, and microeconomics. I have extensive experience in Australia, as well as in New Zealand, the United States and Europe, in competition (antitrust) analysis and competition litigation and in other litigation and strategic consulting assignments concerning damages analysis, contractual matters and contract disputes.
5. Much of my work has concerned the food processing and food distribution industry. For example, over a multi-year period, I prepared a series of detailed reports on a wide variety of United States' packaged food products, including growth rates, projected growth, industry participants and their prospects, innovative products and expected profitability, as well as analyses of consumer demand drivers. These reports were

prepared for investors, including corporate investors interested in de novo entry and acquisitions in the United States. In addition, I have worked for both private clients and antitrust agencies on a number of merger and conduct-related cases related to agricultural products, food distribution and retailing.

6. More generally, my experience in antitrust analysis includes a wide range of matters, including (but not limited to) mergers and acquisitions, as well as allegations of monopolization and attempted monopolization, predatory pricing, raising rivals' costs, price fixing and many other subject matters. I have also considerable experience in economic impact analysis, including experience in constructing and applying economic impact models designed to estimate the regional economic impacts of industrial and economic activity.
7. I have testified before and submitted testimony to the Australian Federal Court and the Australian Competition Tribunal, as well as state and federal courts in the United States and courts in New Zealand and the Republic of Singapore. I have also testified under Australian Federal Court rules in several private arbitrations in Australia. I have been engaged by private clients and by antitrust regulators, including on numerous occasions by the Australian Competition and Consumer Commission.
8. I have authored and co-authored a number of papers. For example, I have authored and/or co-authored articles on market definition, on the competitive effects of long-term contracts, on predatory pricing and on the problems encountered in competition analysis. I am also editor of the "Report from North America," a column on antitrust developments published regularly in the *Australian Journal of Competition and Consumer Law*.
9. I have read, understood and complied with the Federal Court of Australia, Practice Note CM7, dated 4 June 2013, "Expert Witnesses in Proceedings in the Federal Court of Australia." My opinions are based wholly on the specialised knowledge I have gained through my education and experience and the analysis of the assumptions I have been provided.

10. My Expert Report is organized as follows. Section II presents my assignment, while Section III provides a summary of my conclusions. Sections IV through VI present my answers to the questions identified in my assignment.

II. Assignment

11. I have been asked by Herbert Smith Freehills, solicitors for Murray Goulburn Co-operative Co. Ltd. (hereinafter referred to as “Murray Goulburn”), to consider and answer the following four questions (including sub-questions) in relation to Murray Goulburn’s proposed acquisition of Warrnambool Cheese and Butter Factory Holdings Limited (hereinafter referred to as “WCB”):

- (a) **Question 1:** As a matter of economic theory, what are the relevant effects to consider when assessing the economic impact of a merger or acquisition?
- (b) **Question 2:** What are the economic principles and methodologies relevant to:
 - i. **Question 2(a):** defining the dimensions of a market for the purpose of analysing the competitive effects of a merger or acquisition?
 - ii. **Question 2(b):** assessing the competitive effects of a merger or acquisition in a market?
 - iii. **Question 2(c):** assessing the impact of a merger or acquisition on total economic welfare?
- (c) **Question 3:** If the acquiring firm has a co-operative corporate structure, how would this affect the economic principles and methodologies relevant to matters (a), (b) and (c) referred to in question 2 above?
- (d) **Question 4:** Based on the assumptions provided, please provide an opinion as to:
 - i. **Question 4(a):** the dimensions, and hence the definition, of the market(s) that would be relevant to assessing the economic impact of Murray Goulburn Co-operative Co. Ltd’s (**Murray Goulburn**) proposed acquisition of Warrnambool Cheese and Butter Factory Holdings Limited (**WCB**);
 - ii. **Question 4(b):** the likely competitive effects of Murray Goulburn’s proposed acquisition of WCB; and
 - iii. **Question 4(c):** the likely impact of Murray Goulburn’s proposed acquisition of WCB on total economic welfare.

12. The answers to Questions 1 and 2 are presented in Section IV. The answer to Question 3 is presented in Section V. The answers to Questions 4(a) through 4(c) are presented in Section VI.
13. My curriculum vitae is included as Attachment 1. The Engagement Letter (including The Federal Court of Australia, Practice Note CM7, “Expert Witnesses in Proceedings of the Federal Court of Australia,” as Attachment 1 to the Engagement Letter) is included as Attachment 2. The questions that I have been asked to address are included as Attachment 3. The assumptions that I have been asked to make are included as Attachment 4. Supplementary documents relating to those assumptions are included as Attachments 4.1 through 4.10. The document, Australian Competition and Consumer Commission, “Statement of Issues — Murray Goulburn Co-operative Co. Limited – proposed acquisition of Warrnambool Cheese and Butter Factory Company Holdings Ltd,” 22 April 2010, is included as Attachment 5.

III. Summary of Conclusions

14. My main conclusions are summarised below:
 - (a) **Question 1:** As a matter of economic theory, what are the relevant effects to consider when assessing the economic impact of a merger or acquisition?
 - i. In terms of measures of efficiency, the relevant effects to consider are the impacts on prices, output and costs, both in the short run and the long run.
 - ii. One should also consider whether and to what extent competitive alternatives exist, including competition and potential competition from entry.
 - iii. Measurement of other indicators of economic benefit may also be relevant to assessing the economic impact of a proposed acquisition. These may include impacts on international competitiveness, export earnings, employment and fostering the growth in related economic activity.
 - (b) **Question 2(a):** What are the economic principles and methodologies relevant to defining the dimensions of a market for the purpose of analysing the competitive effects of a merger or acquisition?
 - i. Markets are defined based on the concept of close substitutability. The conceptual test used is the hypothetical monopolist test.

- ii. Markets are defined with respect to product, geographic and functional boundaries and sometimes with respect to temporal and customer (price discrimination) considerations.

(c) **Question 2(b):** What are the economic principles and methodologies relevant to assessing the competitive effects of a merger or acquisition in a market?

- i. A key element in any assessment of the competitive effects of any merger is the concept of economic efficiency. Economic efficiency is a measure of economic performance.
- ii. Efficiency is measured as the sum of producer surplus – the amount by which the price received by suppliers exceeds the marginal costs they incur – and consumer surplus – the difference (summed over all consumers) between the amount consumers are willing to pay for a product and the price that they have to pay. Mergers can affect both the amount of consumer surplus and the amount of producer surplus, as well as the relative proportions each represent of total surplus.
- iii. There is no consensus regarding the appropriate methods for assessing the market impact of proposed mergers. Both quantitative and qualitative methods are used. The focus of any such analysis will be on price effects, efficiencies, flow-on effects from changes in economic activity and effects on public policy objectives.
- iv. It is appropriate to evaluate higher-order effects of proposed acquisitions, as first-order effects will not provide an accurate view of effects.

(d) **Question 2(c):** What are the economic principles and methodologies relevant to assessing the impact of a merger or acquisition on total economic welfare?

- i. There is debate over whether consumer surplus or total surplus is the appropriate standard to use in order to evaluate the potential benefits or detriments of a proposed merger, but, where the objective is increases in total efficiency, total surplus – the sum of consumer surplus and producer surplus – is the appropriate measure. In addition, the fact that, in this case, farmer-suppliers control the acquiring entity, makes a total surplus standard even more relevant to assessing competitive effects.

(e) **Question 3:** If the acquiring firm has a co-operative corporate structure, how would this affect the economic principles and methodologies relevant to matters (a), (b) and (c) referred to in question 2 above?

- i. The economic principles and methodologies relevant to answering Question 2 are fundamentally the same if the acquiring firm has a co-operative corporate structure. One of the most important issues in

analysing the economic issues discussed in Question 2 is the precise corporate structure of the co-operative and the alignment between member interests, board members and management interests and how this affects incentives for production and pricing.

- ii. Firms with a co-operative structure will behave differently after a merger or acquisition than investor owned firms under certain circumstances. It is therefore necessary to consider the unique incentives produced by the co-operative structure when assessing the competitive effects of a merger or acquisition. Under many circumstances, co-operatives can operate in a more pro-competitive and more efficient manner than investor-owned firms and have lower incentives to exercise market power.
- iii. Definitive conclusions regarding the relative efficiencies of co-operatives verses IOFs are not possible. Instead, the efficiency of an individual co-operative should be evaluated with respect to the specific circumstances at hand.

(f) **Question 4(a)**: Based on the assumptions provided, please provide an opinion as to the dimensions, and hence the definition, of the market(s) that would be relevant to assessing the economic impact of Murray Goulburn's proposed acquisition of WCB.

- i. There are two major markets and some more minor markets that are relevant to analysis of the effects of the proposed acquisition.
- ii. One major market is the supply of raw milk. Supply and acquisition of raw milk are two facets of the same market (one facet focused on sellers and one on buyers). The geographic extent of this market is at least all of Victoria and parts of South Australia and the Riverina region of New South Wales.
- iii. The other major market includes processed and semi-processed dairy products. Supply-side substitutability among these products as well as some demand-side substitutability indicate that these products exist within a single unified relevant market. However, I have also analysed effects by assuming that each of these products exist within a separate relevant market. The extent of these processed and semi-processed dairy product markets is at least statewide and in some cases national or international.
- iv. More minor markets include markets for very high margin by-products of milk processing, such as lactoferrin, which is international in geographic scope, and additional services offered by Murray Goulburn to its members, such as equipment and fertilizer sales and technical advice, which are sub-state or statewide in geographic scope.

(g) **Question 4(b)**: Based on the assumptions provided, please provide an opinion as to the likely competitive effects of Murray Goulburn's proposed acquisition of WCB.

- i. The proposed acquisition will, compared with the counterfactuals, result in increased concentration in the relevant market for raw milk, although a number of competitive alternatives will remain open to suppliers and buyers. However, the proposed acquisition, compared with the counterfactuals, also will provide substantial efficiency benefits that are likely to outweigh any potential for competitive detriments associated with increased concentration. Furthermore, the co-operative structure of Murray Goulburn can reasonably be expected to provide incentives to maintain or even increase the price paid to the producers of raw milk, the opposite effect normally expected by an increase in concentration in raw milk processing.
- ii. In the other relevant markets, the existence of a substantial number of alternative suppliers even after the proposed acquisition occurs will likely not result in any competitive detriment, while providing additional efficiency benefits.

(h) **Question 4(c)**: Based on the assumptions provided, please provide an opinion as to the likely impact of Murray Goulburn's proposed acquisition of WCB on total economic welfare.

- i. Based on the assumptions provided, it is likely that the proposed acquisition will, on balance compared with the counterfactuals, provide efficiency benefits that outweigh any potential for competitive detriments. In the relevant markets that should be considered in this assessment, the potential for any competitive detriment at all is very low. In addition, there are other public benefits that should accrue from the proposed acquisition that would either be unavailable or much lower under the counterfactuals.
- ii. I conclude, based on the information available to me, that the acquisition of WCB by Murray Goulburn is likely to enhance total economic welfare.

15. I elaborate on these conclusions and my reasons for them in the Sections that follow.

IV. Economic Theory and Principles and Methods for Competition Analysis

16. In Sections IV.1 through IV.3 below I discuss the economic theory and principles relating to the concepts of competition, market power, market definition and the

assessment of competitive effects. In Section IV.4 I briefly discuss use of the total efficiency versus consumer welfare standard to measure the effects of mergers and acquisitions. In all cases the discussion herein is presented from purely an economic perspective. Section IV.1 provides a general backdrop for the economic concepts and principles relevant to answering Questions 2(a) through 2(c), which are answered in Sections IV.2 through IV.4. Section IV.5 provides the answer to Question 1.

IV.1 Definition and Nature of Competition

17. Because “competition” is such an important consideration in antitrust cases, it is appropriate to examine the concept from an economic standpoint. The concept is fundamentally rooted in the notion of rivalry between economic entities in their efforts to obtain and retain consumers.¹ Competition is not an economic abstraction but rather the process of continuous vying for consumers. It is driven by the profit motive and entrepreneurial incentives. In competitive markets, firms have strong incentives to offer products and services that match consumers’ preferences and, in order to stay competitive, ensure efficient production and responsive innovation.²
18. Economists often utilise structural descriptions of the relevant market to gauge the extent of likely competition within the market and the ability of a single firm (or a group of firms) to exercise “market power”. For example, in a perfectly competitive market, there are many sellers, each lacking the ability to influence price through its actions and thus lacking market power.³ Such firms are forced to sell their products at

1 Competition takes place within a market. A relevant antitrust market is best regarded as a set of competitive constraints on the ability of a single firm (or a group of firms) profitably to raise the price above some benchmark level for a significant period of time.

2 E.g., see, J. Ordober, "Economic Foundations of Competition Policy: A Review of Recent Contributions," in W. Comanor, et al., *Competition Policy in Europe and North America: Economic Issues and Institutions, Fundamentals of Pure and Applied Economics*, Vol. 43, Harwood Academic Publishers, 1990, pp. 7-42 and D. Carlton and J. Perloff, *Modern Industrial Organization*, 4th Edition, Pearson Addison-Wesley, Boston, 2005, especially Chapter 3.

3 The characteristics of the perfectly competitive market model are set forth in more detail, e.g., in D. Carlton and J. Perloff, op. cit., p.57ff. These include, inter alia, homogeneous goods and services, perfect information, price taking (i.e., any deviation from market price is unprofitable), free entry and exit, and the absence of scale and scope economies. It is readily apparent that such characteristics do not describe many real world markets.

“marginal cost.”⁴ By contrast, in a classic monopoly market, there is only one seller, usually with significant discretion over price. In the context of competition analysis, economists tend to use the terms “monopoly power” and “significant or substantial market power”⁵ interchangeably to indicate that a firm has no significant competitive constraints on its pricing discretion.⁶ Therefore, in such a context, a firm need not be a classical monopolist in the sense that it has no competitors at all. Rather, it need only be a firm whose competitors impose no significant competitive constraints.

19. In between these extremes, there are various types of imperfectly competitive markets. In what are described as “oligopolistic markets”, there are few sellers of identical or differentiated products.⁷ In oligopolistic markets, firms are generally aware of their influence over price, are cognizant of their interdependence and can often earn rates of return that exceed “normal” levels.⁸ Some markets are best described as being “monopolistically competitive” (i.e., containing many sellers of differentiated products). Because monopolistically competitive firms sell differentiated products, they have some degree of market power and can charge prices exceeding marginal costs. However, because, in theory, entry into monopolistically competitive markets is largely unimpeded, profits are driven toward “competitive” or normal levels, at least in the

4 The terms “marginal costs” and “incremental costs” are sometimes used interchangeably, but, in economic terms, they are not necessarily equivalent. The term “marginal costs”, in its strict economic meaning, essentially refers to the cost associated with producing one more unit of a good or service by a firm. The term “incremental costs” encompasses output changes of various magnitudes. It can refer to anything from the additional cost of producing a very small increment of output (i.e., “marginal cost”) to the costs associated with adding a whole new product line to the existing set of a firm’s offerings.

5 My use of the term “substantial market power” is meant to convey an economic view and indicates the situation in which a firm that possesses substantial market power faces no significant competitive constraint – that is, its competitors – actual or potential – do not significantly constrain its ability to set price or non-price terms for its products.

6 Economists generally discuss market power in terms of “pricing discretion”, but, in fact, market power provides discretion over quality-adjusted price and competition occurs in both price and non-price dimensions. In other words, when economists discuss “price competition,” they use the term as shorthand for price and quality competition. I adopt that shorthand convention in this document.

7 See X. Vives, *Oligopoly Pricing: Old Ideas and New Tools*, MIT Press, Cambridge, Massachusetts, 1999, for a comprehensive discussion of oligopolistic markets.

8 According to economic theory, a “normal” level of profits is defined as return on assets just sufficient to warrant the replacement of economic assets carried by the firm, taking into account the risk associated with these assets. Firms generally strive to earn profits that exceed such levels.

long run. In oligopolistic and monopolistically competitive markets firms have some discretion over price and/or product and service quality because they face downward sloping demand curves.

20. Structural characteristics of the market, as measured by the number and concentration of firms, are an important but not determinative feature of intensity of competition. Indeed, even a firm with a large market share may not, in some circumstances, possess substantial market power. In fact, as noted below, market behaviour of incumbents is also critically affected by the threat of entry, which, in turn, depends on the extent to which the relevant market is protected by entry barriers.⁹
21. Therefore, in practical terms, structural features of the market provide only a starting point for the assessment of the intensity of competition in any given market and the extent to which any given firm has (or can gain) substantial market power, or, for that matter, any degree of market power.¹⁰ For example, no single firm can exercise substantial market power in a relevant market that is not substantially concentrated or protected by significant entry barriers. It is the degree of rivalry between and among firms, as manifested by their behaviour in the marketplace, that is the prime indicator by which one evaluates how competitive a market actually is.
22. Almost by definition, rivalry among firms necessarily involves inherently aggressive behaviour. Thus, competition does not require that competitors in a market provide

9 Barriers to entry can be any factor that makes it more difficult for a firm to enter or expand operations in a market. There has traditionally been considerable debate among economists as to what constitutes an entry barrier, although most economists now subscribe to the view that entry barriers can be structural, strategic or legal/regulatory (in other words, an expansive view of what constitutes an entry barrier now prevails).

When a relevant market is totally unprotected by any entry barrier, it is said to be “perfectly contestable.” Market outcomes in a perfectly contestable market “mimic” those in perfectly competitive markets even when there are only a few sellers or, in the extreme, just one seller. Perfect contestability, like perfect competition, is a textbook abstraction from which essentially all real world markets deviate to differing degrees. E.g., see D. Carlton and J. Perloff, *op. cit.*, Chapter 8; and M. Motta, *Competition Policy: Theory and Practice*, Cambridge University Press, Cambridge, UK, 2004, Chapter 2.

10 E.g., see, J. Ordover, *op. cit.*, for a comprehensive review of various economic indices of market power and social costs of monopoly.

assistance to one another so that each may gain customers and sales.¹¹ Nor does it require that larger competitors should step aside so that smaller competitors may gain a foothold in the market. To the contrary, competitors, as rivals, must continuously seek to gain advantage in the marketplace. Such behaviour is generally efficiency enhancing and should be encouraged, since, ultimately, consumers benefit from unrestricted and vigorous competition. What is important for competition analysis, of course, is separating aggressive but efficient behaviour, from behaviour that is inefficient because it undermines competition.

23. The antithesis of competition (and rivalry) is cooperation. Cooperation in the sale of a good or service is generally a hallmark of a vertical relationship between two or more entities (although it could also occur in circumstances in which two or more entities are engaged in collusive behaviour). Vertical relationships require cooperation in order to maximize profits at each level in any vertical chain used to provide goods and services to final consumers in order to effectively promote, deliver and service the product to those consumers. For example, the manufacturers of durable goods such as automobiles and dishwashers, and non-durable goods such as food and cosmetics, generally utilize distributors and retailers, and, in the case of some durable goods, after-market service providers to ensure that the goods and services they make can be profitably provided to consumers. In some cases these functions are provided by wholly- or partially-owned entities; in other cases they are provided by third parties.

IV.1.1 Market Power and Competition

24. It is important to be precise when using the term “market power” in terms of its meaning in economics. To an economist, market power merely implies that a firm has

11 While most economists agree that there is no general duty (from an economic perspective) to deal with a competitor in a workably competitive market (mainly because, in such a market, competitive considerations would provide an imperative to deal when it was efficient to do so), there is less of a consensus on this subject among economists in relation to markets where a firm exercises substantial market power. However, in markets where the firm has substantial market power as a result of incumbency inherited from a previously existing monopoly that was granted either by statute or through an exclusive franchise, regulations often impose a duty to deal explicitly or implicitly to foster competition in markets where previously there had been no competition. In such situations, an economic analysis of competitive effects and conduct may have to be viewed through the lens of current or past regulatory obligations.

some discretion over its prices and/or its level of product quality.¹² In mathematical terms, the existence of some degree of market power implies that the firm that possesses it faces a downward sloping demand curve (so that, should it raise its prices, it would not lose all of its customers).¹³ Realistically, almost every firm has some “economic” market power.

25. The proper economic benchmark for gauging firm behaviour in an antitrust context is a workably competitive market.¹⁴ In a workably competitive market some (or even all) market participants may have some market power (i.e., some discretion over price), but no market participant has a substantial degree of market power (as defined by economists). In a workably competitive market, at any specific point in time, prices can deviate from underlying costs and the deployed technologies can deviate from the most efficient ones currently available. However, in such markets, economic forces drive the market, albeit not instantly, towards efficient prices, outputs and costs. At the same time, in such markets firms continuously vie for competitive advantage against their actual and potential rivals and strive to earn above-competitive rates of return on their investments.¹⁵ The prospect of above-competitive returns motivates entrepreneurs and managers and energizes market competition. By contrast, a firm that has a substantial degree of market power is able to price ‘without regard’ to (actual or

12 In technical economic terms this is indicative of the fact that the firm faces a downward-sloping demand curve, so that an increase in price would not necessarily result in a loss of all the firm’s sales. By contrast, in a perfectly competitive market, any increase in price above the competitive level would result in the loss of all of the firm’s sales.

13 Contrast this result with the result that would occur in a perfectly competitive market, where no firm has any degree of market power. If a firm in a perfectly competitive market were to raise its prices above the prevailing price, it would lose all of its sales.

14 E.g., see J. Clark, “Toward a Concept of Workable Competition,” *American Economic Review*, Volume 30, 1940, p. 241; and A. Meese, “Monopolization, Exclusion, and the Theory of the Firm,” *Minnesota Law Review*, Volume 85, 2005, 743, pp. 772-793. I consider the terms “workable competition” and “effective competition” as interchangeable.

15 Because these markets are generally in flux (i.e., characterised by “disequilibrium” conditions), firms may have opportunities to earn above-competitive rates of return for some periods.

potential) competition¹⁶ and/or can act in a manner that could exclude equally or more efficient competitors from the market.

26. The degree of market power of concern for competition policy generally is considerably higher than mere economic market power. The concept of a “substantial degree of market power” (or, in the parlance used in the United States in antitrust analysis, “monopoly power”) is the threshold of concern. In economic terms this indicates that a firm can act persistently in a manner materially different from the behaviour that would be observed for a firm in a “workably competitive” market. Alternatively, again in economic terms, firms with substantial market power or with dominance face no significant constraint from competition.¹⁷
27. Firms can attain market power, regardless of degree, through pro-competitive means as well as regulatory fiat.¹⁸ For example, market power (or even monopoly power) can derive from product innovation, particularly efficient production methods, or an exclusive franchise awarded by government authority. Firms generally seek to gain advantages in the marketplace that will result in obtaining some degree of market power and undertake investments that will sustain such market power. They may even obtain a “substantial degree of market power” (or “dominance”) through the development and deployment of legitimate competitive advantages, such as a path-breaking innovation or the deployment of new technology that supersedes that of other competitors and renders their production processes obsolete or obsolescent.
28. For this reason, from an economic perspective, the mere existence of market power is rarely a competitive “problem” in the sense that it requires intervention. It is only when market power is exercised or perpetuated in a manner that causes substantial harm to competition and consumers that antitrust intervention may be warranted. Consistent

16 There are pricing constraints that operate even on a monopolist, of course. This phrase usually means that a firm can profitably price significantly above the competitive level and for a significant period of time or, alternatively, that it has no significant competitive constraint on its prices.

17 I use the terms “substantial market power” and “dominance” interchangeably. In economic terms I interpret both to indicate a sufficient degree of market power so that the firm that possesses it is essentially unconstrained by competitors.

18 *United States v Aluminium Co. of America* 148 F.2d 416 (2nd Cir. 1945).

with this view, firms with market power should not be prevented from engaging in aggressive, efficiency-enhancing competitive behaviour. Otherwise, entry or expansion by less efficient rivals would be encouraged, or healthy rivalry would be stymied. Ultimately, this would harm consumers.

29. Market power is not necessarily correlated with market share, although firms with relatively high market shares sometimes can exercise significant market power and firms with relatively low market shares can seldom do so. In economic terms, market power is the ability to earn returns substantially in excess of the opportunity cost of capital without attracting ‘significant’ entry (that is, entry that would likely impose substantial competitive constraints). Firms with substantial market power are generally able to do so not just as a consequence of a high market share but because their market is protected by entry (and/or expansion) barriers.¹⁹

IV.1.2 The Economic Objectives of Competition Policy

30. Economists agree that the purpose of competition policy is to protect the competitive process, because competition generally enhances efficiency and thereby improves social welfare. This principle does not imply, however, that business conduct is inconsistent with the objectives of competition policy merely because it may deviate from the theoretical benchmarks of behaviour in perfectly competitive or contestable markets. Competition policy should aim to promote conduct that, in the long run, promotes society’s interests by spurring market rivalry, innovation and facilitating pro-competitive entry. Put another way, ensuring “workable competition” is an objective of antitrust policy to which economists widely subscribe.²⁰
31. Economists also agree that the proper function of competition policy is to protect competition, not advance the private interests of individual competitors. While this distinction may, at first, appear confusing, it is a fundamental economic principle of

19 This leads to the definition of an entry barrier as a factor or condition (behavioural or structural or both) that enables an incumbent to persistently earn returns higher than its opportunity cost of capital without attracting significant entry.

20 E.g., see D. Greer, *Business, Government, and Society*, 3rd Edition, Macmillan, New York, 1993, p. 99; and J. McCall, *Sum and Substance of Antitrust*, 2nd Edition, Josephson/Kluwer Legal Educational Centers, 1986, p. 45; and D. Carlton and J. Perloff, op. cit., Chapters 3 and 19.

competition policy. From an economic perspective, competition policy should not be used to provide artificial benefits to individual competitors that, in effect, enable them to gain advantages not otherwise available through the competitive process. This is even more important when providing artificial benefits to some competitors imposes unwarranted costs on other firms. Such handicapping can lead to less efficient outcomes and, ultimately, consumer harm.

IV.2 Market Definition

Question 2(a): What are the economic principles and methodologies relevant to defining the dimensions of a market for the purpose of analysing the competitive effects of a merger or acquisition?

IV.2.1 Complements and Substitutes

32. The most fundamental concept in market definition analysis is that of substitution. As such, it is useful to review the concepts of economic substitutes and economic complements, which, mathematically, are the opposite of substitutes in the way in which sales react to prices.
33. Assume that two Products – Product A and Product B – are economic substitutes. In that case, an increase in the relative (to the price of Product B) price of Product A will, *ceteris paribus*, result in a decrease in the sales for Product A (given the standard assumption – which is applicable to the vast majority of all real world products – of a negative own-price elasticity) and an increase in sales for Product B (i.e., the cross price elasticity of Product B with respect to the price of Product A – and vice versa – is positive).
34. For economic complements the opposite mathematical relationship prevails. Assume that sales for Product X increase (decrease) as a direct consequence of a price decrease (increase) for another (in some manner related) product – Product Y. In such a situation Products X and Y are economic complements. If Products X and Y were substitutes, an increase in the price of Y would result in an increase in the sales of X.
35. As with substitutes, more formally, the concept of a complement can be understood in terms of cross-price elasticities of demand. Price elasticity of demand is a measure of

the change in quantity demanded resulting from a change in price (and is defined as the percentage change in quantity demanded divided by the percentage change in price). While own-price elasticity of demand measures the change in demand for a product when its own price changes, cross-price elasticity of demand measures the change in demand for one good when the price of another (related) good is changed (where such cross-elasticities, as is the case for own-price elasticities as well, are measured on the basis that prices of all other goods are assumed to be unchanged). For substitutes, the cross-price elasticity of demand is positive. That is, for substitutes, a price increase for Product B will result in an increase in the sales of Product A. For complements, cross-price elasticities of demand are negative. That is, for complements, a price increase for Product Y will result in a decrease in the sales of Product X.

IV.2.2 Defining Relevant Markets

36. In a market economy goods and services are exchanged between buyers and sellers and resources are allocated by means of price signals within a market.²¹ For competition purposes, the market definition task delineates an area of close competition relevant to the firms, products and conduct at issue.²² As such, defining the relevant market will assist in identifying the most important competitive constraints on the firm(s) and conduct at issue. Substitution, in either demand and/or supply, is what defines that area of close competition.²³ More specifically, it is *close* substitutes that one seeks to identify, since it is close substitutes that will impose competitive discipline on the firm and conduct at issue.²⁴ The *ACCC Merger Guidelines* are consistent with this principle.²⁵

21 'Markets' in this sense may involve both spot exchange and/or longer term contracts, and, where 'transactions costs' are too high, market exchange may be replaced by the internal allocation of resources within the firm, through vertical integration or other forms of vertical relationships.

22 D. Scheffman and P. Spiller, "Geographic Market Definition under the U.S. Department of Justice Merger Guidelines," *The Journal of Law and Economics*, 30(1), 1987, pp. 123-147.

23 E.g., D. Carlton and J. Perloff, op. cit., pp.646ff.

24 E.g., see M. Motta, op. cit., pp. 103ff and J. Baker, "Market Definition: An Analytical Overview," *Antitrust Law Journal*, 74, 2007, p. 129.

25 Australian Competition and Consumer Commission, Merger Guidelines, November 2008, see Chapter 4, particularly pages 16-23. For example, paragraphs 4.12 and 4.13 of this document state:

37. Economists measure the degree of substitutability using the concepts of the price elasticity of demand and the cross-elasticity of demand.²⁶ While own-price elasticity provides substitution information, cross-price elasticities help define the boundaries of localized competition.²⁷
38. Demand side substitution occurs when a change in relative prices induces a shift in demand, for example from a relatively higher priced product to a relatively lower priced product. Note that economists distinguish between *economic* substitutes and *technical* substitutes. Similarity of characteristics and function relate to “technical substitutability” (i.e., whether products provide similar services/functionality to purchasers), not necessarily to economic substitutability. Economic substitutes constrain the price of the product of interest. Although technical substitutes may have many of the same characteristics or provide many of the same services as the product of interest, technical substitutes would not necessarily sufficiently constrain the price of the product of interest. If they do sufficiently constrain that price, the technical substitutes would also be considered to be economic substitutes.²⁸

... identifying relevant substitutes is key to defining a market. Substitution involves switching from one product to another in response to a change in the relative price, service or quality of two products (holding unchanged all other relevant factors, such as income, advertising or prices of third products). Market definition begins by selecting a product supplied by one or both of the merger parties in a particular geographic area and incrementally broadening the market to include the next closest substitute until all close substitutes for the initial product are included.

There are two types of substitution: demand-side substitution, which involves customer-switching; and supply-side substitution, which involves supplier-switching.

- 26 The price elasticity of demand for a product is defined as the percentage change in quantity divided by the percentage change in price, when the prices for all substitute goods are held constant. It is almost always negative (i.e., as price increases, demand decreases and vice versa).

The cross elasticity of demand (for product 1 with respect to product 2) is defined as the percentage change in demand for product 1 divided by the percentage change in price for product 2. If it is negative (e.g., as the price of product 2 decreases, the demand for product 1 increases), then the products are said to be complements. If it is positive (e.g., as the price of product 2 increases, the demand for product 1 increases), then the products are said to be substitutes.

- 27 D. Rubinfeld, “Market Definition with Differentiated Products: The Post/Nabisco Cereal Merger,” *Antitrust Law Journal*, 68 (1), 2000, p. 163.

- 28 In discussing demand-side substitution, the ACCC states that, while similarity of product characteristics or function (i.e., technical substitutability) may be “indicative” of economic substitutability, it is “not sufficient to determine whether products are demand-side substitutes.” See Australian Competition and Consumer Commission, *Merger Guidelines*, November 2008, paragraph 4.14, pp. 16-17.

39. Supply side substitution occurs when a change in relative prices induces a shift in supply, using existing capacity,²⁹ for example from a relatively less profitable product to a relatively more profitable product. The availability of opportunities for substitution for a firm's product(s) will constrain the firm from increasing its prices or otherwise disadvantaging consumers.
40. While demand-side substitution is relatively straightforward (even if often misinterpreted), analysts are often confused about supply-side substitution as it is used in market definition analysis. The confusion is particularly acute in parsing between supply-side substitution and entry. The concept of supply-side substitution is based on the principal of so-called "hit-and-run entry". Such entry can only be accomplished if a firm mainly uses existing assets, with no or minimal investment in sunk costs, to shift production from another product to the product of interest. Such production shifts must occur very quickly – generally within a few months at most – and must be profitable, not only in the sense of recovering at least marginal costs, but also in the sense of recovering any sunk costs required to fund the production shifts within a very short period – generally within one year.³⁰ Again, the ACCC's Merger Guidelines indicate that the Commission's view on supply-side substitution is broadly consistent with the more general concept.³¹

29 Where new capacity and/or significant new investment are required to supply the new product, this is considered to be market entry, requiring an analysis of barriers to entry. Note that "supply-side substitution" carries this narrow meaning within the context of market definition analysis. However, the term "supply-side substitution" outside this context could refer to either shifts of existing capacity to supply of another product or to development of new capacity to supply a product.

30 E.g., see J. Ordovery and J. Baker, "Entry Analysis Under the 1992 Horizontal Merger Guidelines," *Antitrust Law Journal*, 61 (1), Summer 1992, p. 139; and J. Ordovery and R. Willig, "Economics and the 1992 Merger Guidelines: A Brief Survey," *Review of Industrial Organization*, 8, 1993, p. 139. The newest United States' *Horizontal Merger Guidelines* (issued jointly by the Department of Justice and the Federal Trade Commission, 19 August 2010) do not specify a particular time period for supply-side substitution but instead refer to "rapid entrants" (pp. 15-16). The ACCC *Merger Guidelines* merely specify that supply-side substitution should occur "quickly" (p. 18).

31 The ACCC draws a very sharp distinction between the supply-side substitution and entry. According to the ACCC, a product may be a supply-side substitute for another product if, in response to an increase in the price of the second product:

- "the production facilities and marketing efforts used for that product can be switched quickly and without significant investment to supply a demand-side substitute for the product of the merger party (the product dimension of the market);

41. In considering “close substitution,” the question naturally arises as to how close substitution must be for the purpose of defining a market?³² In the United States, the European Community and Australasia, antitrust regulators and others utilize the so-called hypothetical monopolist paradigm, which employs the SSNIP test (small but significant non-transitory increase in price³³) – also known as the hypothetical

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- “the distribution network used by the product can be modified quickly and without significant investment to supply the merger party’s customers at their present location or within a distance they would likely travel (the geographic dimension of a market); and
 - “it would be profitable for the current suppliers of the product to make these changes— that is, the profits earned on the assets in their current use would be less than if these assets were switched to supply a demand-side substitute for the product of the merger party.” (see Australian Competition and Consumer Commission, Merger Guidelines, paragraph 4.23, page 18.

Note that, while the ACCC’s Merger Guidelines (unsurprisingly) specifically refer to mergers, the principles contained in that document are generally applicable to defining relevant markets in any context. This is true elsewhere in the world as well – e.g., as where, in the United States, the Department of Justice’s/Federal Trade Commission’s Horizontal Merger Guidelines as used, with some modification, as a guide to defining relevant markets in non-merger cases as well, both by the antitrust regulators and private parties.

The ACCC will only treat a product as a supply-side substitute for another product in circumstances where all or virtually all of the capacity used to produce the first product could profitably be switched to supply the substitute quickly and without significant investment. In circumstances where all or most of the capacity could not be switched quickly or without significant investment, the ACCC considers that the capacity should be viewed from the perspective of entry, not as relevant to supply-side substitution (and therefore not relevant to market definition). Consequently, consideration of barriers to entry would be relevant to determining the impact of such capacity (i.e., capacity associated with entry) on competition, but barriers to entry are not a relevant consideration for supply-side substitution (i.e., because there essentially can be no barriers to entry in the case of supply-side substitution) (see paragraphs 4.23-4.24 of the ACCC’s Merger Guidelines, page 19).

32 E.g., see J. Baker, *op. cit.*, pp. 129 and 142ff; and M. Motta, *op. cit.*, pp. 102-103; and M. Coate and J. Fischer, “A Practical Guide to the Hypothetical Monopolist Test for Market Definition,” <http://ssrn.com/abstract=940667>, 2007, pp. 6-10 for a discussion of substitutability and market definition analysis.

33 For a hypothetical monopolist the SSNIP test posits a small but significant non-transitory increase in price, while for a hypothetical monopsonist (ie, a monopolist buyer) the SSNIP test posits a small but significant non-transitory decrease in price.

monopolist test.³⁴ The hypothetical monopolist test has been adopted as the pedagogical tool for determining market boundaries by most competition authorities in their merger guidelines (and is commonly used as a pedagogical tool in other competition analyses as well).³⁵ This test attempts to provide a more precise framework for analysing substitutability. The relevant market is identified as the smallest area over which a hypothetical monopolist could profitably impose a SSNIP.³⁶ Starting with the firm, product(s) and geographic area(s) of supply, the market is gradually expanded to encompass all sources of close substitution that would otherwise defeat such a SSNIP (i.e., by making it unprofitable through sufficient demand- and/or supply-side substitution).

42. For example, in considering demand-side substitution only,³⁷ if a hypothetical monopolist of Product A attempted to implement a SSNIP, but a sufficient number of consumers, in response, would switch to purchasing Product B so that the SSNIP on A would be unprofitable to the hypothetical monopolist, then Products A and B are in the

34 In merger cases, the SSNIP is supposed to be applied using currently prevailing prices, because the objective is to determine whether and to what extent the merger parties can enhance any market power they currently possess. Consequently, market boundaries are evaluated based on substitution possibilities that exist prior to the merger's occurrence. In non-merger cases, the SSNIP is supposed to be applied using competitive market prices (generally using a workably competitive market price as the benchmark for analysis). Competitive market prices are used instead of prevailing prices in non-merger cases because the objective in these types of cases is to explore the constraints on the conduct of the allegedly anti-competitive practices. This requires an evaluation of the market boundaries (and competitive conduct within those boundaries) that would prevail if the firm accused of anti-competitive conduct competed within a workably competitive market. However, a substantial problem in applying the SSNIP test in a non-merger context is the difficulty of identifying a competitive market price.

35 See, for example, the Australian Competition and Consumer Commission, *Merger Guidelines*, Section 4 and the United States Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, issued 19 August 2010, Section 4.1.1.

36 The SSNIP may be defined at any level, but is generally defined in the 5–10 per cent range (e.g., see United States' *Horizontal Merger Guidelines*, issued August 19, 2010, p. 10, and ACCC, *Merger Guidelines*, paragraph 4.21). For non-merger analyses, the benchmark price level from which a SSNIP is, as noted above, assessed is the competitive market price level. The reason why one should focus on the smallest possible area either in geographic or product space is that the objective of any market definition is to provide a context for evaluating competitive concerns. These are best evaluated in the smallest possible area over which a SSNIP test would be valid. If the market were to be defined too broadly the analyst may mistake the abundance of alternatives as indicative of the existence of multiple sources of constraint. However, in a too-broad market these alternatives would not necessarily be able to discipline the competitive conduct of some (or even all) suppliers of the product(s) of interest.

37 I.e., assuming a set of circumstances where there was no supply-side substitutability.

same relevant market. Thus, it is not the fact that some consumers might switch from Product A to Product B that is determinative of market boundaries, but whether a sufficient number would switch to make the price increase on Product A by the hypothetical monopolist (of Product A) unprofitable. If enough consumers would switch, the two products are in the same relevant market (based on demand-side substitutability). If not, the two products are not in the same relevant market.

43. One should note, too, that, if there are several products that compete within the same market as Product A, then it is the cumulative switching to all these alternative Products by consumers that determines whether close demand-side substitutes for A exist.³⁸ If the cumulative effect is sufficient to make the SSNIP unprofitable, then all close substitutes should be included in the market, even if the consumer switching to each individual product (or even cumulatively to a subset of those products) in isolation may be insufficient to make the SSNIP unprofitable.
44. The magnitude of substitution necessary to defeat a given SSNIP depends on the margin of price over marginal cost. Marginal cost is simply the additional cost incurred to produce one more unit of the relevant product. The higher are margins on current sales, the greater the lost contribution to fixed costs and profits from lost sales arising from the SSNIP.³⁹
45. There is a broad consensus among economists and regulators, first, that market definition analysis can be of considerable assistance in many circumstances for assessing competition issues and, second, that the hypothetical monopolist paradigm and the SSNIP test are useful methodological tools for evaluating market boundaries. While analysis of demand-side substitution is widely viewed as necessary step in defining market boundaries, there is some dispute among economists as to whether consideration of supply-side substitutability is necessary to define the boundaries of a relevant market. For example, the United States *Horizontal Merger Guidelines* does

38 When identifying plausible substitutes one should be mindful of the fact that the objective of the SSNIP test is to define the smallest market (e.g., in terms of product space and geographic space) that would satisfy the requirements of the SSNIP test as applied to the hypothetical monopolist paradigm.

39 B. Harris and J. Simons, "Focusing Market Definition: How Much Substitution is Necessary?" *Research in Law and Economics*, 12, 1989, pp. 207–226.

not include supply-side substitutability considerations in defining relevant market boundaries, but instead uses supply-side substitutability to identify participants in a relevant market.⁴⁰ In a general sense, in my opinion, in most circumstances both approaches are broadly consistent in terms of the answers they derive.

46. Recently, there have been significant questions raised about the efficacy and relevance of conducting formal market definition analyses. For example, Salop (2000) and other economists have questioned the need for defining markets in circumstances where competitive effects can be measured directly.⁴¹ There has also been criticism of the hypothetical monopolist test and the market definition exercise more generally as too blunt an instrument when two products within a market are particularly close substitutes.⁴² Finally, some regulators have acknowledged that market definition is one tool in evaluating competition issues and it may not, in some circumstances, be necessary for the analysis.⁴³ While these criticisms have substantial merit, in my opinion these alternative analytical approaches generally imply a market definition and, in some cases, entail the use of significant assumptions about the structure and nature of competition within that market. For this reason, one should be cognizant of the implications of these alternative analytical approaches and should, where useful and feasible, utilize them. However, there remains significant utility in engaging in the traditional market definition exercise, particularly given the additional rigor it can lend to the analysis in conjunction with use of alternative analytical approaches to assessing competitive impacts.

40 E.g., see J. Ordover and R. Willig, op. cit., p. 144.

41 S. Salop, “The First Principles Approach to Antitrust, Kodak, and Antitrust at the Millennium,” *Antitrust Law Journal*, 68, 2000, p. 187.

42 E.g., see J. Farrell and C. Shapiro, “Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition,” *The B.E. Journal of Theoretical Economics: Policies and Perspectives*, 10 (1), 2010, Article 9, <http://faculty.haas.berkeley.edu/shapiro/alternative.pdf> and R. Gilbert and D. Rubinfeld, “Revising the Horizontal Merger Guidelines: Lessons from the U.S. and the E.U.,” February 2010. The newest version of the Horizontal Merger Guidelines in the United States (issued 19 August 2010) incorporates many of these views, in particular the view that the closeness of substitutes within a market is as important in some cases as the overall market boundaries and the identification of the products in the overall market.

43 See “Federal Trade Commission Seeks Views on Proposed Update of the Horizontal Merger Guidelines,” press release, 20 April 2010, <http://www.ftc.gov/opa/2010/04/hmg.shtm>.

IV.2.3 *Market Dimensions*

47. Markets are generally defined in terms of product, geographic and functional space and sometimes in terms of time and customer dimensions.

IV.2.3.1 *Product Market*

48. The analysis of any market should begin with the product(s) at issue, which is (are) the product(s) sold by the firm(s) whose conduct is of interest in the case. Products should be narrowly defined in an economic sense – that is, products should be defined so as to eliminate from any potential relevant market products that potentially do not compete according to the criteria set forth above in relation to the hypothetical monopolist paradigm and the SSNIP test. There is, of course, an element of judgment and practicality in such a separation exercise. Thus, for example, if a firm produces two types of laundry soap for automatic washing machines (and/or several sizes of packages for each type of laundry soap) as well as dishwashing soap, one would normally, at least as an initial matter, consider all the laundry soap as part of one relevant market and all of the dishwashing soap as part of another (i.e., since all of the different variants of laundry soap likely are economic substitutes, whereas laundry soap and dishwashing soap, at least from a demand-side perspective, may not be economic substitutes).
49. These product categorization decisions can be “tested” notionally or empirically using the hypothetical monopolist paradigm. A notional test would essentially be a thought experiment. An empirical test would derive and/or employ estimates of own-price elasticities of demand and cross-price elasticities of demand to identify economic substitutes and market boundaries. Such information can be derived through statistically valid analyses of large sets of demand and pricing data.⁴⁴
50. In most cases, reliable empirical elasticity estimates cannot be derived, either because the requisite data are practically unavailable or are insufficiently reliable.

44 There have been attempts to use the intersection of demand and supply during different time periods to derive price elasticities (i.e., by comparing prices received and quantities demanded across these time periods). Price elasticities derived in this manner are statistically invalid and therefore completely unreliable, suffering from a very serious statistical problem known as the “identification problem”. E.g., see P. Kennedy, *A Guide to Econometrics*, Second Edition, Basil Blackwell, Oxford, 1990, pp. 128-132; and W. Greene, *Econometric Analysis*, Second Edition, Macmillan Publishing Company, New York, 1993, pp. 585-598.

Consequently, judgment is most often the primary means by which market boundaries are specified. In such circumstances, common sense is generally a useful guide for determining, at least in an approximate sense, market boundaries, although it can be useful in some circumstances to test the sensitivity of any conclusions drawn by considering alternative market boundaries.

51. In some circumstances thought experiments can be supplemented with data on buyer or supplier behaviour to define market boundaries. Among the types of data that can be utilised in circumstances where elasticity estimates either are practically unavailable or are insufficiently reliable are the following:
- (a) Evidence/information that buyers have shifted or have considered or would consider shifting purchases between products in response to relative changes in price or other competitive variables;
 - (b) Information on the conduct of suppliers and sales patterns in the marketplace;
 - (c) The influence of downstream competition faced by buyers in their output markets or upstream competition faced by suppliers in their input markets.⁴⁵

IV.2.3.2 Geographic Market

52. The geographic dimension of the market is analysed in much the same manner as the product dimension with one important exception. In investigating the extent of the geographic market(s) of interest, one should not necessarily automatically begin with the geographic area over which the impugned firm's (or firms') product are supplied as the initial estimate of the geographic market's (or markets') extent. Instead, because (as with the relevant product market) the relevant geographic market is defined as the smallest possible area over which a hypothetical monopolist could profitably impose a SSNIP, one should begin the exercise of geographic market definition with the location of the firm(s) of interest as the central point in any geographic market and posit

45 See United States Federal Trade Commission and United States Department of Justice, *Horizontal Merger Guidelines*, issued 19 August 2010, pp. 11-12. Note that data that demonstrate the opposite of the factors included are also relevant in defining boundaries for relevant markets (e.g., evidence that buyers would not or have not shifted purchases to other in response to significant price increases for the product(s) of interest).

boundaries based on this (these) location(s). Each supply location could, at least initially, be considered as the focal point for an individual geographic market, although, upon investigation (assuming there are several supply locations), it may be true that one geographic market may contain several supply locations.

53. As with the product market, one could test these posited boundaries using empirically-estimated elasticities and cross-elasticities of demand or with a thought experiment based on other quantitative information (e.g., shipments data into or out of different geographic areas or shipment costs) or qualitative information that would be relevant to defining a relevant geographic market. Again, as with posited product market boundaries, it may be useful to test the sensitivity of any results as to anti-competitive impacts by analysing the influence of changes in geographic market boundaries on those impacts.
54. Finally, as with product markets, a variety of empirical data on buyers and suppliers may be used to determine the extent of geographic boundaries.⁴⁶

IV.2.3.3 Functional Market

55. Functional markets relate to the part (or level) of the supply chain that is relevant to the analysis. Most importantly from the perspective of considering competitive implications, the different functional levels that relate to a particular product market are related in a vertical, rather than a horizontal manner. For example, the vertical elements in a product market chain (which can each be, at least in some circumstances, separate functional markets) are traditionally viewed in terms of manufacturing, wholesaling and retailing functions. However, in specific markets, the distinctions among these levels may be sufficiently blurred that some or all may be considered as one functional level. Alternatively, it is possible that other functional levels (either in place of and/or in addition to these levels) may be relevant to the analysis.
56. The functional market concept is quite different in nature than the product and geographic market concepts. Most important, because the different functional levels

46 See United States Federal Trade Commission and United States Department of Justice, *Horizontal Merger Guidelines*, issued 19 August 2010, p. 14.

are related vertically, not horizontally, in economic terms the different functional markets in any chain of distribution for a product are economic complements, not substitutes, in the supply of goods and services. Consequently, the hypothetical monopolist paradigm and its associated SSNIP test, both of which are fundamentally grounded in the analysis of competitive – as opposed to complementary and, generally in the case of the vertical elements in a distribution chain for a specific product, co-operative – interactions in order to identify economic substitutes, are not useful for the identification of relevant functional markets because the different functional market levels are not substitutes. For this reason, quantitative estimation to identify the boundaries of functional markets is seldom undertaken, and identification of the relevant functional market in virtually all cases requires some type of qualitative analysis.

IV.2.3.4 Other Market Dimensions

57. There are two other market dimensions that may, in some cases, be relevant to the specification of relevant markets for competition analysis – time and customers. The time dimension refers to location of market boundaries at different points in time. This dimension may be important in the case of markets whose boundaries have been changing or be expected to change in some substantial manner over the relevant time period. The customer dimension is important in circumstances where suppliers (or buyers) can price discriminate so as to separate customers (or suppliers) into distinct groups for pricing purposes. In such cases these separate customer groupings can be treated essentially as if they are separate relevant markets from the demand-side, although, from the supply-side, they may not be separable.

IV.2.3.5 The Objective of Market Definition

58. It is important to note that the market definition exercise is not an end in itself, but is rather a tool for analysing the competitive issues of interest. Consequently, markets should properly (and consciously) be defined so as to illuminate these competitive issues. This implies that the market definition step is contextual (or “purposive”) in that one must first identify the conduct at issue before one embarks on the market

definition exercise in order to embed the competitive issues of interest firmly within the analysis of that conduct.

59. Once one has identified the market, one can proceed to an analysis of its structure. An analysis of structure will include a description of vertical and horizontal elements and participants. Once these elements and participants are identified, market shares at the relevant functional level(s) can be estimated and an analysis of market power undertaken.

IV.2.3.6 Methods for Market Definition Analysis

60. This Section has already identified the main methods used for defining relevant markets. The hypothetical monopolist test, implemented as a thought experiment is, by far, the most common method used to define relevant markets (at least in terms of product and geographic dimensions).⁴⁷ While this test generally employs some combination of qualitative and quantitative data (e.g., see some of the product and geographic market factors set forth in the U.S. *Horizontal Merger Guidelines*⁴⁸), there are many instances where an emphasis on qualitative analysis – akin to a commercial common sense standard – is utilised.
61. The main methodological alternative to use of the hypothetical monopolist test on the demand-side is estimation, using statistical techniques, of the elasticities and cross-elasticities of demand to identify market boundaries. Since the data for such estimations are generally either unavailable or may produce either unreliable or inaccurate results, identification of market boundaries using this method is uncommon.⁴⁹

⁴⁷ Harkrider, John. “Operationalizing the Hypothetical Monopolist Test,” p.1. <<http://www.ftc.gov/bc/mergerenforce/presentations/040217harkriderhmt.pdf>>

⁴⁸ United States *Horizontal Merger Guidelines*, issued 19 August 2010, pp. 11-12 and 14.

⁴⁹ One of the best-known examples of the use of statistical techniques to identify market boundaries occurred in the context of a merger in the breakfast cereals marketplace – see D. Rubinfeld, “Market Definition with Differentiated Products: The Post/Nabisco Cereal Merger,” *Antitrust Law Journal*, 68 (1), 2000, p. 163.

IV.3 Assessing Competitive Effects of Proposed Mergers

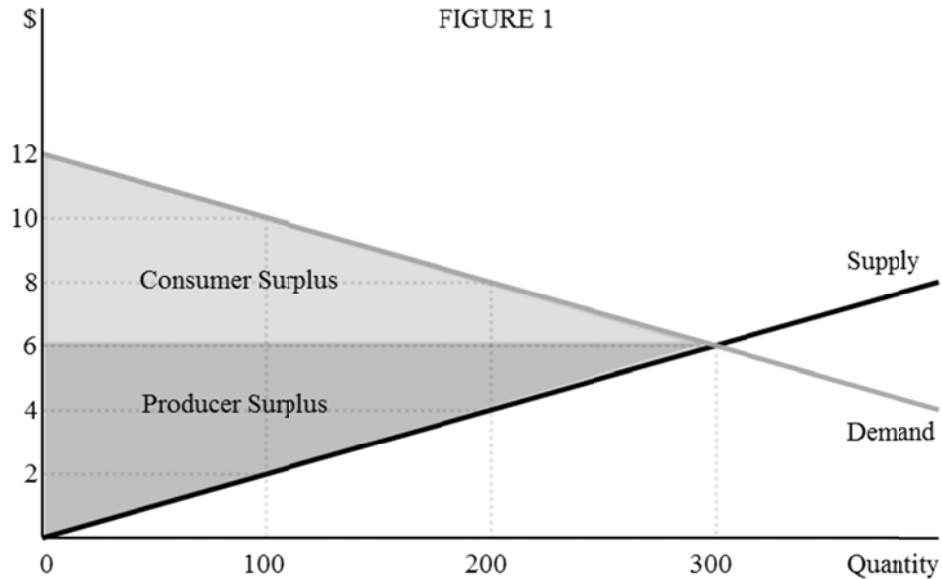
Question 2(b): What are the economic principles and methodologies relevant to assessing the competitive effects of a merger or acquisition in a market?

62. A key element in any assessment of the competitive effects of any merger is the concept of economic efficiency. Economic efficiency is a measure of economic performance. One of the reasons why economists use the concept of perfect competition as a pedagogical tool is that efficiency (and, consequently, economic benefits) is (are) maximized if competition is perfect. While this objective is not achievable in the real world, it is a useful theoretical benchmark.
63. Efficiency is measured as the sum of producer surplus – the amount by which the price received by suppliers exceeds the marginal costs they incur – and consumer surplus – the difference (summed over all consumers) between the amount consumers are willing to pay for a product and the price that they have to pay. Both concepts are illustrated in Figure 1. The sum of producer surplus and consumer surplus is total surplus and is a common measure of economic efficiency.⁵⁰

⁵⁰ Three types of efficiency are generally referred to in the economic literature:

- a. Productive efficiency is maximized when production in the economy occurs at minimum cost (i.e., the most efficient use of inputs).
- b. Allocative efficiency is maximized when the utility gained from the distribution of goods and services across the economy is maximized in light of consumer preferences (i.e., the most efficient distribution of overall output).
- c. Dynamic efficiency is a measure of the ability of the economy to adapt to changes in prices and technology over time.

While dynamic efficiency yields both allocative and productive efficiency benefits over the long run, these two other efficiency concepts are generally conceived as static concepts – i.e., they are measured against the current use of existing resources.



IV.3.1 *Methods for Merger Market Impact Assessment Analysis*

64. There is no consensus regarding the appropriate methods for assessing the market impact of proposed mergers. The newest version of the United States' Horizontal Merger Guidelines set forth a method known as UPP (Upward Pricing Pressure), also known as GUPPI (Gross Upward Pricing Pressure Index), to estimate the likely price increase for mergers in differentiated product markets.⁵¹ While this method is controversial (in that there are some strict assumptions about market behaviour implicit in the technique) and some of the input information required may be difficult to estimate accurately (e.g., diversion ratios for products), it has the advantage of simplicity.⁵² It does not, however, account for strategic responses (by rivals, customers and/or suppliers) and, where these are expected to be significant, it can result in substantial overestimates of price impacts.⁵³

51 United States *Horizontal Merger Guidelines*, issued 19 August 2010, p. 21.

52 E.g., see OECD, *Policy Roundtables: Market Definition*, 2012, p.12
<<http://www.oecd.org/daf/competition/Marketdefinition2012.pdf>>

53 There are no broadly accepted methods for incorporating the impact of strategic responses. Instead, these must be somehow integrated into the analysis through assumptions. Of course, the precise nature of such assumptions is itself likely to be a matter of dispute in many instances.

65. A variety of merger simulation models are also utilised to estimate price impacts.⁵⁴ However, they suffer from many of the same problems as GUPPI, in that they may be difficult to calibrate, require the incorporation of strong assumptions about market behaviour and generally do not account for strategic responses. Consequently, like GUPPI, the results they provide are commonly subject to challenge on a number of economic grounds.
66. As with price impact methodologies, methodologies available for reliably estimating welfare effects are also often both difficult to implement and subject to strong challenge. Producer surplus effects, while in principle easier to estimate (since they only require estimates of efficiency effects and quantities), will be controversial to the extent that there is disagreement about the plausibility of productive efficiencies and the extent to which they are merger specific. In addition, there may be considerable disagreement concerning the ability of the merged entity to achieve dynamic efficiencies.
67. Estimates of consumer surplus effects may depend not only on likely competing views of net price effects (after accounting for strategic responses), but also on assumptions regarding the nature of demand (e.g., the shape of the demand curve, which will be related to price elasticity of demand). Furthermore, it can be difficult to disentangle the expected consumer and producer surplus arising from a potential merger since the extent to which producers will pass-through cost savings in certain situations may be difficult to quantify or, even when quantified, may be subject to large error bands and/or considerable debate concerning whether fundamental assumptions used for the analysis are reliable and/or accurate.
68. Finally, depending on which, if any, other policy objectives are also relevant (i.e., other elements of a public interest test); other methodologies tailored to estimating impacts may also be designated.

54 For example, Bertrand, Cournot, or Auction based models may be used depending upon the form of competition that best describes the market in a particular case. For a comprehensive review of commonly used model varieties, see O. Budzinski and I. Ruhmer, "Merger Simulation in Competition Policy: A Survey," *Journal of Competition Law & Economics*, 2009, p. 283.

IV.4 Efficiency vs. Consumer Welfare Standard

Question 2(c): What are the economic principles and methodologies relevant to assessing the impact of a merger or acquisition on total economic welfare?

69. From an economic standpoint, the appropriate standard to use when assessing a merger depends upon the ultimate goal of antitrust policy and upon the circumstances in which the standard is applied. While most economists agree that antitrust laws should have an ultimate goal of promoting economic efficiency,⁵⁵ this view may not always be consistent with legal practice. Some economists contend that antitrust law should concern itself with the distributional outcomes of a merger – in other words, antitrust law should be used to protect the interests of particular groups like small firms or consumers, but this view is controversial.⁵⁶
70. There is debate over whether consumer surplus or total surplus is the appropriate standard to use in order to evaluate the potential benefits or detriments of a proposed merger.⁵⁷ A consumer surplus standard focuses on the potential gain or loss to consumers that may result from a potential merger. Under this standard, a merger would be prohibited if it reduces the surplus achieved by buyers. In contrast, a total surplus standard evaluates gains (or losses) to both consumers *and* producers. Under a total surplus standard, a merger that decreases producers' costs substantially would be permissible, even if this decrease in costs were accompanied by a small increase in the prices faced by consumers.⁵⁸

55 See D. Carlton and J. Perloff, op. cit., Chapter 19.

56 See D. Carlton and J. Perloff, op. cit., Chapter 19.

57 One fact upon which both sides tend to agree is that the consumer and total surplus standards will often yield a different result. The efficiencies that arise from a merger are often either a reduction in marginal costs or a decrease in fixed costs. While a reduction in marginal costs is often (at least in part) passed through to consumers and captured in a consumer surplus standard, decreases in fixed costs generally do not affect consumer surplus but enhance total surplus (and therefore total efficiency) in the economy. (See K. Heyer, "Welfare Standards and Merger Analysis: Why not the Best?" *Competition Policy International*, Autumn 2006, pp. 35-40) Salop further noted that consumer surplus and total surplus standards will not yield equivalent outcomes, even in the long run, since gains to producers will not necessarily be passed-through to consumers. (See S. Salop, "Question: What Is the Real and Proper Antitrust Welfare Standard? Answer: The True Consumer Welfare Standard," *Loyola Consumer Law Review*, 2010, pp. 349-350.)

58 E.g., see D. Carlton and J. Perloff, op. cit., Chapter 19.

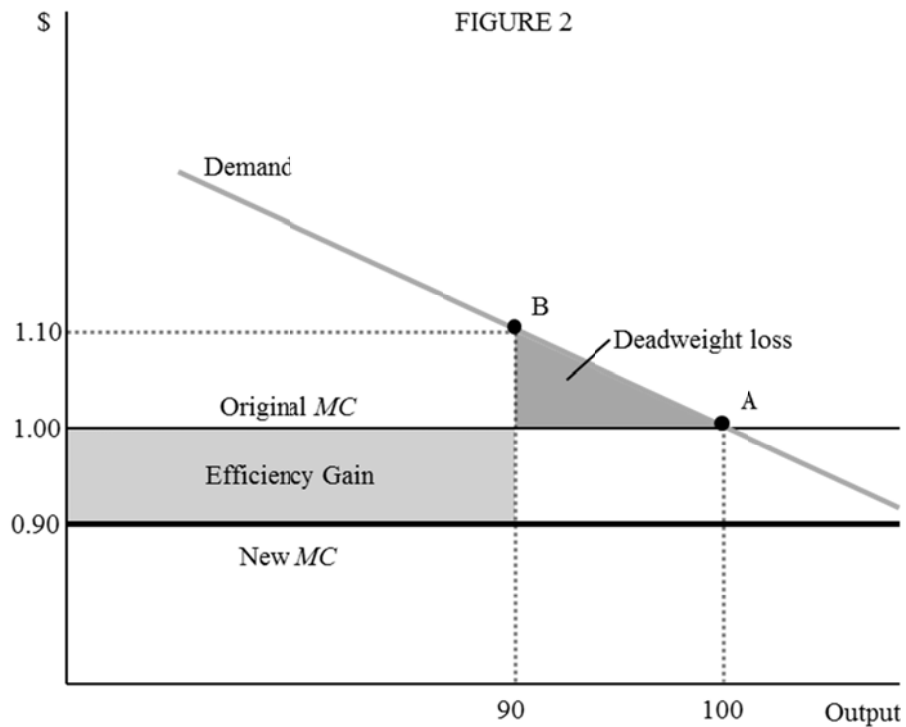
71. Advocates for the consumer surplus standard have advanced a number of arguments. First, antitrust laws in many countries are “primarily concerned with the efficiency benefits directly passed through to consumers.”⁵⁹ If the goal of antitrust policy is to promote consumer welfare or to prevent the redistribution of wealth away from consumers, adopting a consumer surplus standard may be more efficient than engaging in *ex post* remedies via tax policy.⁶⁰ Further, the adoption of a total surplus standard could, at times, lead to inefficiencies by adversely affecting competition and ultimately reduce total surplus.⁶¹ For example, under certain conditions firms faced with a consumer surplus standard might choose to engage in a joint venture with a competitor, achieving cost savings but not decreasing market competition or raising price. When faced with a total surplus standard, these firms may instead choose to merge, internalizing the same cost savings but decreasing competition, and thereby increasing price, transferring consumer surplus to the producers, and generating a so-called “deadweight loss” (caused by the increase in price and the decrease in equilibrium output). This is illustrated in Figure 2.⁶²

59 See R. Lande, "Wealth Transfers as the Original and Primary Concern of Antitrust: The Efficiency Interpretation Challenged," *Hastings Law Journal* 34, 1982, p. 141. See also, S. Salop, *op. cit.*

60 S. Salop, *op. cit.*, pp. 350-351.

61 S. Salop, *op. cit.*, p. 352. While Salop provides a hypothetical example a case in which a joint venture increases consumer and total surplus more than a potential merger, he does not provide evidence on the frequency with which this situation might occur.

62 E.g., see D. Carlton and J. Perloff, *op. cit.*, Chapter 19.



72. Conversely, a number of economists and legal scholars have taken the position that antitrust law should promote total economic efficiency.⁶³ For example, Orbach (2010) noted that that maximization of consumer surplus may actually be counterproductive in certain cases (e.g., status goods).⁶⁴ Heyer (2012) noted that in “cases where the likely magnitude of merger-specific cost savings – whether marginal or fixed” are large, “these benefits to society would exceed any plausible deadweight welfare loss.”⁶⁵ He also noted that there are times (especially in mergers dealing with intermediate goods) where it is very costly to determine the direction or magnitude of the distributional impacts of a merger. A total welfare standard would increase total wealth and help to

63 See for example, R. Posner, *Antitrust Law Journal*, viii, 2d ed., 2001, p. 2, Note that Posner viewed total efficiency using a Kaldor-Hicks standard. Kaldor-Hicks efficiency posits that an outcome is considered more efficient if a Pareto-superior outcome can be reached by arranging sufficient compensation from those that are made better off to those that are made worse off so that all would end up no worse off than before. Under Pareto efficiency, an outcome is more efficient if at least one person is made better off without making anyone else worse off.

64 B. Orbach, “The Antitrust Consumer Welfare Paradox,” *Journal of Competition Law & Economics*, 7(1), 2010, pp. 153-156.

65 K. Heyer, “Welfare Standards and Merger Analysis: Why not the Best?” *Competition Policy International*, Autumn 2006, pp. 29 and 46.

fund government tax and spend policies, which are more appropriate vehicles for dealing with issues of distributional equality.⁶⁶ Farrell and Katz (2005)⁶⁷ reasoned that even if a consumer surplus standard better reflects society's judgments about the appropriate distribution of economic welfare, the use of a total surplus standard is preferred because (1) it allows abstraction away from the uncertainty about the distributional effects on a case-by-case basis; (2) it can yield a more efficient solution for all parties if paired with an appropriate system of transfers; and (3) even if a particular level of redistribution was desired, antitrust policy is not the most efficient vehicle by which to implement this change.

73. One of the most significant objections to use of a total welfare standard – i.e., that including producer surplus skews benefits to higher income segments of the population – has been challenged by Farrell and Shapiro.⁶⁸ They acknowledge that, among individuals who hold stocks, stock ownership is concentrated among higher income segments. However, they also note that the indirect benefits of stock ownership tends to be distributed much more broadly, as pension funds, for example, have vast stock holdings. In addition, they emphasise the need to view welfare from a broad perspective, which implies that total welfare, not just consumer welfare, is the proper standard for competition analysis.
74. Farrell and Katz (2006) decomposed this debate into two separate questions: (1) what should antitrust policy's ultimate goal be, and (2) what objectives should antitrust agencies and courts apply in their enforcement decisions.⁶⁹ The authors noted that, while total surplus is the appropriate goal for antitrust enforcement, it may (or may not) be optimal for some agents involved in antitrust enforcement to focus on consumer surplus, even though the ultimate goal is to maximize total welfare. For example, under a simple game theory model, if antitrust enforcers adopt a consumer surplus standard,

66 See K. Heyer, op. cit., p. 50.

67 J. Farrell and M. Katz, "The Economics of Welfare Standards in Antitrust," *Competition Policy International*, Fall 2006, pp. 9-12.

68 J. Farrell and C. Shapiro, "Horizontal Mergers: An Equilibrium Analysis," *The American Economic Review*, Vol. 80, No.1, Mar., 1990, p. 107.

69 J. Farrell and M. Katz, op. cit., p. 4.

the mergers proposed by firms may exhibit a higher level of total surplus than if the enforcement agency adopts a total surplus standard.⁷⁰ In other cases, (e.g., in cases with a large fixed cost savings and small competitive effects) a consumer surplus standard would block mergers with positive total surplus.⁷¹ Farrell and Katz note the absence of research attempting to quantify the relative frequency with which each case may occur,⁷² and conclude that “we believe one should not too confidently advocate either a total surplus or a consumer surplus prosecutorial and judicial standard.”⁷³ Neven and Roller (2005) are similarly agnostic to the appropriate standard, finding that neither standard strictly dominates the other when the institutional environment in which the antitrust agency operates is considered.⁷⁴

75. Australian antitrust law appears to allow for the consideration of both consumer surplus and total surplus. Under section 50 of the Australian Competition and Consumer Act, mergers and acquisitions are prohibited “if the acquisition would have the effect, or be likely to have the effect, of substantially lessening competition in any market.”⁷⁵ Concerns over a substantial lessening of competition, or “SLC”, may relate back to the concern that merging producers might increase prices even while achieving efficiency gains, and thus support the consideration of a consumer surplus standard. In contrast, the Australian Competition Tribunal can authorize a merger if it would lead to “such a benefit to the public that the acquisition should be allowed to occur” and specifically references the “international competitiveness of any Australian industry.”⁷⁶ This broader focus is more consistent with a total surplus standard.

70 See J. Farrell and M. Katz, op. cit., p. 15.

71 See J. Farrell and M. Katz, op. cit., p. 17.

72 See J. Farrell and M. Katz, op. cit., p. 22.

73 See J. Farrell and M. Katz, op. cit., p. 28.

74 D. Neven & L.-H. Röller, “Consumer surplus vs. welfare standard in a political economy model of merger control,” *International Journal of Industrial Organization*, 2005, pp. 829-848.

75 CCA Section 50(1); see Australian Competition and Consumer Commission, *Merger Guidelines*, November 2008, Appendix 1, p.54

76 CCA Section 95AZH; http://www.austlii.edu.au/au/legis/cth/consol_act/caca2010265/s95azh.html

76. In the final analysis a total surplus standard is more consistent with assessing all of the benefits and detriments associated with a proposed acquisition than a consumer surplus standard. Given the co-operative structure of the proposed acquirer (which means that the owners of the capital assets are farmer-suppliers – see also Section V below), use of a total surplus standard is particularly appropriate (because total surplus measures benefits to both consumers and owners of the relevant capital assets).

IV.4.1 Merger Effects on Productivity Efficiency and Price

77. The reality of measuring merger effects in a real world setting is generally much more complex than simple supply, demand and surplus graphs might indicate, because these effects illustrated by those graphs capture only the immediate internal effects (i.e., internal to the merging parties and in the absence of any second-order, etc. effects) of the proposal. In the real world, customers and suppliers respond to any and all actions on the part of the merged entity, and the merged entity, in turn, responds to these responses. In economic terms, the illustration in the aforementioned Figure 2 focuses only on the first-order productive efficiency and price effects, while higher-order productive efficiency and price effects and dynamic efficiency effects may overwhelm these first-order effects.⁷⁷

78. First-order merger effects derive from two simple propositions. First, (as a first order effect ignoring any internal or external higher-order effects), an increase in concentration in an industry will result in an increase in market power (however trivial), which will in turn, according to economic theory, result in a price increase. Second, also as a first-order effect, and operating in the opposite pricing direction, the primary justification for most mergers is that the merging parties can operate and reorganise their assets to achieve more efficient production (i.e., achieve productive efficiencies). In the parlance of antitrust, these effects are referred to simply as efficiencies or synergies. The latter term (synergies) is sometimes used to distinguish efficiencies that could not or would not be captured in the absence of the merger (i.e.,

77 E.g., see R. Gilbert and D. Rubinfeld, “Revising the Horizontal Merger Guidelines: Lessons from the U.S. and the E.U.,” in Faure, M. and Zhang, X. (eds.), *Competition Policy and Regulation: Recent Developments in China, Europe and the US*, Cheltenham, Edward Elgar, 2011; and J. Farrell and C. Shapiro, “Horizontal Mergers: An Equilibrium Analysis,” op. cit., pp. 107-126.

synergies are merger-specific efficiencies).⁷⁸ An example of a non-merger specific efficiency could be the achievement of economies of scale through merger in a rapidly growing relevant market (i.e., because organic growth of individual firms might be expected, within a relatively short period of time, to achieve the same result, at least for some market participants).⁷⁹ It is generally acknowledged that efficiency effects that may be considered non-merger specific in a rapidly growing relevant market (such as economies of scale or scope) may be much more difficult to achieve through organic growth in slow growing, stable or declining markets, so the delineation of merger-specific efficiencies is, to a significant extent, context-specific.⁸⁰

79. However, it is generally acknowledged that some types of efficiencies are virtually always merger-specific. These include synergies that can be achieved by combining complementary assets that reside within the merger parties – assets that would be difficult for either firm to replicate but which, when combined, yield benefits in increased output and/or reduced costs.⁸¹
80. Merger-specific efficiencies can involve either productive or dynamic efficiency benefits, depending on the time horizon during which they can be achieved, with dynamic efficiency benefits measured over the longer-run (generally several years) and productive efficiency benefits over the shorter-run (e.g., a few months to a year or two).
81. Efficiency benefits operate to counteract any price increase deriving from an increase in market power because they act to reduce costs and/or increase output. There is debate among economists as to the relative influence of efficiency benefits and market power effects. Some economists hold the view that efficiency benefits must be particularly substantial to overcome market power effects, while others believe that efficiency

78 E.g., J. Farrell and C. Shapiro, “Scale Economies and Synergies in Horizontal Merger Analysis,” *Antitrust Law Journal*, Vol. 68, No. 3, 2001, pp. 685-710.

79 E.g., O. Williamson, “Economies as an Antitrust Defense: The Welfare Tradeoffs,” *The American Economic Review*, Vol. 58, No. 1 (Mar., 1968), 18, p. 25; J. Farrell and C. Shapiro, “Scale Economies and Synergies in Horizontal Merger Analysis,” op. cit.

80 E.g., O. Williamson, op. cit., p. 25; J. Farrell and C. Shapiro, “Scale Economies and Synergies in Horizontal Merger Analysis,” op. cit.

81 E.g., J. Farrell and C. Shapiro, “Scale Economies and Synergies in Horizontal Merger Analysis,” op. cit.

benefits have a greater impact, particularly in the long run.⁸² In any case, the influence of these two effects is context-dependent, based on the characteristics of the market at issue and higher-order response effects expected within the market.

82. However, there are formal and informal “safe harbours” in any analysis of the competitive effects of a merger (i.e., instances in which a merger is unlikely to result, on balance, in competitive detriment). For example, the U.S. DOJ and FTC have established certain ranges of market concentration and change in market concentration resulting from a merger that are considered “safe harbours” for merging firms (i.e., cases in which a challenge is declared to be “unlikely”) as well as some initial presumptions of anticompetitive harm.⁸³ Mergers in which productive and dynamic efficiencies are particularly substantial with no significant reduction in the competitive alternatives available to customers and/or suppliers and/or mergers for which the expected result is an increase in industry output as compared with the counterfactual are also, from an economic perspective, unlikely to be viewed as anticompetitive.
83. Higher order merger effects may be as important, or even more important, than first order effects, but may be more difficult to identify and quantify. They may occur as a result of competitive responses by rivals, suppliers and/or customers or through dynamic changes (e.g., product innovations or organizational or operational changes). For example, suppliers to the merged entity may contract directly with customers of the merged entity, thereby establishing an alternative supply chain. Or rivals may expand their product lines or the geographic coverage of their operations in response. In addition, the merged entity may be able to more effectively pursue research and development efforts than the two separate firms.⁸⁴

IV.4.2 Other Potential Merger Assessment Tests

82 E.g., O. Williamson, *op. cit.*, p. 25; J. Farrell and C. Shapiro, “Scale Economies and Synergies in Horizontal Merger Analysis,” *op. cit.*

83 United States’ *Horizontal Merger Guidelines*, p. 19.

84 J. Farrell and C. Shapiro, “Horizontal Mergers: An Equilibrium Analysis,” *op. cit.*, p. 107; R. Gilbert and D. Rubinfeld, *op. cit.*; and D. Ridyard, “The Commission’s New Horizontal Merger Guidelines: An Economic Commentary,” The Global Competition Law Centre Working Papers Series, GCLC Working Paper 02/05, College of Europe, Bruges.

84. In addition to the economic efficiency and SLC tests, a somewhat different set of tests have been proposed by some policy-makers. These can be roughly described as public interest tests and can include assessments that investigate the ability of a merger to satisfy certain public policy objectives – such as increased employment, increased export earnings or assistance toward achieving income distribution objectives.⁸⁵ Because such objectives bear no necessary relationship to achieving efficiency improvements, weighing these objectives against efficiency improvements may be difficult from an economic perspective.

IV.5 Relevant Effects in Assessing the Economic Impact of a Merger

Question 1: As a matter of economic theory, what are the relevant effects to consider when assessing the economic impact of a merger or acquisition?

85. The discussion above in Section IV.4 provides information relevant to answering this question. Specifically, in terms of measures of efficiency, the relevant effects to consider are the impacts on prices, output and costs. Where multiple products are concerned, these effects may have to be disaggregated by the individual products at issue. While broader effects on economy-wide allocative efficiency are relevant, they are, as noted above, often difficult to measure. To the extent that effects on prices, output and costs can be measured not only in terms of short-run effects (static efficiency) but also over the long run (dynamic efficiency effects), such measurements would be highly relevant to assessing the economic impact of a merger or acquisition.
86. One useful benchmark that may provide insight into price and output effects is an assessment of competitive alternatives, including both supply-side substitution and entry (as well as entry barriers). In circumstances in which multiple significant competitive alternatives continue to exist and entry barriers are not high, negative economic impacts may be substantially ameliorated or even eliminated. Therefore, an assessment of competitive alternatives (with and without the proposed acquisition) is useful as well.

85 E.g., see OECD, *Policy Roundtables: Substantive Criteria used for Merger Assessment*, 2002.

87. Finally, measurement of other indicators of economic benefit may also be relevant to assessing the economic impact of a proposed acquisition. These may include impacts on international competitiveness, production efficiency, export earnings (including flow-on effects from increased earnings and/or efficiency improvements, such as increased commodity production and processing activity in Australia), employment (including indirect benefits such as increases in income taxes and reductions in unemployment and related costs) and fostering the growth in related economic activity (e.g., multiplier effects of increased economic activity).

V. Effects of Co-operative Corporate Structure on Competitive Assessment Analysis

Question 3: If the acquiring firm has a co-operative corporate structure, how would this affect the economic principles and methodologies relevant to matters (a), (b) and (c) referred to in question 2 above?

88. Before answering this question, it is necessary to consider a number of structural factors that can be expected to influence the incentives faced by a co-operative and its management. These include the purpose or objective function of the co-operative, how the ownership of the co-operative is structured, how the compensation of its members and/or shareholders is structured, how voting rights are structured, how the compensation of its management board is structured, whether membership in the co-operative is open or closed, and whether the co-operative has an obligation to purchase all of the input product that its members wish to supply.
89. This discussion focuses on producer co-operatives⁸⁶ in which the co-operative entity is owned and controlled by input producers, as opposed to consumer or purchasing co-operatives where the co-operative entity is owned and controlled by members that buy products from external firms. In a producer co-operative, the membership (usually independent farmers) establishes a co-operative board to manage their interests. The members of the co-operative sell the output from their farms to the co-operative and the employees of the co-operative either collect the output for on-shipment and/or

⁸⁶ This type of co-operative is also sometimes referred to as a marketing co-operative.

transform the raw product (e.g. raw milk) into more refined products and then sell these products into downstream markets. Any residual profit generated by the co-operative (after paying for inputs) is reinvested, paid out as dividends to co-operative members, or used to retire the investments of co-operative members as desired.⁸⁷ If the co-operative is granted not-for-profit, tax-exempt status, it is generally prevented from paying above-market returns on ownership shares, and instead returns excess earnings to members (often on the basis of their patronage).⁸⁸

90. In a typical for-profit investor owned firm (IOF), the firm's objective is to maximise profit. Under most circumstances, and setting aside certain stability concerns, an IOF has the incentive to pay the lowest price necessary to obtain a sufficient quantity and quality of inputs. In the case of a co-operative, these incentives may differ. In a co-operative in which most or all of its shareholders are current milk producers and the distribution of shares held roughly mimics the distribution of milk produced, the desire of the shareholders is not to increase profit at the expense of the input suppliers. Under a simplified model, where the co-operative shares are held exactly in proportion to production, and setting aside issues of timing, uncertainty, risk-aversion, and requirements that the co-operative purchase any input its members wishes to supply, shareholders are indifferent between maximizing the price received for their dairy production at the farm-gate or the price at the gate plus the dividend payouts on their shareholdings.⁸⁹
91. When there exist other (non-producing) shareholders in the firm, the input producing members may prefer to set relatively higher input prices and thereby increase the fraction of total profits captured by the producers relative to other shareholders. The divergence in the incentive structure between active producers and other shareholders means that the ownership and voting structure of a co-operative is relevant to an

87 Porter and Scully (1987) includes a description of the structure of a typical dairy producer co-operative. See P. Porter and G. Scully, "Economic Efficiency in Co-operatives," *Journal of Law and Economics*, Vol. 30, No. 2, October 1987, pp. 489-512.

88 P. Porter and G. Scully, op. cit., p. 496.

89 Early literature on the incentives of producer co-operatives (e.g. Enke (1945)) hypothesised that the co-operative maximised the sum of its members' profit and its own profit (which is subsequently distributed to the members). Implicitly under this model, the co-operative equalised revenues to marginal costs.

analysis of co-operative behaviour. To the extent that current producers hold a larger share of voting rights, the management structure of the co-operative is aligned with the interests of those voting members, and the co-operative has discretion over how much input it purchases, the co-operative has an incentive to pay at least as much or more for the inputs it purchases from its members than would a typical for-profit firm.

92. The compensation structure of a co-operative's management board is also relevant to an analysis of competitive and efficiency effects. When the incentives of a manager do not align with a firm's owners and there are informational asymmetries (e.g., if owners cannot observe how hard the agent works or the opportunities available to the firm) the actions of the co-operative's management board may deviate to some extent from the interests of the shareholders. This is known as the "principal-agent problem" and is a consideration in both IOFs and co-operatives.⁹⁰ The risk of a principal-agent problem can be reduced by aligning the incentives of the agent and the co-operative's members. This can be done, at least in part, through specific contractual or compensation provisions like profit sharing plans, linking compensation to specific efficiency or performance metrics, or by increasing transparency and the ability to terminate the agent if he or she fails to act in accordance with the shareholders' interests. If the co-operative management's incentives are not aligned with the shareholders, the co-operative management's incentive structure should also be considered when assessing competitive effects from a potential acquisition or merger.
93. Another relevant factor in the assessment of a co-operative's incentives is the level of control it can exert over membership and the discretion it has over how much input it purchases. If the co-operative has an open-membership policy and is contractually required to purchase all of the input products its members wish to sell, the co-operative board must control the amount it purchases by setting the price it pays for the input product. The shareholder's incentive to pay a high input price is counter-balanced when the co-operative has insufficient capacity to process these supplies or runs the risk

⁹⁰ For a discussion of the principal-agent problem see A. Mas-Colell, M. Whinston, and J. Green, "Microeconomic Theory," Chapter 14. The management of a co-operative may also face unique challenges arising from the fact that the users of a co-operative (not the investors) generally have the rights to any residual profit. See M. Cook, "The role of management behaviour in agricultural co-operatives," *Journal of Agricultural Cooperation*, 1993, p. 45.

of driving down product prices in downstream markets through over-production. In this case, the co-operative may need to reduce the input price offered or otherwise scale back supply to maximise profit. Conversely, where the co-operative faces a decline in the availability of raw materials because of a contraction in their production, has excess production capacity itself, and sees substantial opportunities or increased sales in Australia and elsewhere (i.e., when the co-operative can operate more efficiently by increasing the amount of input it purchases as discussed in paragraph 97), the co-operative's incentive to pay higher input prices will be strengthened. This additional constraint is discussed in more detail below.

Question 3a: If the acquiring firm has a co-operative corporate structure, how would this affect the economic principles and methodologies relevant to: (a) defining the dimensions of a market for the purpose of analysing the competitive effects of a merger or acquisition?

94. The basic economic principles and methodologies relevant to defining markets for the purposes of analysing competitive effects are consistent with the principles described in Question 2a regardless of whether the acquirer is a co-operative or an IOF. Defining the appropriate product and geographic markets remains, as described above, an exercise in identifying relevant substitutes for the products produced by the merging parties through an analysis of demand-side and supply-side substitution. For example, under a hypothetical monopolist (SSNIP) test, the market is still gradually expanded to encompass all sources of close substitution that would otherwise defeat such a SSNIP (i.e., by making it unprofitable through sufficient substitution). Regardless of the structure of the firms involved, regard should be had for the specific capabilities of the firms and the products at issue.

Question 3b: If the acquiring firm has a co-operative corporate structure, how would this affect the economic principles and methodologies relevant to assessing the competitive effects of a merger or acquisition in a market?

95. Firms with a co-operative structure will behave differently after a merger or acquisition than IOFs under certain circumstances. It is therefore necessary to consider the unique incentives produced by the co-operative structure when assessing the competitive effects of a merger or acquisition.

96. Under a simplified model where the co-operative has discretion over how much input it purchases and it sells into a competitive downstream market with homogenous products, a co-operative and an otherwise comparable vertically integrated IOF will face similar pricing incentives in downstream markets.⁹¹ The co-operative's behaviour in the upstream (input) market will be influenced by the factors discussed in paragraphs 88-93 above. Notably, if there is significant overlap between shareholders and input producers and the incentives faced by the co-operative's management are appropriately aligned, input prices offered by the co-operative can reasonably be expected to be higher or at least as high as those offered by an otherwise comparable IOF.
97. The analysis of these incentives becomes more complex when membership in the co-operative is open to all comers and where the co-operative is required to purchase all of the upstream product that its members wish to supply. Helmlberger and Hoos (1962) suggested that in the long-run under an open-membership co-operative, existing members will expand their output and new supplier firms will continue to join the co-operative until the co-operative earns zero profit and individual members will have no incentive to increase or decrease production.⁹² This implies that the co-operative chooses a price such that the average revenue (net of input costs) generated by the co-operative equals the co-operative's average cost, which in turn equals the members' aggregate marginal cost plus the co-operative's average transaction and processing cost. When this is paired with the assumptions that individual producers are price-takers and supply is otherwise unconstrained, it implies that the co-operative behaves as if it were a perfectly competitive firm and, even if it were to gain a monopoly position, it would not exploit that position in any way that reduces welfare.⁹³ If, on the other hand, the existing supply of the input is insufficient to achieve optimal efficiencies of scale, co-

91 In fact, early models of co-operative behaviour relied upon the profit maximisation criteria associated with vertically integrated firms. For discussion, see P. Helmlberger and S. Hoos, "Cooperative Enterprise and Organization Theory," *Journal of Farm Economics*, Vol. 44, No. 2, May 1962, pp. 275-290 at p. 276.

92 P. Helmlberger and S. Hoos, op. cit., pp. 286-290.

93 See P. Helmlberger and S. Hoos, op. cit.. Bergman (1997) also reviews the literature on this subject. See M. Bergman, "Antitrust, Marketing Co-operatives, and Market Power," *European Journal of Law and Economics*, Vol. 4, 1997, pp. 73-92.

operatives will achieve greater efficiencies and pay a higher price for inputs as additional suppliers are added to the membership.⁹⁴

98. Sexton (1990) considered the impact of a co-operative as compared with an IOF structure on spatial competition in agricultural industries. He found that co-operatives which follow net average revenue product pricing behaviour (i.e., that suggested by Helmberger and Hoos for an open-membership model) can have pro-competitive effects in oligopolistic markets.⁹⁵ These co-operative firms can serve as a competitive yardstick for pricing behaviour in oligopolistic markets, thereby forcing private firms to behave more competitively.
99. Bergman (1997) extended this analysis to include export markets.⁹⁶ Under his model, the co-operative's total payments cannot exceed the revenue it generates and the co-operative must set the purchase price of milk to obtain sufficient supply to meet end-product demand at whatever output price that it chooses. If both constraints bind (i.e., there is no export), the co-operative will set price at the competitive level, not at the monopoly level that would be charged by a private firm.⁹⁷ This result also holds under a duopoly model with IOFs and is consistent with the Helmberger and Hoos finding that co-operatives will mimic a perfectly competitive outcome in downstream markets under certain conditions. Bergman concludes that if a marketing co-operative is not able to export at a lower price than the domestic price, its presence will likely benefit its members and consumers.⁹⁸

94 This is true regardless of whether the co-operative has an open or closed membership structure. See P. Helmberger and S. Hoos, op. cit. at p. 289.

95 See R. Sexton, "Imperfect Competition in Agricultural Markets and the Role of Cooperatives: A Spatial Analysis," *American Journal of Agricultural Economics*, Vol. 72, No. 3, August 1990, pp. 709-720. This paper and other literature comparing co-operatives to IOFs is summarised in M. Cook, C. Iliopoulos, and F. Chaddad, "Advances in co-operative theory since 1990: A review of Agricultural Economics Literature," published in *Restructuring Agricultural Co-operatives*, 2004, pp. 65ff.

96 See M. Bergman, op. cit., p. 78. Bergman uses the term "marketing co-operative" as opposed to "producer co-operative" however he defines the entity as "an arrangement that enables a large number of small sellers to coordinate strategies (such as price) when selling a good and to exploit returns to scale" and goes on to state that "in the co-operative structure, the small units own and control the large [production] unit" (M. Bergman, op. cit., p. 73).

97 M. Bergman, op. cit., p. 79.

98 M. Bergman, op. cit., p. 88.

100. However, if exports are desirable, the international price of the downstream product is lower than the price in the domestic market, and the availability of the input product is not otherwise constrained, the co-operative will set the producer price such that the profit extracted from the domestic market is equal to the loss incurred in the export market, the co-operative generates zero excess profit and the net welfare effect is ambiguous.⁹⁹ It therefore follows that if exports are desirable and the international price of the downstream product is at least as high as the price in domestic market (and the other conditions noted apply), there will be no losses in the export market. To the extent export prices/margins are higher than domestic prices/margins, the co-operative would set a higher input product price.
101. Jesse (1980) takes a step back and considers alternative situations in which a co-operative might achieve market power and influence prices in output markets, as compared to an IOF. He noted that, in addition to the typical criteria for market power (a large market share, high entry barriers, or sale of a highly-differentiated product) agricultural co-operatives must also have the ability to prevent surplus production by members. Such control can be exerted by restricting membership (i.e., closed membership), controlling supply through marketing contracts, selling surpluses in non-competitive markets, or by limiting member returns by increasing organizational slack.¹⁰⁰ Rogers and Marion (1990) expanded on this point stating that while “relatively few co-operatives have closed membership”, “many co-operatives do control their supply through production contracts or quotas. As a result, some price enhancement may be achieved by co-operatives.”¹⁰¹ Thus, the ownership and control structure of a co-operative should be considered in determining its incentives and ability to price at a super-competitive point.

99 M. Bergman, op. cit., pp. 79 and 88.

100 E. Jesse, Editor, “Antitrust Treatment of Agricultural Marketing Co-operatives,” Papers presented at a seminar on enforcement of Section 2 of the Capper-Volstead Act, Washington, D.C. April 15, 1980, North Central Regional Research Project NC-117, Monograph No. 14, p.4.

101 R. Rogers and B. Marion, “Food Manufacturing Activities of the Largest Agricultural Cooperatives: Market Power and Strategic Behaviour Implications,” *Journal of Agricultural Cooperation*, Vol. 5, 1990, p. 72.

102. From an empirical perspective, the exercise of market power by co-operatives appears to be limited. Rogers and Marion (1990) found empirical evidence that U.S. food and tobacco co-operatives appear to have little market power and concluded that “absent further processing and product differentiation, however, we would expect any price enhancement to be modest.”¹⁰² Similarly, Jesse concluded that “possession of market power sufficient to yield significant price premiums is more difficult for a co-operative than for a proprietary firm.”¹⁰³

Question 3c: If the acquiring firm has a co-operative corporate structure, how would this affect the economic principles and methodologies relevant to assessing the impact of a merger or acquisition on total economic welfare?

103. In addition to the changes in total welfare arising from relative differences in competitive effects that are discussed above, a co-operative corporate structure may affect the total economic welfare by impacting the efficiencies resulting from a merger.
104. Co-operatives may be more efficient than IOFs for a number of reasons. First, to the extent that, under an IOF structure, both input producers and the input processor possess market power, the vertical integration of the two entities into a co-operative can be expected to ameliorate the problem of double marginalization (in which firms in both levels of the supply chain price above marginal cost). This will lower prices in the downstream markets, increase the quantity sold, reduce deadweight loss, and increase consumer, producer and total surplus.¹⁰⁴ Second, if vertical integration achieved through a co-operative lowers cost, the co-operative will achieve economic benefits.¹⁰⁵ Third, a co-operative that is managed by current or former producers may have improved information flows relative to IOFs, which can result in more efficient

102 R. Rogers and B. Marion, op. cit., p. 72.

103 E. Jesse, op. cit., p. 6.

104 D. Pepall, D. Richards and George Norman, *Industrial Organization: Contemporary Theory and Practice*, 2nd Edition, South-Western Thomson Learning, Cincinnati, 2002, p.437-443.

105 P. Porter and G. Scully, op. cit., p. 512.

policies.¹⁰⁶ Fourth, if there is potential for monopsony power in the industry,¹⁰⁷ the presence of robust co-operatives may limit monopsonistic exploitation by processors and reduce market distortions. The existence of a co-operative in this setting can also promote more efficient behaviour by all firms operating in the market.

105. Conversely, the structure of co-operatives can make them less efficient. For example, to the extent that the quality of the input product produced by co-operative members is monitored or enforced less reliably than under an IOF structure, co-operative members have an incentive to produce lower quality products and free-ride on the efforts of other members. This can decrease total efficiency relative to an IOF which has the ability to terminate low quality suppliers. Furthermore, as noted by Porter and Scully (1987) co-operatives face “transaction, decision, information, and contract monitoring and enforcement costs incurred incrementally through a process of collective organization, decision making, and responsibility” that can, under certain circumstances, generate efficiency losses.¹⁰⁸ Moreover, the shared nature of the ownership of the assets of the co-operative can create incentives for sub-optimal investment in technology, innovation, and brand development.¹⁰⁹
106. Empirical evidence on co-operative efficiency (relative to IOFs) is mixed. For example, Porter and Scully (1987) concluded that “the average co-operative fluid-milk-processing firm is only 75.5 percent as efficient as its proprietary, for-profit counterpart” and that “the source of co-operative inefficiency is not... allocative inefficiencies that might arise from the pursuit of alternative objective functions but inherent weakness in the structure of property rights within co-operatives.”¹¹⁰ Similarly, Hollas and Stansell (1988) analysed the utilities sector from 1977 to 1980 and conclude

106 R. Sexton and J. Iskow, “What Do We Know About the Economic Efficiency of Cooperatives: an Evaluative Survey,” *Journal of Cooperatives*, 1993, p. 19.

107 The potential for monopsony power likely has been reduced through the availability of refrigerated transport.

108 P. Porter and G. Scully, op. cit., p. 511.

109 P. Porter and G. Scully, op. cit., pp. 495 and 511.

110 P. Porter and G. Scully, op. cit., p. 511.

that co-operative utilities were not as profit-maximizing as profit seeking proprietary utilities but were more profit-maximizing than not-for-profit municipal utilities.¹¹¹

107. Conversely, Parliament, Lerman, and Fulton (1990) used financial ratio analysis to compare nine U.S. regional dairy co-operatives with non-co-operative firms. They found that between 1976 and 1987, the median dairy co-operative's performance was "significantly better than the performance of IOFs in terms of leverage, liquidity, coverage, and efficiency and not worse in terms of profitability."¹¹² Akridge and Hertel (1991) performed an empirical analysis of Midwestern co-operatives and investor-oriented grain and farm supply firms, using data from a cross-sectional survey of 120 retail farm supply firms.¹¹³ The authors rejected the hypothesis that investor-oriented firms are more efficient than co-operative firms and conclude that co-operatives are no less efficient in terms of variable costs.¹¹⁴
108. Babb and Boyton (1981) focused on the Wisconsin cheese market and considered (1) the "prices paid by plants for milk and the scope and quality of services provided for farmers by plants," (2) the "profitability, various financial performance ratios, and processing costs and efficiency," and (3) "assistance to special types of dairy farmers, firm goals, by-product disposal techniques, income tax revenue generated, and product quality."¹¹⁵ The study utilises survey and interview data collected for 44 plants (27 co-operative and 17 proprietary).¹¹⁶ Babb and Boyton found that there was no statistical difference in the price paid by the plant for milk and that proprietary plants generated more income tax revenue. However, Babb and Boyton determined that farmers perceive

111 D. Hollas and S. Stansell, "An Examination of the Effect of Ownership Form on Price Efficiency: Proprietary, Cooperative and Municipal Electric Utilities," *Southern Economic Journal*, Vol. 55, No. 2, 1988, p. 349.

112 C. Parliament, Z. Lerman, J. Fulton, "Performance of Cooperatives and Investor-Owned Firms in the Dairy Industry," *Journal of Cooperatives*, 1990, p. 11.

113 J. Akridge and T. Hertel, "Cooperative and Investor-Oriented Firm Efficiency: A Multiproduct Analysis," *Journal of Cooperatives*, 1991, pp. 6 and 9.

114 J. Akridge and T. Hertel, op. cit., p. 11.

115 E. Babb and R. Boyton, "Comparative Performance of Cooperative and Private Cheese Plants in Wisconsin," *North Central Journal of Agricultural Economics*, Vol. 3, No. 2, 1981, pp. 157-158.

116 E. Babb and R. Boyton, op. cit., p. 158.

co-operative buyers to be superior and that co-operative plants have better “productive efficiency and produce cheese at significantly lower per unit cost.”¹¹⁷

109. Given the disparate nature of these empirical results (and subsequent research by Sexton and Iskow that criticises studies in both camps for data and methodological choices among other reasons),¹¹⁸ definitive conclusions regarding the relative efficiencies of co-operatives versus IOFs are not possible. Instead, the efficiency of an individual co-operative should be evaluated with respect to the specific circumstances at hand.

VI. Economic Impact of the Proposed Acquisition

110. In this Section of my report I set forth my views regarding market definition and market impact for the proposed acquisition of WCB by Murray Goulburn. Section VI.1 provides my answer to Question 4(a). Section VI.2 sets forth my answer to Question 4(b) and Section VI.3 sets forth my answer to Question 4(c).

VI.1 Market Definition

*Question 4(a): Based on the assumptions provided, please provide an opinion as to the dimensions, and hence the definition, of the market(s) that would be relevant to assessing the economic impact of Murray Goulburn Co-operative Co. Ltd.’s (**Murray Goulburn**) proposed acquisition of Warrnambool Cheese and Butter Factory Holdings Limited (**WCB**)*

111. The ACCC’s Statement of Issues from 22 April 2010¹¹⁹ is an obvious starting point for identification of relevant markets for analysing the competitive effects of the proposed acquisition, including in comparison with the three counterfactuals specified in the assumptions provided.¹²⁰ In the SOI, the ACCC expressed a “preliminary view” that the following were the relevant markets to be considered in the proposed acquisition of WCB by Murray Goulburn:

117 E. Babb and R. Boyton, op. cit., p. 162.

118 R. Sexton and J. Iskow, op. cit., pp. 20-23.

119 Australian Competition and Consumer Commission, “Statement of Issues — Murray Goulburn Co-operative Co. Limited – proposed acquisition of Warrnambool Cheese and Butter Factory Company Holdings Ltd,” 22 April 2010 (hereinafter referred to as the “SOI”).

120 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 190-199.

- The separate markets for the acquisition of raw milk in:
 - south west Victoria;
 - south east South Australia; and
 - the central region of South Australia.
- The market for the manufacture and wholesale supply of fresh milk in Victoria.
- The market for the manufacture and wholesale supply of flavoured milk in Victoria.
- The national market for the manufacture and wholesale supply of powdered milk products.
- The separate markets for the supply of bulk raw milk in:
 - south west Victoria;
 - south east South Australia; and
 - central South Australia.
- The market for the manufacture and supply of bulk cream in Victoria and South Australia.
- The national market for the manufacture and wholesale supply of packaged and bulk cheese.
- The national market for the manufacture and wholesale supply of packaged and bulk butter.
- The national markets for the manufacture and wholesale supply of whey products.
- The national market for the manufacture and wholesale supply of packaged cream.¹²¹

112. The ACCC defined the geographic boundaries of its putative relevant markets for the “acquisition of raw milk” and the “supply of bulk raw milk” by reference to the following statements:¹²²

- (a) “These regional areas are generally defined by the distances between dairy processors’ plants and the dairy farms that supply them, usually within a radius of less than 400 kilometres. Information obtained by the ACCC during market inquiries indicates that processors would incur substantially higher costs if they

121 SOI, paragraph 31.

122 While the statements cited refer specifically to the ACCC’s putative market for the “acquisition of raw milk”, “the ACCC considers the geographic dimension of the relevant markets for the supply of raw milk is likely to mirror the geographic scope of the markets for the acquisition of raw milk” (SOI, paragraph 44).

were to acquire and transport large quantities of raw milk from farms more than 400 kilometres from their processing plants.”¹²³

(b) “The ACCC understands that to some extent, drought conditions have resulted in processors acquiring raw milk from farms that are located at greater distances from their processing plants than has traditionally been the case. However, despite this, the ACCC’s preliminary view is that in response to a small but significant decrease in price, processors with plants that are located more than 400 kilometres from the dairy producing regions in central and south east South Australia, and south west Victoria, are unlikely to acquire raw milk in substantial volumes from these regions.”¹²⁴

113. There are several important problems with the relevant markets – both product and geographic – defined by the ACCC in the SOI for the purpose of evaluating the proposed acquisition of WCB by Murray Goulburn. These problems can be grouped into three broad categories – problems relating to defining the relevant products, problems relating to defining the relevant geographies and conceptual problems associated with principles of market definition analysis. I discuss these problems immediately below.

VI.1.1 Problems with the ACCC’s Identification of Relevant Products

114. The ACCC’s identification of relevant products suffers from two main problems. These problems undermine the logic of the relevant product markets defined by the ACCC.

115. First, the ACCC identifies separate product markets for the “acquisition of raw milk” and the “supply of bulk raw milk”. These are not separate markets at all but merely the two sides of a single product market. That is, firms acquire raw milk from suppliers of that raw milk (either farmers or intermediaries that acquire raw milk from farmers in order to on-supply the product to other buyers). Raw milk that is acquired from the farmgate is a perfect supply-side substitute for raw milk that is acquired from an

123 SOI, paragraph 33.

124 SOI, paragraph 34.

intermediary. Conversely, raw milk that is supplied by an intermediary is a perfect demand-side substitute for raw milk supplied by a farmer. There is no economic rationale that would justify defining separate markets for suppliers and buyers (which is essentially the basis for identifying separate “acquisition” and “supply” markets for a single commodity) in this case. Every transaction involving raw milk involves a party that supplies raw milk and a party that acquires raw milk.

116. The ACCC has taken a single product – i.e., raw milk – and separated its supply into two separate markets just because buyers of raw milk may obtain that exact same product (i.e., “raw milk” from farmers is the exact same product as “bulk raw milk” supplied by intermediaries) from different types of suppliers – farmers versus intermediaries. Indeed, some raw milk buyers may obtain supplies from both types of suppliers. It appears that the reason the ACCC has defined separate raw milk markets is that it is concerned that the same entity that acquires raw milk from farmers could, if that entity were to have substantial market power, either (1) reduce the price it pays farmers (in the upstream side of the market) and/or (2) increase the price it charges for raw milk to downstream buyers. While, in my opinion, neither outcome is likely if the proposed acquisition of WCB by Murray Goulburn were to occur, from an economic perspective analysing potential effects on upstream suppliers and downstream buyers does not require artificially distinguishing between different types of raw milk transactions (particularly when the different transactions can, in some circumstances, function as perfect substitutes for one another). In other words, from an economic perspective it is more appropriate to view these transactions as occurring within a single unified product market.
117. Furthermore, the ACCC in its SOI identifies at least three factors that further undermine its division of raw milk supply into two separate product markets:
- (a) the existence of milk brokers, which purchase raw milk from farmers and resell the raw milk to processors;¹²⁵

¹²⁵ SOI, paragraph 23. See also “Further Assumptions for Expert Economist, 27 November 2013, Assumption 200.

(b) Milk swaps, which are transactions that are effectively similar to those that would occur by milk brokers;¹²⁶ and

(c) The possibility that powdered milk may be substitutable for bulk raw milk.¹²⁷

118. The first two factors further undermine the entirely artificial distinction between “raw milk” in the putative acquisition market and “bulk raw milk” in the putative supply market because they illustrate that farmers can supply to different types of buyers – either directly to milk processors or to intermediaries – and that milk processors that purchase raw milk effectively engage in brokering-type activities as well. Consequently, defining a separate market depending on the precise characteristics of the transaction is neither economically necessary nor economically justified. The third factor, to the extent that powdered milk might be an economic substitute (i.e., as defined in the hypothetical monopolist paradigm) for bulk raw milk (i.e., they may be demand-side substitutes), could result in a product market that includes both of these products (that is, there might be no separate relevant product market that includes just raw milk).¹²⁸ I explicitly analyse the potential for competitive effects in both sides of the market for raw milk (i.e., the risk for monopolist or monopsonist type power) in the subsections below.

119. Second, the ACCC has defined eight downstream (i.e., downstream of raw milk) dairy product markets that are variously described as statewide, multi-state (i.e., Victoria and South Australia for bulk cream) or national.¹²⁹ Based on the assumptions I have been provided, it seems unlikely that these (and other) downstream dairy products exist in separate product markets. It appears that there is considerable technical supply-side

126 SOI, paragraph 24. See also SOI, paragraph 35 and “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 83-86

127 SOI, paragraph 43.

128 I assume, for the purposes of my analysis, that raw milk exists in a relevant product market separate from all downstream products made from raw milk. The resulting assumed product market, since it is narrower than a market that would include both raw milk and milk powders, would tend to overestimate any reduction in competition in the relevant raw milk market.

129 SOI, paragraph 31.

substitutability¹³⁰ among these products, particularly within reasonably short time frames across the various products because the mix of products produced by a single production facility can be significantly altered (in response to shifts in consumer demand and shifts in product prices).¹³¹ Furthermore, a multi-plant producer would likely have even more flexibility to alter the mix of products produced across all of its plants (particularly in light of the fact that the ACCC identified all of the downstream product markets as at least statewide in terms of geographic boundaries and many producers of dairy products in Victoria and South Australia have multiple plants in these states).¹³²

120. It is likely that the supply-side substitutability in terms of product mix would respond to price differences in the relevant downstream products. In addition, the substitution can occur over relatively short periods of time (within a few months¹³³ or less given the excess processing capacity that exists¹³⁴). Therefore, a hypothetical monopolist of one of these products would be unlikely to find a SSNIP profitable, as producers of other products would likely be able to shift sufficient production in a relatively short period of time to the product whose price was increased so that the price increase would be unprofitable. These facts imply that these downstream products may be economic supply-side substitutes. It is also possible that some downstream products may be demand-side substitutes as well (e.g., processed milk and milk powders), at least in some circumstances. Consequently, it is likely that all these downstream dairy products are economic substitutes for one another.
121. Evaluating the bulk cream market specified by the ACCC in particular (because that is the downstream market in which the ACCC specified potential concerns about the

130 See ACCC, *Merger Guidelines*, 2008, paragraphs 4.12 through 4.26.

131 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 89-95 and Attachment 7.

132 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumption 96 and Attachment 8.

133 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumption 92.

134 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 97-103.

potential exercise of market power if the proposed acquisition were to occur¹³⁵), supply-side substitutability between bulk cream and other dairy ingredients is likely to be sufficient to undermine the rationale for defining a separate bulk cream product market.¹³⁶ That is, if a hypothetical monopolist of bulk cream were to impose a SSNIP,¹³⁷ it is likely that raw milk processors would shift production away from other products to bulk cream (e.g., a partial shift from full-fat milk and butter toward lower fat milk and bulk cream sufficient to make a SSNIP on bulk cream unprofitable). As long as this supply-side substitutability were sufficient to make a SSNIP on bulk cream unprofitable, no separate product market for bulk cream would exist.

122. There may also be other product markets besides those identified by the ACCC that may be relevant to the analysis of the proposed acquisition. One class of these markets may include some very high margin by-products of milk processing, such as lactoferrin.¹³⁸ A second class of markets may include additional services offered by Murray Goulburn to its members, such as equipment and fertilizer sales and technical advice.¹³⁹

VI.1.2 Problems with the ACCC's Relevant Geographic Markets

123. There are major problems with the ACCC's claimed boundaries for the relevant geographic markets for raw milk (although the ACCC has artificially divided the raw milk market into an acquisition and a supply market, as I have noted above, there is just one relevant product market for raw milk). It appears that the ACCC relied heavily on an observation that, for any particular dairy farming region in South Australia and Victoria, the plants for each firm were located approximately 400 kilometres from other plants owned by the same firm but located in another dairy farming region. From this observation, the ACCC appears to have concluded that there would be relatively little

135 SOI, paragraphs 50-57.

136 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 87-94 and Attachment 7

137 Assuming the prices for all other downstream products produced from raw milk remained constant (as is appropriate under the hypothetical monopolist paradigm).

138 See "Further Assumptions for Expert Economist", 27 November 2013, Attachment 7.

139 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 62-65.

acquisition and supply of raw milk across regions in response to a SSNIP (except in extraordinary circumstances, such as drought conditions).

124. However, based on the assumptions I have been provided, the ACCC's conclusions appear to be incorrect. While the geographic boundaries of the raw milk market in fact include all of Victoria and parts of South Australia and the Riverina region of New South Wales,¹⁴⁰ the problems in the ACCC's conclusions as to geographic market boundaries can be illustrated by reference to examples from Victoria:

- (a) The dairy farming regions in Victoria appear to have developed for historical reasons that may not be related to economic market boundaries. As an example, the areas in Southeastern Victoria (Gippsland) and Southwestern Victoria are separated by the metropolitan areas (mainly Melbourne) where dairy farming would likely be uneconomic based on land values in alternative uses.¹⁴¹ The physical separation of regions based on the intermediate location of a metropolitan area is not necessarily consistent from an economic perspective with a conclusion that separate relevant geographic markets exist.
- (b) There are several dairy processing plants located in and around Melbourne. These plants would be closer than 400 km to each of the three historical dairy farming regions in Victoria.¹⁴² Even if, for the sake of argument, the 400 km limit the ACCC has proposed were binding, the fact that any of the raw milk producing regions could feasibly ship product to milk processing plants in Melbourne would link all three regions into one unified geographic market.
- (c) In addition, some of the dairy processing plants in one dairy farming region are located within 400 km of dairy processing plants located in another region. For example, Parmalat's North Bendigo plant in the northern Victoria dairy farming region is located roughly 300 km from Murray Goulburn's Koroit plant, located

140 See below paragraphs 125-126.

141 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 6 and 46 and Attachment 1.

142 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 96-103 and Attachment 8.

in the southwestern Victoria dairy farming region, and about 290 km from Murray Goulburn's Leongatha plant, located in the southeastern Victoria (Gippsland) dairy farming region.¹⁴³ If the ACCC's claimed 400 km limit were binding, farmers in both southwestern Victoria and southeastern Victoria would still presumably have the alternative of shipping raw milk to Parmalat's plant located in another dairy farming region. This fact, too, tends to support the view that there is a unified relevant geographic market for raw milk across Victoria (as do other facts noted below).

- (d) Even within one firm, some plants are located significantly closer than within 400 km of each other. For example, Murray Goulburn's Koroit plant (located in the southwestern Victorian dairy farming region) is located only about 250 km from its Laverton plant (under construction in the Melbourne metropolitan area). Its Koroit plant is located only about 360 km from its Rochester plant (in the northern Victorian dairy farming region). Its Rochester plant is located only about 330 km from its Leongatha plant (located in the Gippsland dairy farming region).
- (e) Furthermore, it appears that WCB, whose plants are located in southwestern Victoria and adjacent areas of South Australia,¹⁴⁴ utilizes some sources of raw milk supply from the dairy farming region in Northern Victoria.¹⁴⁵
- (f) Significant volumes of raw milk are shipped inter-regionally by Murray Goulburn and its competitors.¹⁴⁶
- (g) Significant volumes of milk are swapped across (and within) dairy farming regions in Victoria between competitors.¹⁴⁷

143 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 96-103 and Attachment 8. Distances were derived from "Google maps" driving directions function.

144 See "Further Assumptions for Expert Economist", 27 November 2013, Assumption 96 and Attachment 8.

145 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 67, 96-103 and Attachment 8.

146 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 72-81.

147 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 83-86.

(h) Raw milk price structures in all three dairy farming regions in Victoria are very similar (Murray Goulburn uses the exact same pricing structure in all three regions).¹⁴⁸ While similarity of pricing is possible across separated relevant geographic markets, it is also consistent (especially in light of other facts noted above and below) with a conclusion that a unified relevant geographic market for raw milk exists across at least Victoria.

(i) “It is industry practice to deliver raw milk to a relevant processing plant within 50 hours of pick up.”¹⁴⁹ Any location within Victoria is within 50 hours transport time of any processing plant in any region in the State. For example, the greatest distance between Murray Goulburn plants in Victoria is 590 km (Koroit to Kiewa). According to Google Maps, the non-stop transit time between these two locations is 6 hours, 9 minutes.

125. Consequently, numerous factors tend to support the conclusion that the relevant geographic market for raw milk is at least statewide in Victoria. In fact, other information tends to support a conclusion that the geographic market for raw milk in Southeastern Australia is even broader – covering at least all of Victoria and parts of South Australia and including parts of New South Wales (the Riverina region) as well. Most obviously, dairy farming areas in southeastern South Australia are contiguous with and located in close proximity to dairy farming regions in southwestern Victoria (e.g., Mount Gambier is located less than 175 km from Koroit). [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]¹⁵⁰ Therefore,

there appears to be no economic rationale whatsoever for the ACCC’s conclusion that a

148 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 50-52 and 70-71.

149 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumption 76.

150 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumption 67 and Attachment 8.

separate geographic market exists for raw milk products in southeastern South Australia.¹⁵¹

126. Moreover, even a conclusion that a separate raw milk market exists in central South Australia¹⁵² appears unfounded as a matter of economics. According to the assumptions provided to me, Murray Goulburn procures raw milk from that dairy farming region as well.¹⁵³ Given that Murray Goulburn has no processing plants in South Australia,¹⁵⁴ milk procured from central South Australia by Murray Goulburn would have to be shipped to plants in Victoria for processing. Non-stop transit times from central South Australia to any of Murray Goulburn's plants in Victoria are longer than non-stop transit times between any of Murray Goulburn's plants within Victoria. Consequently, the assumed existence of significant raw milk shipments from central South Australia to Victoria supports a conclusion that there is one unified raw milk relevant geographic market that includes all of Victoria, and both southeastern and central South Australia and parts of New South Wales.¹⁵⁵

127. Finally, data on transport costs relative to the price paid for raw milk provide additional insights into the geographic scope of the relevant market for raw milk in Victoria.

[REDACTED]

[REDACTED] A SSNIP of 10% in the price of raw milk (in this case in the form of a decline in the price paid by the hypothetical monopsonist buyer) in one region of Victoria/South Australia

151 SOI, paragraph 31.

152 SOI, paragraph 31.

153 See "Further Assumptions for Expert Economist", 27 November 2013, Assumption 6 and Attachment 1.

154 See "Further Assumptions for Expert Economist", 27 November 2013, Assumption 6 and Attachment 1.

155 See "Further Assumptions for Expert Economist", 27 November 2013, Assumption 6 and Attachment 1.

156 See "Further Assumptions for Expert Economist", 27 November 2013, Assumption 181.

157 See "Further Assumptions for Expert Economist", 27 November 2013, Assumption 82.

would be

¹⁵⁸

[REDACTED]

¹⁵⁹ Consequently, farmers in any region in Victoria could access raw milk buyers located in other regions of Victoria, enabling farmers to render the SSNIP by a hypothetical monopsonist acquirer of raw milk in one region of Victoria unprofitable. This indicates that a broader geographic market definition (than a single dairy farming region in Victoria or South Australia) is economically justified. In fact, the transport cost differentials between and among dairy farming regions (and between dairy farming regions in Victoria and processing plants in Melbourne) indicate that the relevant geographic market for raw milk is at least statewide.

128. As for downstream (i.e., processed) dairy products, at the narrowest the relevant geographic market is statewide. At the broadest (e.g., for butter and cheese), the relevant market is national or international.¹⁶⁰ To the extent that there is demand-side

158 I note that my assumptions indicate that such conduct (i.e., varying the price of raw milk significantly across different dairy farming regions of Victoria and South Australia) is inconsistent with observed market behaviour.

159

[REDACTED]

160 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumption 109(a) and Attachment 9 and Assumptions 140-174.

and supply-side substitutability among these downstream products, the relevant geographic market would likely be equivalent to the product(s) with the broadest geography.

VI.1.3 *Potential Conceptual Problems with the ACCC's Relevant Markets Analysis*

129. One aspect of the hypothetical monopolist test that is often overlooked relates to the fact that market boundaries are not tested on the basis of current prices,¹⁶¹ but only after a SSNIP has been applied to those prices. Therefore, to identify product or geographic market boundaries, the hypothetical monopolist test requires identification of production and/or shipment patterns at prices that would reflect a SSNIP (by the hypothetical monopolist), not production and/or shipment patterns at current prices. Indeed, production and/or shipment patterns at current prices may not be a good indicator of production and/or shipment patterns that would prevail if a hypothetical monopolist of a single downstream product or a hypothetical monopolist of raw milk in a confined geographic area were to impose a SSNIP. To the extent that production and/or shipment patterns would change once a SSNIP were imposed by the hypothetical monopolist, using production and/or shipment patterns that prevail at current prices will be biased toward finding markets that are too narrow (i.e., too small in terms of product space and/or too small in terms of geographic area).
130. Moreover, when considering geographic market boundaries for raw milk in particular, it is not surprising that, as is currently true, given that pricing structures (e.g., for raw milk) do not vary at all across Victoria (including dairy farming regions of South Australia) or there is little effective variation in pricing structures across Victoria (including dairy farming regions of South Australia),¹⁶² shipments from one dairy farming region within that Victoria/South Australia to another dairy farming region within that Victoria/South Australia would be much lower than if there was significant price variation across dairy farming regions (e.g., if a SSNIP were imposed by a

161 Strictly speaking, the relevant price for application of a SSNIP is current prices only for a merger. In a conduct case, one should use competitive market prices as the basis for imposing a SSNIP.

162 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 50-52 and 70-71.

hypothetical monopolist of the supply or the purchase of raw milk in a particular dairy farming region). In this case, there currently already are significant cross-regional shipments of raw milk in the relevant geographic market for raw milk (i.e., at least Victoria plus southeastern and central South Australia) even though pricing structures for raw milk across the dairy farming regions within this market exhibit little or no variation.¹⁶³ One would expect even greater potential for cross-regional shipments of raw milk if a hypothetical monopolist purchasing raw milk in one dairy farming region (e.g., southwestern Victoria/southeastern South Australia) were to impose a SSNIP.

131. It is not apparent that the ACCC's SOI adequately considered this conceptual issue in defining its relevant markets for raw milk (or other downstream dairy products). In other words, in relation to market(s) for raw milk, the ACCC may have assumed (1) that little or no shipments from one dairy farming region in Victoria to another dairy farming region in Victoria were occurring at current prices and (2) that assumed shipping patterns at current prices were indicative of shipping patterns after the imposition of a SSNIP by a hypothetical monopolist purchaser of raw milk in the southwestern Victoria dairy farming region.¹⁶⁴ It does not appear that the first of these assumptions was correct or that the second would be correct. However, even if, for the sake of argument, the first assumption were correct, if the second assumption were wrong, this would undermine the ACCC's conclusion as to the correct geographic market boundaries.

VI.1.4 Conclusions on Market Definition

132. There are two major markets that are relevant to an analysis of the proposed acquisition of WCB by Murray Goulburn. First, there is a market for raw milk (supply and acquisition). The geographic extent of this market is at least all of Victoria plus southeastern and central South Australia and the Riverina region of New South Wales.

¹⁶³ See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 50-52 and 70-71.

¹⁶⁴ The ACCC combined these assumptions with a further assumption that each dairy farming region in Victoria constituted a separate geographic market based on its assumed 400 km "rule" (see SOI, paragraphs 33-34). This "rule", as I have demonstrated, does not hold in Victoria and leads to an erroneous conclusion as to market boundaries. Such an erroneous conclusion would further bias the analysis of geographic market boundaries.

Numerous factors noted above indicate that this geographic market is a single unified relevant market.

133. Second, there is a market for downstream (processed and semi-processed) products produced from raw milk.¹⁶⁵ This includes processed milk, milk powders, cheese, butter, bulk dairy ingredients, and other products. From a production perspective (which is the appropriate perspective given the business activities of the prospective acquirer and the prospective target and the concept of economic substitutability), supply-side and, in some cases, demand-side substitution among these products indicate that it is, from an economic perspective, not useful to consider separate product markets for each of these downstream products. Since the relevant geographic area over which each of these downstream products is supplied is at least statewide, the relevant geographic market for downstream products is at least statewide as well. More likely, given supply-side and demand-side substitutability among these downstream products, the relevant geographic market is national or international.
134. While in my opinion the downstream market for processed and semi-processed milk products is a unified market (as a consequence of supply-side and at least some demand-side substitutability), for completeness I will also analyse the competitive effects of the proposed acquisition on each product category (i.e., bulk dairy ingredients, cheese, UHT milk, bulk processed milk, packaged processed milk, butter, milk powders, flavoured milk, bulk cream, packaged cream, and dairy desserts and yoghurt) by individual product category (i.e., as if each category represented a distinct relevant product market). The geographic scope of each of these markets is at least statewide.¹⁶⁶
135. There are also some less important markets that one could consider. First, there are markets for very high margin by-products of raw milk processing, such as lactoferrins. This market is likely international in geographic scope. Second, there are markets for

165 The relevant functional level for this market is at the intermediate production level (i.e., for sales to distributors and retailers rather than directly to end customers). See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 131-139.

166 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 140-174.

ancillary services provided by Murray Goulburn to its members, such as sales of supplies and equipment and technical advice. These markets are likely sub-state or statewide in geographic scope.

VI.2 Competitive Effects of the Proposed Acquisition

Question 4b: Based on the assumptions provided, please provide an opinion as to the likely competitive effects of Murray Goulburn’s proposed acquisition of WCB

136. As described in my response to Question 2b, an assessment of competitive effects of an acquisition can appropriately consider the acquisition’s impact on consumer surplus and total surplus. More specifically, such an assessment will consider whether the acquisition is likely to have the effect of substantially lessening competition in any relevant market¹⁶⁷ and whether the public will likely benefit should the acquisition be allowed to occur. It may also consider other ancillary competitive and public benefit effects, for example on the ability of Australian firms to compete in international markets. While the definition and threshold of an SLC is not explicitly set forth in the CCA, it is common to consider whether the acquisition is likely to lead to significantly higher prices, reduced quality or quantity, or a reduced rate of innovation as a result of a decrease in competition.¹⁶⁸
137. Potential competitive effects are assessed relative to the most likely counterfactual scenarios if the acquisition does not occur. Based on the assumptions I have been provided, the counterfactual scenarios if Murray Goulburn does not acquire WCB are:
- (a) The status quo will continue, with WCB continuing to operate as an independent business;
 - (b) Bega Cheese Limited (“Bega”) will acquire WCB; or

¹⁶⁷ CCA Section 50(1); see Australian Competition and Consumer Commission, Merger Guidelines, November 2008, Appendix 1, p.54

¹⁶⁸ T. Barnett, “Substantial Lessening of Competition – The Section 7 Standard,” *Columbia Business Law Review*, 293 2005, pp. 298-299.

(c) Saputo, Inc. (Saputo”), a Canadian based producer of dairy products, will acquire WCB.¹⁶⁹

138. As noted in paragraph 64 above, there is no consensus regarding the appropriate methods for assessing the market impact of proposed mergers. Given the data available to me at this time, in my opinion there is insufficient information to undertake a purely quantitative assessment of price or welfare impacts (like a GUPPI analysis or the use of a merger simulation model). Instead, I consider the likely competitive effects from a more qualitative perspective.
139. There are various factors that make competitive effects (including a substantial lessening of competition) more or less likely to occur after an acquisition. These include market characteristics that facilitate the coordinated interaction with the other firms in the relevant market. A merger can also result in a substantial lessening of competition if the merged firm finds it profitable to unilaterally elevate its price and suppress output.¹⁷⁰ This can occur because the merging of two horizontal competitors reduces or eliminates the competitive constraints those two firms impose upon one another. A SLC is more likely to occur when there is insufficient competition or potential competition remaining in the market to make a unilateral price increase unprofitable. Unilateral price increases are less likely to be profitable when other firms can enter the market quickly (i.e., there are low barriers to entry) or when existing firms can quickly alter the quantity they supply to take advantage of any price increase. They are also less likely in homogenous markets and in markets where substitution away from the product at issue is easy. Other factors to consider when assessing the likelihood of a SLC include: the actual and potential level of import competition in the market and the nature and extent of vertical integration in the market.¹⁷¹
140. The likelihood that an acquisition will increase prices can be offset by efficiencies achieved by the merging parties. In an industry like the Australian dairy industry,

169 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 190-191.

170 Or, in the case of an acquirer of a product (e.g., of raw milk), if the merged firm finds it profitable to reduce unilaterally its price and suppress output.

171 See CCA Section 50(3); see Australian Competition and Consumer Commission, Merger Guidelines, November 2008, p. 3

where (according to the assumptions I have been provided) the availability of raw milk volumes has declined,¹⁷² any economies of scale-based or operational efficiencies are likely to be merger-specific because it would be difficult or impossible to obtain such efficiencies through organic growth.

141. In the remainder of this section, I consider the competitive effects likely to occur in the (upstream) market for raw milk and in the downstream market for processed dairy products. I also briefly consider the markets for very high margin by-products of milk processing, such as lactoferrin, and markets that include additional services offered by Murray Goulburn to its members, such as equipment and fertilizer sales and technical advice.

VI.2.1 Market for Raw Milk

142. As I state in paragraph 132 above, it is my opinion that there is one relevant product market for raw milk and that there is support for the conclusion that the relevant geographic market for raw milk likely includes all of Victoria, parts of South Australia, and parts of New South Wales. I use this broader market as the basis of my analysis here.
143. One commonly examined indicator of the potential for a merger or acquisition to result in adverse competitive effects is the increase in market share and market concentration arising from that merger. All else equal, a SLC is more likely to occur in concentrated markets where there is insufficient competition remaining to make a unilateral price increase unprofitable or when coordinated action becomes easier because there are fewer firms.¹⁷³ I calculated the pre and post-acquisition market concentrations using information on existing purchases supplied to me in the assumptions¹⁷⁴ and considered market concentrations arising if Murray Goulburn were to acquire WCB and under each counterfactual scenario. This analysis indicates that an acquisition of WCB by Murray Goulburn or Bega will each increase the relative concentration in the market for

172 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumption 121.

173 At best, economists can identify the conditions under which coordinated action may be facilitated. Economists have not developed reliable tools to predict when coordinated action will occur.

174 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumption 67.

raw milk by a not-inconsequential amount (Murray Goulburn's acquisition will result in greater concentration than a Bega acquisition). According to the assumptions provided to me, Saputo does not currently purchase raw milk in Australia, and thus an acquisition of WCB by Saputo would not impact market concentration.

144. Significant changes in market concentration are useful in separating mergers that are unlikely to raise antitrust concerns from others that warrant a closer examination. However, potential concerns raised by an increase in market concentration are rebuttable using other market specific evidence. In this case, there are several facts that support the conclusion that, irrespective of an increase in market concentration, a merger between Murray Goulburn and WCB will not result in a SLC and, consequently, either lower prices paid to the suppliers of raw milk or higher prices paid by downstream purchasers of raw milk.
145. First, despite any increase in concentration, there are a large number of alternative raw milk buyers that will remain active in the relevant market, including both raw milk processors and brokers of raw milk. Moreover, according to the assumptions provided to me, [REDACTED] [REDACTED].¹⁷⁵ Given the ability of farmers to shift their raw milk sales to alternative buyers (both within dairy farming regions and outside their dairy farming region), the existence of a large number of alternative buyers is consistent with a conclusion that competition for purchases of raw milk will not be substantially lessened.
146. Second, as my assumptions and other information indicate, in addition to dairy companies that process raw milk, both dairy companies and other entities broker raw milk to other dairy processors.¹⁷⁶ Since it is possible that sunk costs associated with entry in brokering may be relatively low,¹⁷⁷ potential entry may also represent a

175 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 97-103.

176 See "Further Assumptions for Expert Economist", dated 27 November 2013, Assumption 200, and SOI, paragraph 23.

177 Costs for entry would include costs for developing relationships with farmers and customers, as well as equipment costs, such as prime movers, tankers and, perhaps, bulk refrigerated tanks. Equipment costs would largely not be sunk, as this equipment would likely be saleable on exit.

significant constraint on the exercise of market power both in terms of purchases of raw milk from farmers and sales of raw milk to downstream buyers.¹⁷⁸

147. Third, unilateral price effects are more likely when the merging firms are close substitutes as perceived by customers (or, in the case of the market for raw milk, as perceived by the sellers of raw milk.) In essence, the more dairy farmers consider one merging party to be the next best alternative to the other merging party, the more likely a SLC after the acquisition becomes. A variety of evidence can be used to evaluate the extent of direct competition between the merging firms, including win/loss reports and customer switching patterns. In this case, I have analysed data on movements of milk suppliers to and from Murray Goulburn from 2011, 2012 and 2013.¹⁷⁹ [REDACTED]

[REDACTED]

178

[REDACTED]

179

These data were provided to me in "Further Assumptions for Expert Economist", 27 November 2013, Attachments 4, 5 and 6.

148. Fourth, the co-operative structure of Murray Goulburn can be expected to have a protective influence on the price offered by Murray Goulburn to raw milk suppliers. I understand that Murray Goulburn is structured as a co-operative of dairy producers.¹⁸⁰ The firm's primary objectives according to its constitution include the acquisition of milk from its shareholders and its stated business objective is to significantly increase the farmgate milk price.¹⁸¹ The co-operative's voting members are all active raw milk producers in the co-operative and voting power is distributed roughly in proportion to the volume of milk they supply (e.g., it is subject to certain limits on total voting power).¹⁸² The majority of the co-operative's Board of Governors are required to be farmer-suppliers hailing from geographically diverse regions and are nominated by other suppliers in their respective dairy farming regions of operation.¹⁸³ The compensation of the senior executives is dependent, in part, on the price paid at the farm gate for raw milk and on the growth in that price.¹⁸⁴ Given the stated goals of the co-operative (e.g., to increase the price paid for raw milk¹⁸⁵) and explicit provisions to align management incentives with those of the suppliers of raw milk, the co-operative has an incentive to increase the price it pays for raw milk relative to an IOF. This is the opposite of the effects that would be expected if competition were to be substantially lessened among buyers of raw milk. Based on the assumptions provided to me, it is unlikely that WCB, Bega or Saputo will have a similar incentive to increase the raw milk price.¹⁸⁶
149. Fifth, if a merger generates significant efficiencies either through decreased incremental costs or via an enhancement in the merged firm's ability to compete, such efficiencies may reduce or completely offset any incentive for the merged firm to reduce upstream

180 See "Further Assumptions for Expert Economist", 27 November 2013, Assumption 1.

181 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 8 and 9 and 187-189.

182 See "Further Assumptions for Expert Economist", 27 November 2013, Assumption 14.

183 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 16-19.

184 See "Further Assumptions for Expert Economist", 27 November 2013, Assumption 10.

185 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 9, 10, 24 and 181.

186 See "Further Assumptions for Expert Economist", 27 November 2013, Assumption 11.

raw milk prices. In addition, competition and potential competition in the purchase of raw milk from farmers could reduce or completely offset incentives to raise raw milk prices to downstream buyers (see also footnote 178). Moreover, as discussed above in paragraph 97 if the co-operative is operating below an efficient scale and can achieve additional economies of scale by increasing the quantity of raw milk it processes, economic theory predicts that these economies of scale will translate into increases in the raw milk price paid to members. (i.e., dairy farmers, the group most likely to be adversely affected if an SLC were to occur). Based on the assumptions provided to me, it appears that an acquisition of WCB by Murray Goulburn may generate significant merger-specific efficiencies that would not be generated under the counterfactual scenarios. There are at least four types of quantifiable and non-quantifiable (given the current information available to me) efficiency gains that the proposed acquisition may deliver:

- [REDACTED] ¹⁸⁷ Given declines in Australian dairy production,¹⁸⁸ these cost reductions are likely to be entirely merger-specific and likely would not be achievable through other means.
- Second, prospective increases paid in the price of raw milk will stimulate production above the baseline that would occur in the absence of the acquisition. The increased production will increase Murray Goulburn's export capabilities, both increasing its sales and increasing its reliability as perceived by export customers¹⁸⁹ (a benefit that may further increase the prices it receives for its products). While the efficiency benefits of this source of efficiency cannot at this time be quantified, they may be substantial and likely would not occur in the absence of the acquisition.
- Third, [REDACTED] ⁹⁰ (which, in turn, would increase its profitability and thereby enable it to pay higher raw milk

187 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 180-181.

188 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 35-42.

189 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 121-122.

190 See "Further Assumptions for Expert Economist", 27 November 2013, Assumptions 182-186 and 187-189.

prices). Any stimulative effect of higher raw milk prices on supply would only reinforce this effect. There is no indication that benefits of a similar scale would occur if any of the counterfactuals were to occur in place of the acquisition of WCB by Murray Goulburn. While the efficiency benefits of this source of efficiency cannot at this time be quantified, they may be substantial.

- Fourth, the increased volumes of raw milk available to Murray Goulburn may enable it to better manage commodity price risks.¹⁹¹ To the extent that this is true, it would increase profitability and thereby, given the firm's co-operative structure, provide additional incentives to increase the price paid for raw milk and stimulate raw milk production. Again, there is no indication that these effects would occur at all or, to the extent they did, would be as significant if any of the counterfactuals were to occur. While the efficiency benefits of this source of efficiency cannot at this time be quantified, they may be substantial.

150. When viewed in combination, these effects appear likely to counteract any potential adverse effects in any market resulting from an increase in market concentration from the acquisition of WCB by Murray Goulburn. The acquisition of WCB by Bega would result in somewhat lower market concentration increases, but would not benefit from the protective influences on raw milk prices of a co-operative structure. In addition, it would not generate efficiencies of similar magnitude. The acquisition of WCB by Saputo or a continuation at the status quo would not increase market concentrations and are not likely to produce competitive effects. However, either counterfactual would likely not deliver efficiency benefits, nor would either counterfactual provide similar incentives to increase the price paid for raw milk.

151. An acquisition by Murray Goulburn appears to be the most likely to result in merger-specific efficiency gains, and the quantifiable portion of these gains alone appear to be significant [REDACTED].¹⁹² Significantly smaller efficiency gains may be present if WCB is acquired by Bega, and, based on the information provided to me, appear to be absent under the remaining counterfactual scenarios.

191 See "Further Assumptions for Expert Economist", 27 November 2013, Assumption 123.

192 See "Further Assumptions for Expert Economist", 27 November 2013, Assumption 181.

152. The non-quantifiable efficiency effects that appear to be possible if Murray Goulburn acquires WCB may be much more significant (particularly in the long run) than the quantifiable effects. It does not appear that these non-quantifiable effects are likely to occur under any of the counterfactuals.
153. This analysis suggests that the acquisition of WCB by Murray Goulburn is not likely to generate significant harmful competitive effects in the market for raw milk (either in terms of the price paid to farmers or the price charged to downstream purchasers), and will likely be efficiency enhancing relative to the counterfactual scenarios.

VI.2.2 *Market for Downstream Products*

154. As noted in paragraphs 133 and 134 above, based on the assumptions I have been provided, it seems unlikely that downstream dairy products exist in separate product markets. As such, I consider the likelihood of competitive effects using a single statewide/national/international market for all downstream down-stream products. However, in case the Tribunal should ultimately decide to adopt separate markets for downstream products, I also consider the eight downstream product markets specified by the ACCC.¹⁹³
155. According to my instructed assumptions, there are no fewer than a dozen firms that supply processed and semi-processed dairy products to the Australian market.¹⁹⁴ In addition, various dairy-based products and semi-processed inputs are imported from other countries.¹⁹⁵
156. The relevant geographic market (or markets, in the alternative if one assumes that some or all downstream products exist in separate relevant product markets) is (are) at least statewide or national or international.¹⁹⁶ The number of competitors in this (these)

193 SOI, paragraph 31.

194 These include Fonterra, Burra Foods, WCB, UDP, Bega Tatura, Lion, Parmalat, Longwarry Food Park, Nestle, Sanitarium, Goodman Fielder, and George Weston. (See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 112, 154, and 164).

195 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 104-107 and 151 and Attachment 9.

196 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 140-174.

market(s) is significant, and competition is also likely to be fierce. In its SOI, the ACCC indicated a potential concern for only one downstream product – bulk cream.¹⁹⁷ However, the proposed acquisition would only create the second largest producer of bulk cream in Australia, with at least three other substantial competitors (Fonterra, Burra Foods and UDP), and with several other smaller suppliers as well.

157. Consequently, based on this information, it is my opinion that competitive processors can provide a check on the Murray Goulburn’s ability to unilaterally increase downstream dairy product prices if it acquires WCB. Moreover, according to the assumptions I have been provided, dairy processing plants are generally not used at full capacity year round, but are instead “wound-up” or “wound-down” based on fluctuations in raw milk supply.¹⁹⁸ Further, as the result of substantial declines in raw milk production in the last 10 years, many dairy processors have excess capacity.¹⁹⁹ Such excess capacity allows existing competitors in the downstream market(s) to easily and rapidly increase the amount of product they can process, thereby suppressing the ability of a merged firm to unilaterally raise downstream product prices. Moreover, as discussed above, I understand that dairy processors are able to adjust their production of dairy products according to demand trends in both Australian and international markets.²⁰⁰ This supply-side substitutability will mitigate any attempt by another firm to increase the product price for a subset of downstream products.
158. Competitive effects are more likely if the merging sellers were considered closer substitutes (than any other suppliers) by the buyers in downstream markets. While I do not have specific switching-data, according to the assumptions provided to me in this case, WCB rarely supplies private-labelled dairy products to the same downstream suppliers as Murray Goulburn.²⁰¹ In addition, WCB does not supply UHT milk and dairy desserts and supplies relatively little favoured milk, while Murray Goulburn is a

197 SOI, paragraphs 50-57.

198 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 92.

199 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 68, and 97-103.

200 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 93.

201 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 178.

major supplier of these products.²⁰² This information suggests that there may be limited diversion between the Murray Goulburn products and WCB products, thereby suggesting that unilateral price effects are likely to be limited.

159. According to the assumptions that have been provided to me, some purchasers in downstream markets (e.g. food processors) have some degree of bargaining power.²⁰³ This may mitigate some or all of any potential adverse competitive effects regardless of who acquires WCB.
160. Combined, these factors, even aside from consideration of the potential efficiencies arising from the acquisition noted above (which would further reduce the chances for a substantial lessening of competition), mitigate any risk of substantial adverse competitive effects associated with a Murray Goulburn acquisition of WCB. This conclusion holds no matter whether the downstream products are considered to compete in a unified market or they are considered to compete in separate, single product markets.

VI.2.3 Other Markets

161. While no assumptions have been provided to me that enable me to assess competitive effects in other relevant markets – i.e., markets for very high margin by-products of milk processing, such as lactoferrin, and markets that include additional services offered by Murray Goulburn to its members, such as equipment and fertilizer sales and technical advice – it seems unlikely that an SLC would be likely in these markets under the factual or the counterfactuals. As to high margin by-products, the market(s) for these is (are) international. In addition, the scale afforded to Murray Goulburn by the proposed acquisition would enable it to provide additional competition to existing competitors in this market. Furthermore, because the scale available under the counterfactuals is much lower (or non-existent), these benefits are much less likely to occur and would likely, to the extent that they would occur at all, be much smaller

202 See “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 31, 163 and 166.

203 See e.g., “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 132-137.

under those counterfactuals. So, the acquisition would likely be pro-competitive in this (these) market(s).

162. As to the additional services markets, the proposed acquisition would likely not affect the incentives of Murray Goulburn to offer these services to its owners or the prices that it charges (particularly given the likely level of competition in equipment and fertilizer sales, which would not be affected by the acquisition, since it is my understanding that WCB does not offer these services).

Question 4c: Based on the assumptions provided, please provide an opinion as to: (c) the likely impact of Murray Goulburn’s proposed acquisition of WCB on total economic welfare.

163. As discussed above, the evidence available to me suggests that any competitive effects on pricing resulting from Murray Goulburn’s acquisition of WCB are likely to be offset or counter-balanced by a number of factors. It follows that there is no *prima facie* reason to expect total economic welfare to decline as the result of dead-weight loss generated by the exercise of market power. To the contrary, given the efficiencies likely to occur if Murray Goulburn acquires WCB (and which are likely to be much larger than the efficiencies that would occur if any of the counterfactuals were to occur), it is likely that economic welfare would be significantly enhanced by the acquisition. In other words, the assumptions provided to me and economic reasoning suggest that the acquisition of WCB by Murray Goulburn will produce merger-specific efficiencies that will expand total economic welfare, *ceteris paribus*.

164. Further, I note that the corporate structure of the Murray Goulburn co-operative may forestall decreases in efficiency relative to IOFs and may instead promote efficiency. For example, it is reasonable to expect that the close ties between raw milk producers and the co-operative’s management (e.g., that the majority of the Board of Directors must be raw milk producers),²⁰⁴ will facilitate information transfer between groups which can make the combined entity more efficient. Further, tight quality controls and

204 See e.g., “Further Assumptions for Expert Economist”, 27 November 2013, Assumptions 16-18.

stepped down payments for lower quality milk²⁰⁵ should reduce the incentive for individual farmers to free-load off of any efforts by his or her peers to produce a high quality product. Likewise, specific contractual provisions in the compensation structure of the co-operative executives linking compensation to milk prices and, indirectly, to profitability²⁰⁶ should help align incentives among dairy farmers, the co-operative's board and its management and encourage a high level of effort by this management. Furthermore, competition and potential competition in the sale of raw milk to third party downstream processors should preclude any exercise of substantial market power (or substantial efficiency loss relating to co-operative structure) relating to those transactions.

165. In addition, the opportunities for increased production of raw milk (stimulated by higher prices for raw milk) and higher production of exports and increased production of higher margin products could result in a significant increase in dairy farming and dairy processing economic activity relative to the counterfactuals. To the extent this is true, there will also be a multiplier effect that will increase both employment and income, particularly within Victoria and South Australia. For example, typical economic impact multipliers for dairy farming/agricultural activity typically indicate that an increase of \$1 in economic activity in the primary sectors (i.e., dairy farming and dairy processing) will result in a total increase in economic activity of approximately \$2-\$3.²⁰⁷ These employment and income benefits add to total welfare and further increase the competitive benefits associated with the acquisition. They are particularly pertinent in this context, because the proposed acquisition is likely to provide much greater efficiency benefits than any of the counterfactuals.
166. For these reasons, I conclude, based on the information available to me, that the acquisition of WCB by Murray Goulburn is likely to enhance total economic welfare.

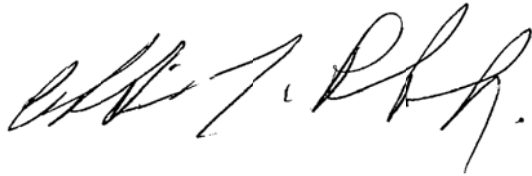
205 See e.g., "Further Assumptions for Expert Economist", 27 November 2013, Attachments 2 and 3.

206 See e.g., "Further Assumptions for Expert Economist", 27 November 2013, Assumption 10.

207 See e.g., K. O'Toole, M. Keneley, M. McKenzie, and P. Hellier. "Economic Impact of the Dairy and Blue Gum Plantation Industries in South West Victoria." Deakin University, April 2008, p. 17. See also, the Dairy Australia website at <http://www.dairyaustralia.com.au/Industry-overview/About-the-industry.aspx>.

VII. Declaration

167. I have made all the inquiries that I believe are desirable and appropriate and no matters of significance that I regard as relevant have, to my knowledge, been withheld from the Court.



Dr. Christopher Jon Pleatsikas

27 November 2013

Date

Attachment 1



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PhD, Regional Economic Analysis, University of Pennsylvania

MS, Natural Resources, University of Vermont

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SUMMARY:

Christopher Pleatsikas is a Director at the Berkeley Research Group. He was a Managing Director at LECG, in charge of its Australian litigation practice and has been a Vice President at CRA International, based in Sydney, where he was the co-director of its Asia-Pacific competition group. He also has been a principal at Putnam, Hayes & Bartlett, Inc. Dr. Pleatsikas has served as a manager of the Economic Analysis Unit, Management Advisory Services, at Price Waterhouse and was a managing associate at Urban Systems Research and Engineering, Inc. His published papers include analyses of the interface between antitrust and regulatory policy, evaluation of the implications of standards for determining whether prices are predatory, assessments of the competitive implications of contractual provisions, and analyses of merger policies and regulations.

TEACHING EXPERIENCE

Dr. Pleatsikas has served as Distinguished Lecturer in Economics at the University of California, Santa Cruz, teaching industrial organization. He has also taught econometrics and quantitative methods at the University of Pennsylvania and the University of Maryland.

ECONOMIC EXPERTISE

While Dr. Pleatsikas specializes in competition analysis and antitrust issues, he has provided expert advice and testimony on a number of other economic issues. His areas of expertise include:

Antitrust/Competition Analysis

Mergers and acquisitions, market definition, assessments of market power, evaluation of contractual and other business practices, monopolization and attempted monopolization, monopoly leveraging, price fixing and price discrimination, predatory pricing, class action certification and evaluation of competition and efficiency impacts of business practices and public policy. He was an advisor in the most recent rewrite of the Merger Guidelines for the Australian antitrust regulator.

Impact Assessment Analysis

Assessment of economic impacts, often by industry sector and/or geographic region for a variety of policy and economic activity changes; development and implementation of economic impact assessment models.

Intellectual Property

Patent/copyright/trademark infringement; valuation of intellectual property and trademarks; patent fraud/misuse; ITC disputes; and pooling.

Damages

Causation, lost sales or profits, reasonable royalty, unjust enrichment, punitive damages; breach of contract, fraud, intellectual property, class action certification and damages, antitrust and “unfair competition”.

Regulation

Review and analysis of regulatory decisions and impact assessment methodologies and methods; development of deregulation/re-regulation regimes; prudence inquiries, facility siting and planning, reasonableness of rates and ratebase, and demand forecasting.

INDUSTRY EXPERTISE

Dr. Pleatsikas has been engaged in assignments covering a wide range of industries. For example, for a major facilities-based telecommunications provider he was engaged to examine a series of price and margin squeeze allegations brought in relation to a variety of services by several competitors. He has been engaged to examine price squeeze, margin squeeze and predatory pricing allegations in the pay television, electricity, food processing/distribution/retailing and building products industries.

Dr. Pleatsikas also has expertise in high technology industries, including computer hardware and software used in a variety of applications, as well as other high technology applications (e.g., medical devices and machine tools) and media industries. These assignments have included antitrust, intellectual property and contract damages cases.

He also has substantial experience in a variety of network industries, having evaluated competition, pricing, mergers and damages issues in a wide variety of network industries. These include financial services (credit cards, debit cards and other payment instruments), energy transportation and distribution (natural gas and electricity), telecommunications, computer networks and computer services and transportation (trucking, railroads, ocean shipping, terminals and airlines).

Dr. Pleatsikas also has substantial expertise in the energy industry, including antitrust litigation, intellectual property disputes, contract disputes and pricing arbitrations. He has worked extensively in all segments of the industry, including oil and gas, coal, electricity, and renewable technologies, as well as at all stages of the industry, including extraction, processing, distribution (wholesale and retail) and consumer demand.

TESTIMONY, EXPERT REPORTS AND AFFIDAVITS

Dr. Pleatsikas has testified on numerous occasions in a variety of venues, including:

- United States Federal Court;

- United States State Courts (e.g., California, Louisiana);
- State Administrative Agencies (e.g., Public Utilities Commissions);
- United States Federal Administrative Agencies (e.g., International Trade Commission);
- Federal Court of Australia;
- Australian Competition Tribunal;
- High Court of New Zealand; and
- High Court of the Republic of Singapore.

Dr. Pleatsikas has also provided expert reports to foreign administrative agencies and has testified in private arbitrations. In addition, he has been retained as an expert on numerous occasions in other matters that were settled prior to trial or the provision of written or oral testimony. A list of his testimony is available upon request.

PUBLICATIONS

“The Supreme Court Decision on Pay For Delay: An Economic Perspective,” *Australian Journal of Competition and Consumer Law*,” forthcoming December 2013

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Dr. Pleatsikas also serves as editor of *The Report from North America*, a regular column on antitrust developments in the United States that appears in the *Competition and Consumer Law Journal*, one of the leading antitrust journals in Australia.

Attachment 4



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Dr Chris Pleatsikas
Director
Berkeley Research Group, LLC
2200 Powell Street, Suite 1200
Emeryville CA 94608
United States of America
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5 November 2013
Matter 82230139
By Email

Dear Dr Pleatsikas

Confidential

Murray Goulburn - merger authorisation application - expert retainer

1 Introduction

We act for Murray Goulburn Cooperative Co. Ltd (**Murray Goulburn**).

This letter is to confirm your retainer to act as an independent expert in relation to Murray Goulburn's merger authorisation application in respect of its proposed acquisition of Warrnambool Cheese & Butter Factory Company Holdings Limited (the **Proceedings**) and to set out the terms of your retainer.

Murray Goulburn will be responsible for payment of your fees, although your accounts are to be addressed to our office as referred to below.

In addition to the terms set out below, your retainer is governed by the Federal Court Practice Direction — 'Guidelines for Expert Witnesses in Proceedings in the Federal Court of Australia'. A copy of the Guidelines is attached as Attachment 1 to this letter. You should fulfil the duties and responsibilities set out in the Guidelines in undertaking your work and preparing for the presentation of evidence that you may ultimately be required to give in the Australian Competition Tribunal (the **Tribunal**).

2 Scope of your assignment

Murray Goulburn has made a bid to acquire all of the shares of Warrnambool Cheese & Butter Factory Company Holdings Limited, and is intending to make an application to the Tribunal for merger authorisation in respect of its proposed acquisition.

We would like you to prepare a report in which you address matters based on your expertise as an economist. For your assistance, we include a short guide to preparation of an expert report as Attachment 2 to this letter.

We propose to send you a list of questions that we would like you to address in your report. We will also send you, by way of a brief, a set of factual assumptions and other relevant material that we will ask you to consider in answering the questions. Please let us know if there are any further documents or materials which you think should form part of your brief.

From time to time you may also be required to respond to further evidence or expert opinions if and when received from other parties.

You may need to be available to give evidence in the Tribunal, most likely to be in Melbourne at some time during the course of the Proceedings.

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3 Confidentiality

We may also ask that you be available at other times when experts retained by the other parties to the Proceedings are giving evidence.

3 Confidentiality

Your independent expert report and any drafts prepared in accordance with your retainer are confidential and are not to be copied or used for any purpose unrelated to the Proceedings without our permission.

Material supplied to you by Herbert Smith Freehills is confidential and is not to be copied or used for any purpose unrelated to your retainer without our permission.

Your report and any drafts prepared by you should also have the following words inserted on the cover page:

You, and specific officers of your organisation, may be requested to execute a confidentiality undertaking. You may be required to return all documents, copies and workings at the conclusion or termination of your retainer.

4 Conflicts of interest

As an independent expert, it is important that you are free from any possible conflict of interest in the provision of your advice. You should ensure that you have no connection with any party to the Proceedings which would preclude you from providing your opinion in an objective and independent manner.

We have enclosed as Attachment 3 to this letter a list of the parties in the Proceedings. Please let us know if you have had any dealings with any of the parties.

5 Fee estimate

Please provide us with details of your rates.

Expenses such as taxis, parking, couriers, printing etc are to be billed at cost.

You should present your memoranda of fees on a monthly basis. This will assist us to deliver an overall memorandum to Murray Goulburn.

From time to time, should you become aware that your fee estimate is likely to alter in a material way, you must notify Herbert Smith Freehills immediately of the likely change and obtain approval for any material increase.

As mentioned above, it is Herbert Smith Freehills' client which is responsible for paying your fees.

6 Communications

All communications, whether verbal or written, should be directed to our office, so that we can coordinate, manage and integrate work activities with legal requirements and ensure privilege is maintained as appropriate.

7 Your duties and responsibilities as an expert witness

Your role is that of an independent expert.

You are not an advocate for any party.

Though you are retained by Murray Goulburn, you are retained as an independent expert to assist the court and you have an overriding duty to it. The court expects you to be objective, professional and to form an independent view as to the matters in respect of which your opinion is sought.

Your duties are set out in the Guidelines attached to this letter.

Would you please sign and return this letter to confirm your agreement to the terms of the retainer.



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7 Your duties and responsibilities as an expert witness

Yours sincerely


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Herbert Smith Freehills LLP and its subsidiaries and Herbert Smith Freehills, an Australian Partnership, are separate member firms of the international legal practice known as Herbert Smith Freehills.

sign here ► 
Dr Chris Pleatsikas

Berkeley Research Group, LLC


Adam M. Teinbaum
Deputy General Counsel



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Attachment 1

Practice Note CM7 — Expert witnesses in proceedings in the Federal Court of Australia

Commencement

1. This Practice Note commences on 4 June 2013.

Introduction

2. Rule 23.12 of the Federal Court Rules 2011 requires a party to give a copy of the following guidelines to any witness they propose to retain for the purpose of preparing a report or giving evidence in a proceeding as to an opinion held by the witness that is wholly or substantially based on the specialised knowledge of the witness (see Part 3.3 - Opinion of the Evidence Act 1995 (Cth)).
3. The guidelines are not intended to address all aspects of an expert witness's duties, but are intended to facilitate the admission of opinion evidence¹, and to assist experts to understand in general terms what the Court expects of them. Additionally, it is hoped that the guidelines will assist individual expert witnesses to avoid the criticism that is sometimes made (whether rightly or wrongly) that expert witnesses lack objectivity, or have coloured their evidence in favour of the party calling them.

Guidelines

1. **General Duty to the Court²**
 - 1.1 An expert witness has an overriding duty to assist the Court on matters relevant to the expert's area of expertise.
 - 1.2 An expert witness is not an advocate for a party even when giving testimony that is necessarily evaluative rather than inferential.
 - 1.3 An expert witness's paramount duty is to the Court and not to the person retaining the expert.
2. **The Form of the Expert's Report³**
 - 2.1 An expert's written report must comply with Rule 23.13 and therefore must
 - (a) be signed by the expert who prepared the report; and
 - (b) contain an acknowledgement at the beginning of the report that the expert has read, understood and complied with the Practice Note; and
 - (c) contain particulars of the training, study or experience by which the expert has acquired specialised knowledge; and
 - (d) identify the questions that the expert was asked to address; and
 - (e) set out separately each of the factual findings or assumptions on which the expert's opinion is based; and

¹ As to the distinction between expert opinion evidence and expert assistance see *Evans Deakin Pty Ltd v Sebel Furniture Ltd* [2003] FCA 171 per Allsop J at [876].

² The *"Ikerian Reefer"* (1993) 20 FSR 563 at 565-566.

³ Rule 23.13.



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Attachment 1 Practice Note CM7 — Expert witnesses in
proceedings in the Federal Court of Australia

- (f) set out separately from the factual findings or assumptions each of the expert's opinions; and
 - (g) set out the reasons for each of the expert's opinions; and
 - (ga) contain an acknowledgment that the expert's opinions are based wholly or substantially on the specialised knowledge mentioned in paragraph (c) above⁴; and
 - (h) comply with the Practice Note.
- 2.2 At the end of the report the expert should declare that "[the expert] has made all the inquiries that [the expert] believes are desirable and appropriate and that no matters of significance that [the expert] regards as relevant have, to [the expert's] knowledge, been withheld from the Court."
- 2.3 There should be included in or attached to the report the documents and other materials that the expert has been instructed to consider.
- 2.4 If, after exchange of reports or at any other stage, an expert witness changes the expert's opinion, having read another expert's report or for any other reason, the change should be communicated as soon as practicable (through the party's lawyers) to each party to whom the expert witness's report has been provided and, when appropriate, to the Court⁵.
- 2.5 If an expert's opinion is not fully researched because the expert considers that insufficient data are available, or for any other reason, this must be stated with an indication that the opinion is no more than a provisional one. Where an expert witness who has prepared a report believes that it may be incomplete or inaccurate without some qualification, that qualification must be stated in the report.
- 2.6 The expert should make it clear if a particular question or issue falls outside the relevant field of expertise.
- 2.7 Where an expert's report refers to photographs, plans, calculations, analyses, measurements, survey reports or other extrinsic matter, these must be provided to the opposite party at the same time as the exchange of reports⁶.
- 3. Experts' Conference**
- 3.1 If experts retained by the parties meet at the direction of the Court, it would be improper for an expert to be given, or to accept, instructions not to reach agreement. If, at a meeting directed by the Court, the experts cannot reach agreement about matters of expert opinion, they should specify their reasons for being unable to do so.

J L B ALLSOP
Chief Justice
4 June 2013

⁴ See also *Dasreef Pty Limited v Nawaf Hawchar* [2011] HCA 21.

⁵ The *"Ikarion Reefer"* [1993] 20 FSR 563 at 565

⁶ The *"Ikarion Reefer"* [1993] 20 FSR 563 at 565-566. See also Omrod *"Scientific Evidence in Court"* [1988] Crim LR 240

Attachment 5

Australian Competition Tribunal

Murray Goulburn Co-Operative Co. Limited
Re: Proposed acquisition of Warrnambool Cheese and Butter Factory Holdings Limited

Questions for expert economist

22 November 2013

- 1 As a matter of economic theory, what are the relevant effects to consider when assessing the economic impact of a merger or acquisition?
- 2 What are the economic principles and methodologies relevant to:
 - (a) defining the dimensions of a market for the purpose of analysing the competitive effects of a merger or acquisition?
 - (b) assessing the competitive effects of a merger or acquisition in a market?
 - (c) assessing the impact of a merger or acquisition on total economic welfare?
- 3 If the acquiring firm has a co-operative corporate structure, how would this affect the economic principles and methodologies relevant to matters (a), (b) and (c) referred to in question 2 above?
- 4 Based on the assumptions provided, please provide an opinion as to:
 - (a) the dimensions, and hence the definition, of the market(s) that would be relevant to assessing the economic impact of Murray Goulburn Co-operative Co. Ltd's (**Murray Goulburn**) proposed acquisition of Warrnambool Cheese and Butter Factory Holdings Limited (**WCB**);
 - (b) the likely competitive effects of Murray Goulburn's proposed acquisition of WCB; and
 - (c) the likely impact of Murray Goulburn's proposed acquisition of WCB on total economic welfare.

Attachment 6

Australian Competition Tribunal

Murray Goulburn Co-Operative Co Limited

Re: Proposed acquisition of Warrnambool Cheese and Butter Factory Holdings Limited

Further Assumptions for expert economist

27 November 2013

1 Murray Goulburn

1.1 Overview of Murray Goulburn's business

- 1 Murray Goulburn Co-operative Co. Limited (**Murray Goulburn**) is an unlisted public company controlled by the dairy farmers from whom it acquires raw milk. It operates in accordance with cooperative principles.
- 2 Murray Goulburn currently acquires raw milk from approximately 2,500 dairy farmers located in various dairy producing regions of Victoria, South Australia and New South Wales (and also acquires milk from a joint venture in Tasmania).
- 3 Using that raw milk, Murray Goulburn produces and sells a range of finished dairy products and dairy ingredients including fresh milk, daily pasteurised milk, ultra heat treated (**UHT**) milk, cheeses, butters, milk powders, whey powders, milk fats, specialty milk proteins and nutritional products (including infant formula) in Australia and overseas.
- 4 Murray Goulburn currently has seven Australian processing plants:
 - (a) In northern Victoria, located at Cobram, Rochester and Kiewa;
 - (b) In south-western Victoria, located at Koroit;
 - (c) In the Gippsland region of Victoria, located at Leongatha and Maffra; and
 - (d) In Tasmania, located at Edith Creek.
- 5 Murray Goulburn has committed to building a milk processing plant at Laverton in Melbourne and a further milk processing plant at Erskine Park in Sydney. These plants are expected to be operational by mid-2014.
- 6 Murray Goulburn has an integrated logistics centre located at Laverton and a global distribution centre (including for frozen products) located at the Port of Melbourne. A map that graphically depicts the locations of Murray Goulburn's processing plants and distribution centres, as well as the regions in which it acquires raw milk, is **Attachment 1**.
- 7 During the financial year ended 30 June 2013 (**FY2013**), Murray Goulburn:
 - (e) acquired approximately 2.99 billion litres of raw milk from dairy farmers;
 - (f) produced 760,678 tonnes of dairy products, and exported 336,000 tonnes of dairy products;
 - (g) had total revenue of \$2.385 billion, with international sales accounting for approximately 48% of that revenue; and
 - (h) had profit before income tax of \$39.053 million.

1.2 Murray Goulburn's co-operative structure

Objects

- 8 Murray Goulburn's constitution requires it to carry on business having as its primary objects one or more of the following:
- “(a) the acquisition of milk and other commodities from its shareholders for disposal or distribution;
 - (b) the storage, marketing, packing and/or processing of milk and other commodities of its shareholders;
 - (c) the rendering of services to its shareholders; and
- without limitation in respect of the above primary objects, such other objects as the Board may from time to time resolve as being in the interests of Murray Goulburn and its shareholders and suppliers and for the benefit of its shareholders and suppliers.”
- 9 Murray Goulburn's stated business objective is to significantly increase the farmgate milk price.
- 10 Murray Goulburn's senior executives are motivated to deliver increases in the farmgate milk price, because a significant proportion of their remuneration is based on Murray Goulburn's milk price performance. Specifically:
- (a) In the case of Murray Goulburn's senior executives, apart from the Managing Director, 25% of their remuneration comprises a short term incentive that is only paid if the milk price budget set by the Board at the beginning of each year is achieved (see assumptions 57 to 61 below regarding Murray Goulburn's process for setting its milk price budget and milk price). If the milk price budget is achieved, three other factors (namely, safety performance, internal audit performance and individual KPIs) determine the level of short term incentive that is paid; and
 - (b) In the case of Murray Goulburn's Managing Director, 20% of the Managing Director's remuneration comprises a short term incentive (which is paid as described in (a) above) and 30% of the Managing Director's remuneration comprises a long term incentive, which is paid having regard to implied milk price growth and return on capital employed on an equally weighted basis. The level of long term incentive paid depends on whether either of the “Threshold”, “Target” or “Stretch” performance levels are met.
- 11 The remuneration of senior executives at Warrnambool Cheese and Butter Factory Company Holdings Limited (**WCB**), Bega Cheese Limited (**Bega**) and Saputo Inc. (**Saputo**) does not depend on the milk price paid by their respective companies.

Shares and voting

- 12 There are five classes of shares in Murray Goulburn:
- (a) Ordinary shares, which carry a right to one vote for every share;
 - (b) “NV” class shares, which do not carry any voting rights;
 - (c) “A” class non cumulative preference shares, which do not carry voting rights;
 - (d) “B” class non cumulative preference shares, which do not carry voting rights; and
 - (e) “C” class non cumulative preference shares, which do not carry voting rights.
- 13 Only those dairy farmers who currently supply Murray Goulburn with raw milk (**farmer suppliers**) may hold ordinary shares in Murray Goulburn, and all farmer suppliers must hold at least 500 ordinary shares. Specifically:

- (a) Ordinary and NV shares have a value of \$1.00 per share, and farmer suppliers purchase their initial holding of 500 ordinary shares at \$1.00 per share; and
 - (b) There is a monthly share off-take scheme in which farmer suppliers are paid the equivalent of \$0.0065 per litre in shares for each litre of milk supplied during that month.
- 14 Murray Goulburn's constitution requires that voting power be roughly equitably distributed across all of its farmer suppliers in the following ways:
- (a) The Board is obliged, so far as it is practicable, to ensure that the ratio between each farmer supplier's ordinary shares and milk volume (in litres) is 1:5. Shares in excess of that ratio would be converted into NV class shares, which do not carry any voting rights. Subject to (b) below, this means farmer suppliers are able to vote in proportion to the volume of milk that they supply.
 - (b) No farmer supplier is permitted to hold more than 0.5% of the total number of ordinary shares. If a farmer supplier's shareholding breaches the 0.5% cap, the Board may require that the shares be disposed of, or convert them into NV class shares, which do not carry any voting rights.
 - (c) If a shareholder ceases to be a farmer supplier, that shareholder's shares would be redeemed unless the Board consents to converting that shareholder's ordinary and NV class shares into non cumulative preference shares (which do not carry any voting rights).
- 15 The rules relating to shareholder voting rights can only be altered if 90% of ordinary shareholders, or if polled, shareholders representing at least 90% of the ordinary shares, vote in favour of the change.

Governance and the Board of directors

- 16 Murray Goulburn's constitution provides for the appointment of the following categories of directors to its Board of Directors:
- (a) At least 7 directors must be farmer suppliers who have been nominated by at least 5 other farmer suppliers from the one "supplier region";
 - (b) There may be 1 managing director; and
 - (c) There may be up to 3 special directors, who are not required to be farmer suppliers or shareholders of Murray Goulburn.
- 17 Murray Goulburn's constitution requires that farmer suppliers be divided into "supplier regions". At present, there are the following supplier regions, and each of these regions is able to appoint the following number of directors:
- (a) Gippsland Region – 3 directors;
 - (b) Northern Region – 3 directors; and
 - (c) Western Region – 3 directors.
- The Board may, by majority decision, increase or reduce the number of supplier regions (but not less than 3 or more than 10), and may increase or decrease the number of directors appointed by each supplier region.
- 18 The Board's policy is that the number of directors per supplier region ought to reflect the quantity of milk acquired from each supplier region. At present, because the volume of milk acquired in each supplier region is approximately the same, each region has the same number of representative directors.
- 19 The current Board comprises a managing director, 9 supplier directors and 2 special directors.
- 20 Murray Goulburn management also regularly consults with its farmer suppliers through a consultative group comprising 30 farmer suppliers, with 10 being appointed from each of Murray Goulburn's three regions.

Dividends

21 All shareholders of Murray Goulburn are entitled to participate in dividends. In the case of non cumulative preference shares:

- (a) "A" class shares entitle the holder to a non cumulative preferential dividend of 8% (on the face share value of \$1); and
- (b) "B" and "C" class shares entitle the holder to a non cumulative preferential dividend at a rate determined by the Board.

22 In FY2011, FY2012 and FY2013, the final dividends paid or recommended were as follows:


Share type	2011	2012	2013
Ordinary shares and NV class shares	\$0.12	\$0.12	\$0.08
Class A preference shares	\$0.08	\$0.08	\$0.08
Class B preference shares	\$0.05	\$0.05	\$0.05
Class C preference shares	\$0.08	\$0.08	\$0.08
Total	\$29,937,000	\$31,282,000	\$25,096,000

1.3 Implications of possible capital restructure

23 Murray Goulburn is intending to put a proposed capital restructure to its farmer supplier shareholders at an Extraordinary General Meeting in 2014.

24 The object of the capital restructure is to facilitate investment by Murray Goulburn in the capacity and capability of its processing plants, primarily in order to increase farm gate returns by more than \$0.07 per litre of milk by 2017.

25 If the capital restructure is approved by the farmer suppliers, it would involve the following:

- (a) The creation of a unit trust listed on the Australian Stock Exchange to represent a proportion of Murray Goulburn's current capital base;
- (b) The units in the trust would be issued to new investors, and existing shareholders would be able to sell the economic rights to a certain percentage of their shares;
- (c) All voting rights will remain with farmer suppliers, meaning that farmer suppliers will continue to control Murray Goulburn;
- (d) The creation of a mechanism for trading shares between farmer suppliers;
- (e) Murray Goulburn would pay a benchmark milk price to farmer suppliers, with its profits being distributed by way of dividends on shares and units; and
- (f) 

26 If the capital restructure proceeds, Murray Goulburn will continue to operate under co-operative principles.

27 

2 Warrnambool Cheese and Butter

28 WCB is a listed public company with approximately 3,900 shareholders. It does not operate according to cooperative principles.

- 29 Murray Goulburn has launched a takeover bid for WCB. Its current bid is \$9 per share.
- 30 In FY2013, WCB collected 890 million litres of raw milk from over 570 dairy farmers mostly located in the dairy producing regions of south-western Victoria and South Australia.
- 31 Using that raw milk, WCB produces and sells a range of dairy products including cheeses, milk powders, whey protein concentrate, butter, cream and packaged milk. WCB does not produce nutritional products or UHT milk.
- 32 WCB currently produces approximately 130,000 tonnes of dairy products at its two Australian processing plants:
- (a) One is located in south-western Victoria at Allansford, where WCB conducts the overwhelming majority of its processing and manufacturing; and
 - (b) One is located in South Australia at Mil Lel, where WCB processes, cuts and wraps speciality cheeses.
- 33 WCB exports approximately 40% of its cheese, almost all of its milk powder, some of its butter and cream products, and the majority of its whey protein concentrate.
- 34 In FY2013, WCB had:
- (a) total revenue of \$495.851 million; and
 - (b) profit before income tax of \$9.591 million.

3 Acquisition of raw milk

3.1 Milk production in Australia and comparison with New Zealand

- 35 The Australian dairy industry is Australia's third largest agricultural industry, being worth over \$4 billion per year.
- 36 South Eastern Australia currently produces approximately 75% of Australia's raw milk.
- 37 Between FY2002 and FY2012:
- (a) Australia's production of milk has significantly declined, from 11.271 billion litres to 9.48 billion litres.
 - (b) Australia's number of dairy cows has significantly declined from 2,123,000 cows to 1,630,000 cows;
 - (c) In Victoria and South Australia, the number of dairy cows has significantly declined from 1,437,000 cows to 1,136,000 cows; and
 - (d) Victoria's total dairy farm area has significantly reduced from 1.38 million hectares to 1.08 million hectares.
- 38 During FY2014, it is expected that Australia will produce between 9.4 and 9.6 billion litres of raw milk.
- 39 By contrast, in New Zealand, between FY2002 and FY2012:
- (a) New Zealand's production of milk has significantly increased, from 13.607 billion litres to 19.129 billion litres;
 - (b) New Zealand's number of dairy cows has significantly increased from 3,692,703 cows to 4,634,226 cows; and
 - (c) New Zealand's total dairy farm area has significantly increased from 1.4 million hectares to 1.64 million hectares.
- 40 Although milk production in Australia declined between FY2002 and FY2012, and over the same period, milk production in New Zealand increased, milk productivity has

3 Acquisition of raw milk

increased in both countries during that period at approximately the same rate. Further, milk productivity is higher in Australia.

- 41 The table below summarises the number of dairy cows, the milk yield per cow, and milk production in **Australia** for each financial from FY2002 to FY2012:

Financial year	Dairy cows '000	Milk yield per cow (L)	Milk production (billions of litres)
2001–02	2,123	5,309	11.271
2002–03	2,050	5,038	10.328
2003–04	2,038	4,944	10.076
2004–05	1,942	5,215	10.127
2005–06	1,880	5,367	10.089
2006–07	1,796	5,336	9.583
2007–08	1,640	5,624	9.223
2008–09	1,676	5,602	9.388
2009–10	1,596	5,653	9.023
2010–11	1,589	5,727	9.101
2011–12	1,630	5,816	9.480

- 42 The table below summarises the number of dairy cows, the milk yield per cow, and milk production in **New Zealand** for each financial from FY2002 to FY2012:

Financial year	Dairy cows	Milk yield per cow (L)	Milk production (billions of litres)
2001–02	3,692,103	3,680	13.607
2002–03	3,740,637	3,720	13.906
2003–04	3,851,302	3,737	14.599
2004–05	3,867,659	3,574	14.103
2005–06	3,832,145	3,763	14.702

3 Acquisition of raw milk

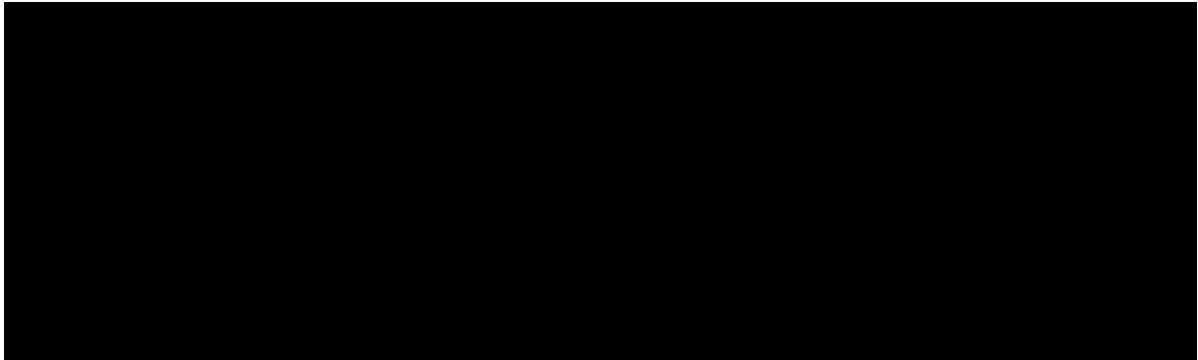
2006–07	3,916,812	3,791	15.134
2007–08	4,012,867	3,567	14.745
2008–09	4,252,881	3,710	16.044
2009–10	4,396,675	3,642	16.483
2010–11	4,528,736	3,829	17.339
2011–12	4,634,226	4,128	19.129

- 43 The key factors that have contributed to Australia's decline in milk production since 2002 have been:
- (a) The deregulation of daily pasteurised drinking milk production and supply in 2000, which removed milk quotas and guaranteed raw milk prices, and led to lower raw milk prices for dairy farmers;
 - (b) Droughts in 2003, 2004, 2006 and 2007, and floods and cyclones in 2005 and 2011;
 - (c) The global financial crisis in 2008, and significantly lower global dairy commodity prices.
- 44 These factors in particular have contributed to significantly lower farmer confidence, and in 2013, over 40% of dairy farmers surveyed by Dairy Australia said that they had no plan to expand milk supply in the next three years.
- 45 Although there is low farmer confidence at present, and there have been significant reductions in Australian dairy production over the past decade, there is potential in south eastern Australia to convert additional land to dairy farming and to increase dairy production.

3.2 Murray Goulburn's relationship with its farmer suppliers

Milk collection areas and volumes

- 46 For convenience, Murray Goulburn has historically divided its raw milk collection into three regions, being the regions where it purchases the majority of its raw milk:
- (a) North, which comprises northern Victoria and the Riverina region of New South Wales;
 - (b) West, which comprises south-western Victoria and South Australia; and
 - (c) Gippsland, which comprises the Gippsland region of Victoria.
- 47 In Tasmania, Murray Goulburn does not collect raw milk from farmers directly, and instead purchases it from a joint venture, Tasmanian Dairy Producers.
- 48 From June 2013 onwards, Murray Goulburn has also commenced collecting milk in central and northern New South Wales.
- 49 [REDACTED]

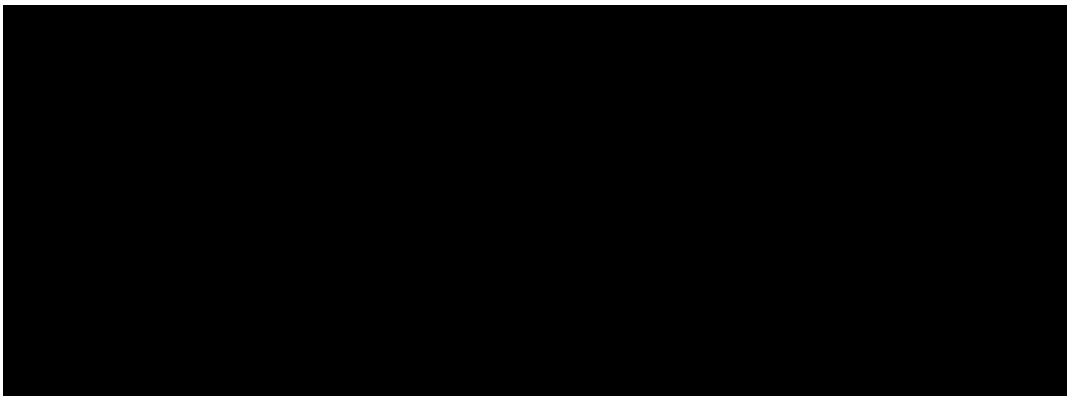


Murray Goulburn's raw milk pricing

50 Murray Goulburn offers farmer suppliers in its North, West and Gippsland regions the same milk price structure, regardless of where they are located. **Attachment 2** contains an explanation of the Milk Payment System. Specifically:

- (a) There is a single base price per kilogram for milk solids that is offered to all farmer suppliers regardless of location or calving pattern;
- (b) There are incentives payable for "flat" supply of milk, growth in milk supply, and higher volume farms;
- (c) There are discounts deducted for lower quality milk; and
- (d) There are differing milk collection and handling charges that depend upon the size of tanker servicing the farm and number of collections per day.

51



52 Murray Goulburn's single base price for raw milk varies from month to month to reflect the seasonality of milk production and to encourage milk production during the months when production is usually lower (that is, outside of Spring).

53 In central and northern New South Wales, Murray Goulburn offers farmer suppliers a separate milk payment system that differs from the Milk Payment System that Murray Goulburn offers in its North, West and Gippsland regions. **Attachment 3** contains an explanation of the New South Wales – Sydney Market Region Milk Payment System.

54 Murray Goulburn offers a different milk payment system in central and northern New South Wales for the following reasons:

- (a) New South Wales milk production is largely used by dairy processors for supplying daily pasteurised drinking milk, and they require a certain, year round, flat supply of milk. As a consequence, dairy processors in central and northern New South Wales pay a higher price for milk than in southern New South Wales and Victoria in order to obtain largely flat milk supply (which is a higher cost production style); and

(b)



However, raw milk prices in New South Wales would not be greater than raw milk prices in southern New South Wales and Victoria after adjusting for transport costs from Victoria.

Murray Goulburn's raw milk price setting

55 At the start of each financial year, Murray Goulburn notifies its farmer suppliers of its "opening" base milk price and its forecast of the base milk price that farmer suppliers can expect to receive over the course of the coming financial year.

56 The "opening" base milk price is usually 90% to 96% of the forecast base milk price for the coming year, and Murray Goulburn periodically announces a "step up" to the base milk price throughout the year. "Step ups" apply retrospectively for farmer suppliers who are continuing to supply Murray Goulburn at the time of the step up.

57 Murray Goulburn's Board is responsible for approving all "opening" base milk prices and price "step ups".

58

(d) Management sensitivity tests [REDACTED] by reference to expectations of foreign exchange rates and global dairy commodity prices; and

(e) [REDACTED], management determines the recommended opening base milk price at approximately 90% to 96% of the estimated available amount for distribution to the farmer suppliers.

59 Murray Goulburn's management determines the recommended amount and timing of "step ups" to the milk price largely by having regard to:

(a) Delivered sales as the year progresses;

(b) Key sensitivities such as foreign exchange rates and commodity prices;

(c) Any other assumptions underlying the initial budget estimate (such as revised milk intake volumes, revised sales for Murray Goulburn's Trading Stores or revised operating costs); and

(d) Farmer supplier hardship or cash-flow needs.

60 Although Murray Goulburn principally sets its milk price based on the amount it considers it can return to farmer suppliers, after allowing for a \$30 million retained profit, it also has regard to competitor milk pricing from time to time.

61 If Murray Goulburn observes that competitors are pricing above its current base milk price, or have "stepped up" their milk price before Murray Goulburn, Murray Goulburn's management may recommend to the Board that it bring forward any planned "step ups".

Additional services supplied to farmer suppliers

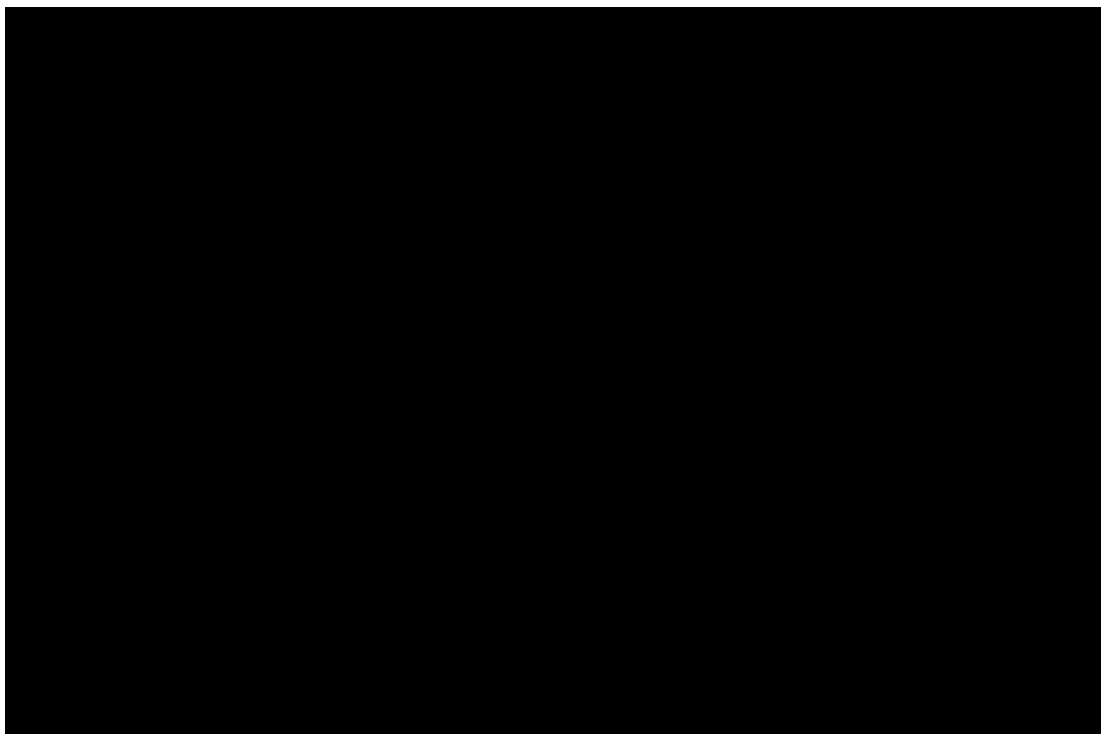
62 Murray Goulburn offers its farmer suppliers a range of additional services, primarily through its 21 MG Trading stores and four fertiliser depots.

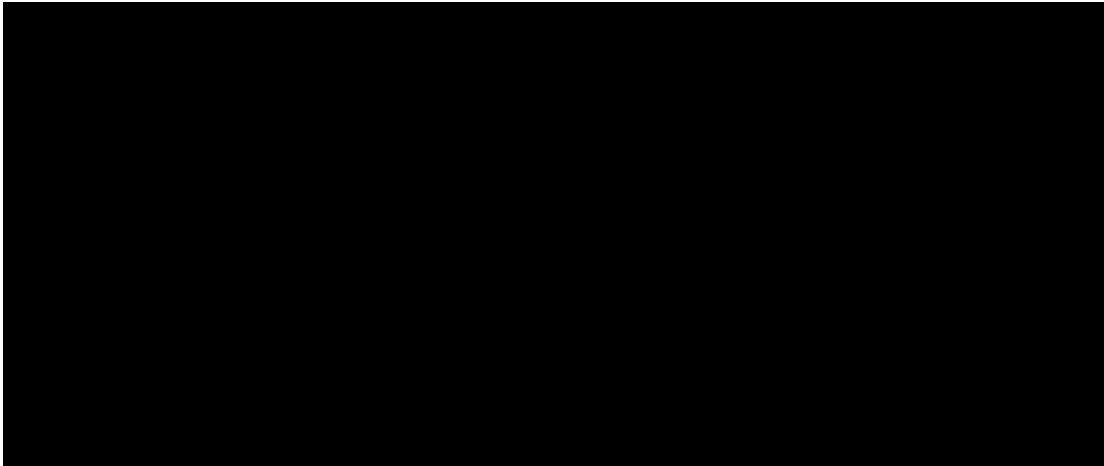
63 Murray Goulburn's MG Trading stores offer various farm products, expert technical and agronomy advice services and milk machine sales and servicing, and Murray Goulburn's farmer suppliers receive a 3% discount.

- 64 Murray Goulburn employs Field Service Officers who provide free services to farmer suppliers, including farm budgeting, food safety and farm audits.
- 65 Murray Goulburn offers loans at competitive rates to its farmer suppliers through its MG Trading Finance and Supplier Finance programs.

3.3 Competitors in the acquisition of raw milk

- 66 Murray Goulburn's competitors in the acquisition of raw milk in south-western Victoria, northern Victoria and the Riverina region of New South Wales, the Gippsland region of Victoria and South Australia include:
- (a) Fonterra Australia, which acquires approximately 1.8 billion litres of raw milk per year from approximately 1,400 dairy farmers;
 - (b) WCB, which acquires approximately 890 million litres of raw milk per year from approximately 570 dairy farmers;
 - (c) Bega, which acquires approximately 641 million litres of raw milk per year;
 - (d) United Dairy Power (**UDP**), which acquires approximately [REDACTED] of raw milk per year;
 - (e) Parmalat Australia Limited (**Parmalat**), which acquires approximately [REDACTED] of raw milk per year;
 - (f) Lion Pty Ltd (**Lion**), which acquires approximately 1 billion litres of raw milk per year from approximately 750 dairy farmers, including from Dairy Farmers Milk Co-operative (**DFMC**), which acquires approximately [REDACTED] of raw milk from approximately 600 farmer suppliers, and supplies all of that milk to Lion;
 - (g) Bulla Dairy Foods;
 - (h) Burra Foods Australia; and
 - (i) Longwarry Food Park.
- 67 During FY2013, Murray Goulburn and its competitors acquired the following volumes of milk from farmer suppliers in each relevant region:





68 Declining milk production during the past 10 years, combined with many dairy processors having excess capacity, has intensified competition for raw milk between dairy processors.

69 Spreadsheets recording farmer suppliers gained and lost by Murray Goulburn in the North, West and Gippsland regions for FY2011, FY2012 and FY2013 are [REDACTED]

70 Murray Goulburn's competitors in the North, West and Gippsland regions offer milk price structures to dairy farmers that are similar to, but not identical to, Murray Goulburn's milk payment system. Some competitors' milk price structures differ according to the kinds of end products that they have chosen to supply. For example:

- (a) Parmalat and Lion focus on obtaining year round flat milk supply, and their pricing structures are tailored to suit obtaining dairy farmers of that kind;
- (b) WCB and Burra Foods focus on obtaining milk to support their export businesses, and their pricing structures are tailored accordingly; and
- (c) Murray Goulburn aims to collect milk for both purposes, and structures its milk price structure in order to attract all kinds of dairy farmers.

71 Murray Goulburn's competitors in the North, West and Gippsland regions offer the same milk price structure throughout the region, and only occasionally offer different regional milk prices in order pursue temporary strategies.

3.4 Movement of raw milk within and across milk producing regions

Transporting raw milk from farm to processing plant

72 [REDACTED]

73 To lower its transport costs, Murray Goulburn aims to use the lowest number of trucks required to collect all raw milk from its farmer suppliers in each region – North, West and Gippsland – by arranging collection routes that can be completed in the shortest time period and involve the shortest driving distance.

74 For Murray Goulburn, the average number of daily pick-ups per region is significantly higher in the North and Gippsland regions, as compared with the West region, because the farms in the West region are substantially larger. That means the milk yield per pick-up is higher in the West.

75 Murray Goulburn usually transports raw milk from farms to the nearest Murray Goulburn processing plant, unless it is conducting a swap with a competitor, and delivering milk to

¹ Australian Consolidated Milk Pty Ltd.

3 Acquisition of raw milk

a competitor's processing plant, or unless it has decided to promote production at another plant.

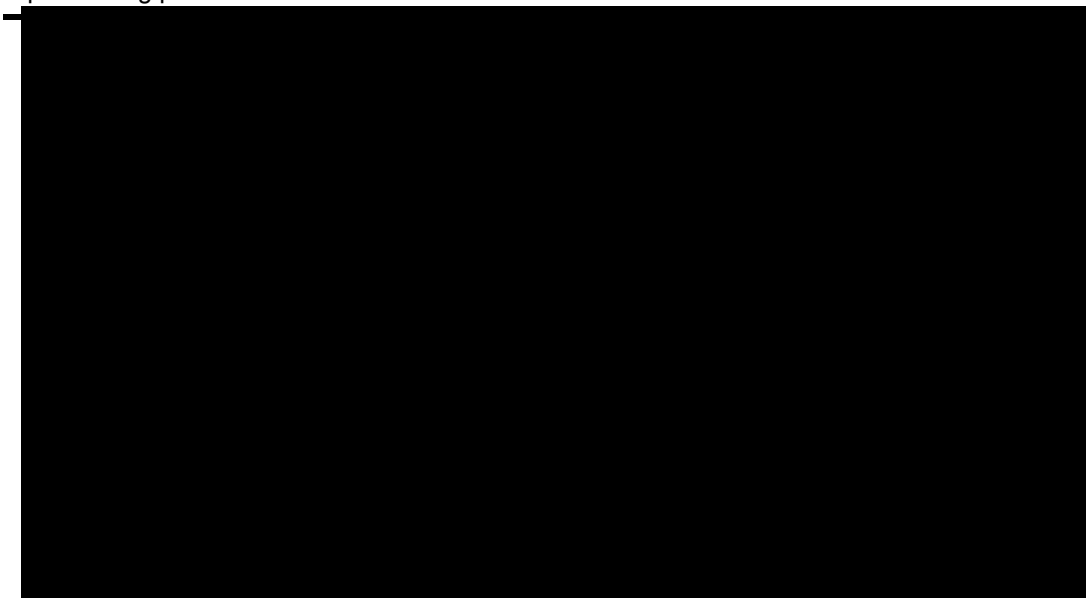
76 It is industry practice to deliver raw milk to a relevant processing plant within 50 hours of pick-up.

77 Although Murray Goulburn does not usually transport raw milk from farms directly to processing plants in different regions, Murray Goulburn regularly transports dairy products between its processing plants, including across regions. Murray Goulburn most commonly transports bulk milk, dairy ingredients and cream concentrate between its processing plants. For example:

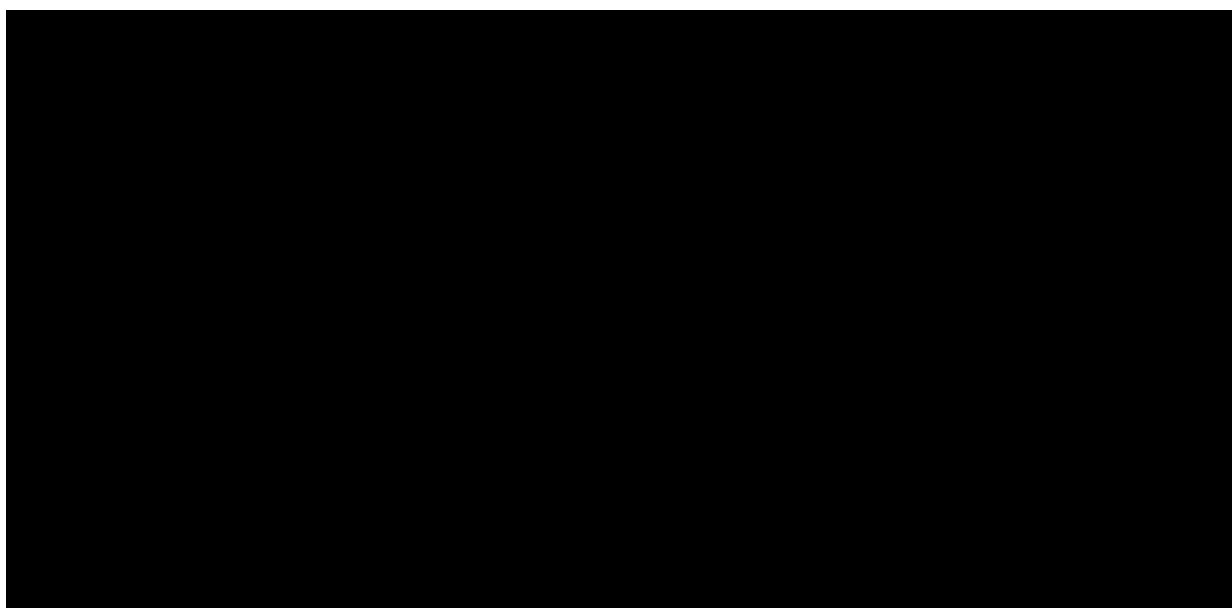
(a) Murray Goulburn transports raw milk from the West to its processing plants located in the North and Gippsland regions; and

(b) Murray Goulburn transports raw milk from farmer suppliers in South Australia to its Koroit plant in western Victoria.

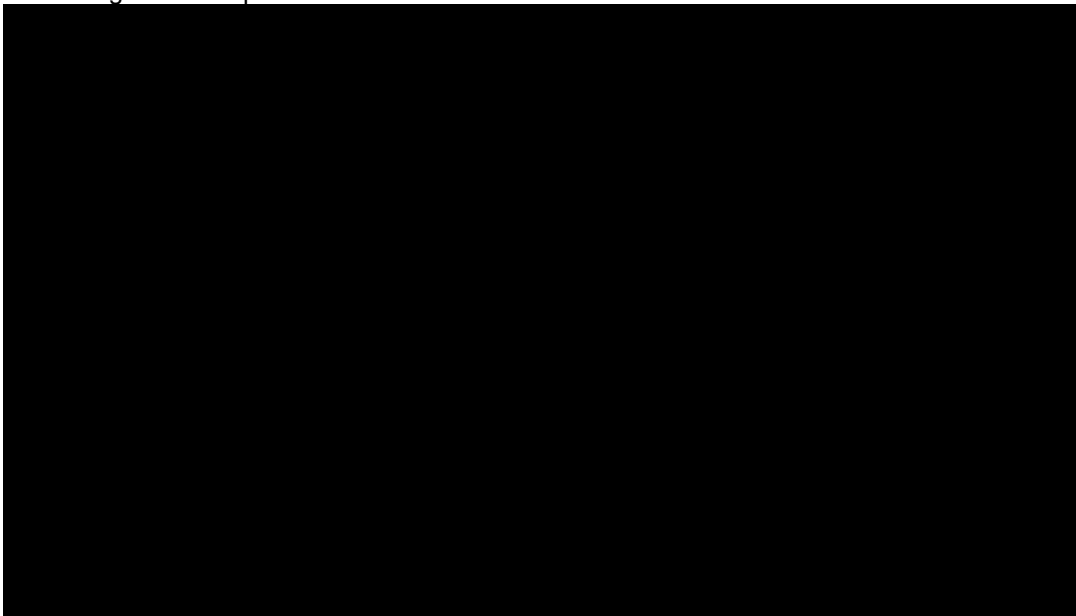
78 During FY2013, Murray Goulburn transported the following number of loads between its processing plants:



79 During FY2013, Murray Goulburn transported the following number of 'backloads' (that is, products transported on return trips) between its processing plants:



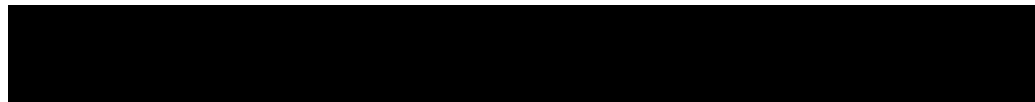
80 During FY2013, Murray Goulburn transported the following volumes of raw milk (in millions of litres) between its processing plants. The highlighted cells indicate instances of inter-regional transport.



81 Some of Murray Goulburn's competitors regularly transport raw milk from farm to processing facilities in different regions, including:

- (c) WCB, which collects approximately 35 million litres of raw milk from farms in central South Australia and transports it back to its Allansford processing plant;
- (d) Bega, which collects approximately 60 million litres of raw milk in western Victoria and transports it back to its processing plants in northern Victoria, Melbourne and a limited amount to the Bega Valley; and
- (e) UDP, which collects approximately 25 to 30 million litres of raw milk in Gippsland and transports some of it back to its processing plants in South Australia.

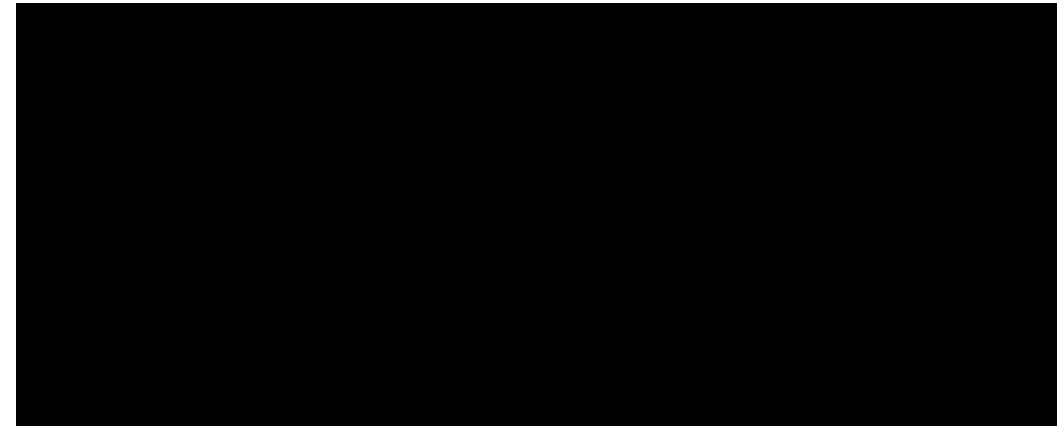
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Swaps between competitors

83 Murray Goulburn regularly swaps bulk raw milk with Fonterra, Lion, Parmalat, WCB, Bulla, Longwarry, Procal and a number of other companies, both in the same region, and across regions.

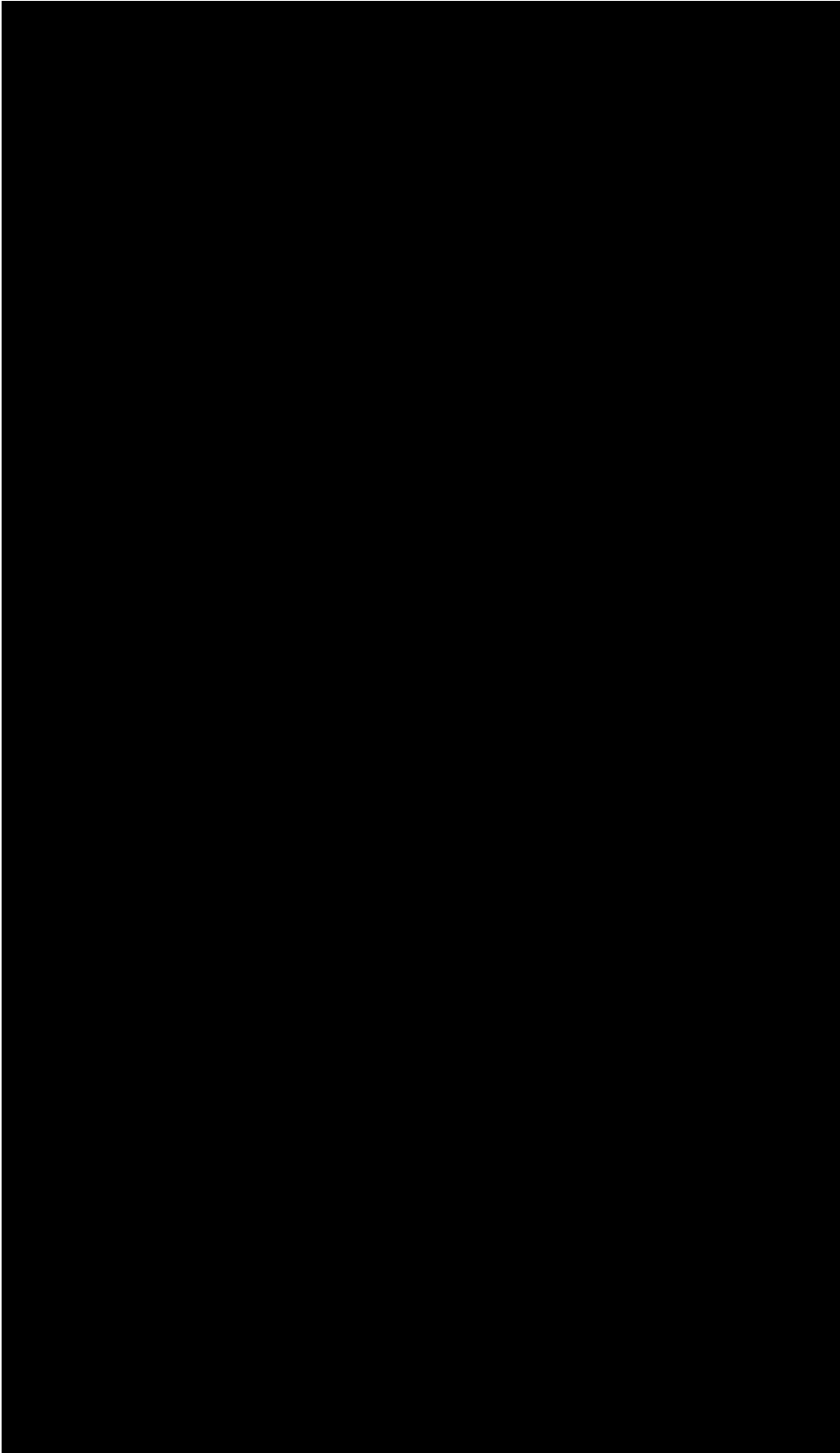
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3 Acquisition of raw milk

85

86





4 Dairy processing facilities in South East Australia

4.1 Processing milk and manufacturing dairy products

87 The main finished dairy products and ingredients manufactured from raw milk are daily pasteurised milk, UHT milk, cheeses, butters, milk powders, whey powders, milk fats, speciality milk proteins and nutritional products (including infant formula).

88 Common elements in processing raw milk and manufacturing dairy products include:

- (a) Collecting raw milk from farmers and keeping it cool;
- (b) Testing raw milk for any harmful microorganisms; and
- (c) Heat treating raw milk (either pasteurising it or subjecting it to ultra heat treatment to extend its shelf-life) to destroy pathogens.

89 After the raw milk is heat treated, it can be put through different processes depending on the end product being produced. For example:

- (a) Pasteurised milk may be centrifugally separated into cream and skim milk;
- (b) Cream may be further processed by churning it into butter;
- (c) Pasteurised milk may be standardised, evaporated and spray dried into full cream milk powder; and
- (d) Pasteurised milk may be standardised, given start and coagulant addition, and by having the curds separated from the whey, turned into cheese.

An exhaustive list of the processes and end dairy products that can be made with raw milk is graphically depicted in **Attachment 7**.

90 Because most dairy products use only components of whole raw milk, or are by products of other dairy products, there is an interdependence of product volumes for many dairy products. For example:

- (a) Increased production of skim milk and its derivative products increases the production of cream (because it is made by centrifugally separating cream from the skim milk); and
- (b) Decreased production of butter will increase the volume of cream available for supply.

91 Producing the same volume of different dairy products also may require different volumes of raw milk. For example:

- (a) More raw milk is required to produce 250g of skim milk powder as compared with infant nutrition powder, because additional ingredients such as whey, casein, vegetable oils, lactose, vitamins and minerals are required to produce infant nutrition powder; and
- (b) More raw milk is required to produce 250g of butter as compared with 250g of Swiss-style yoghurt, because fruit, sugar, starch, pectin and gelatin is added to the latter.

92 Because of fluctuations in raw milk production throughout the year, processing plants are not used in a uniform manner all year round. Processing plants, or parts of plants, are

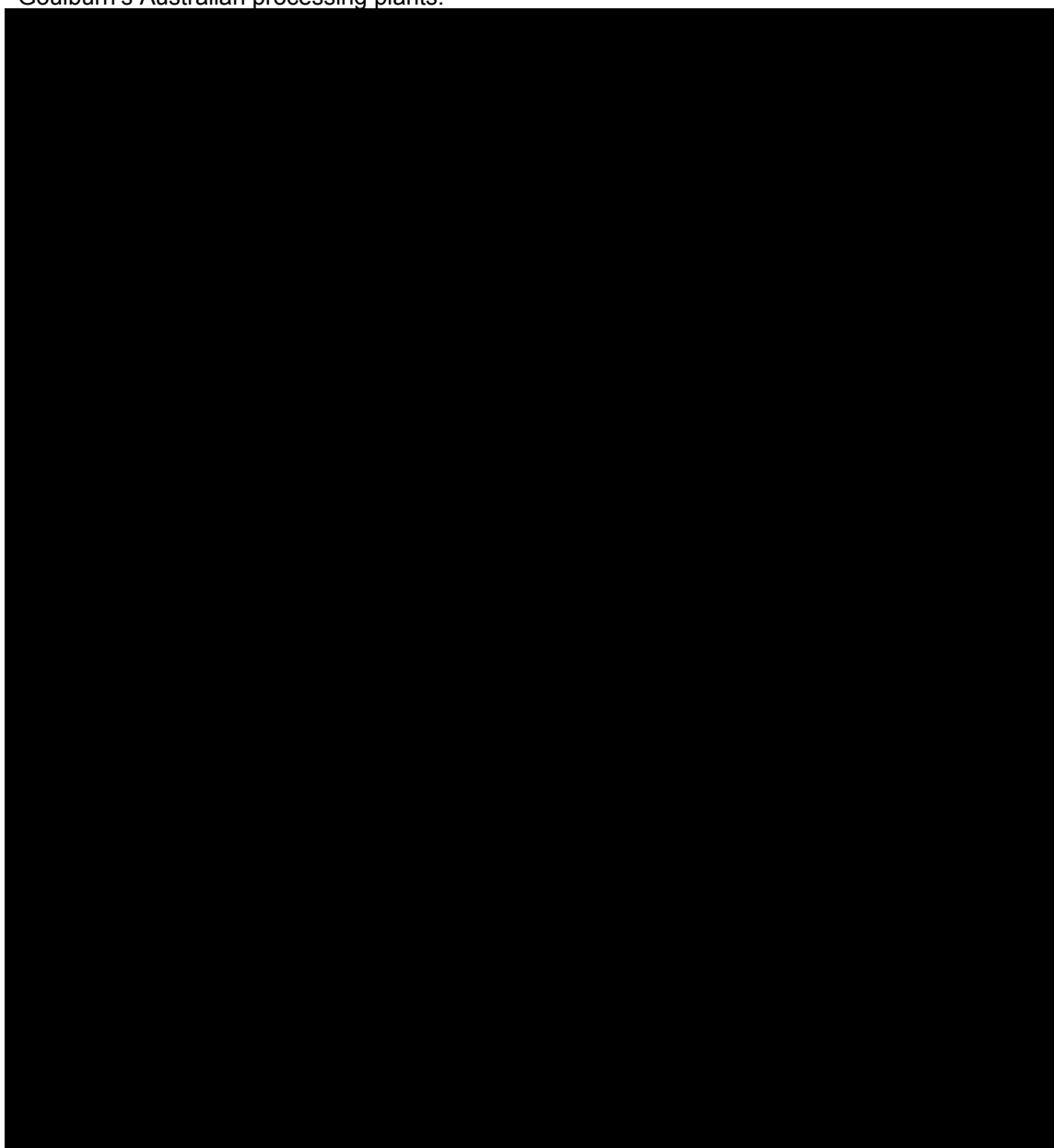
4 Dairy processing facilities in South East Australia

regularly 'wound down' and 'wound up' each year, and the winding down or up process takes approximately 2 to 3 months lead time to organise, and involves managing labour and maintenance of the plants.

- 93 Most Australian dairy processors are able to adjust their production of dairy ingredient products according to demand trends in Australia and in international markets.
- 94 The basic infrastructure required to build a new dairy processing plant on a greenfield site is approximately \$50 – 70 million. The total cost of building a milk powder plant with a single spray dryer would be more than \$200 million. The total cost of building a drinking milk processing facility would be lower. For example, Murray Goulburn's new milk processing plants at Laverton and Erskine Park will cost approximately \$160 million in total.

4.2 Murray Goulburn's processing facilities

- 95 The following table summarises the production capability and current utilisation of Murray Goulburn's Australian processing plants:

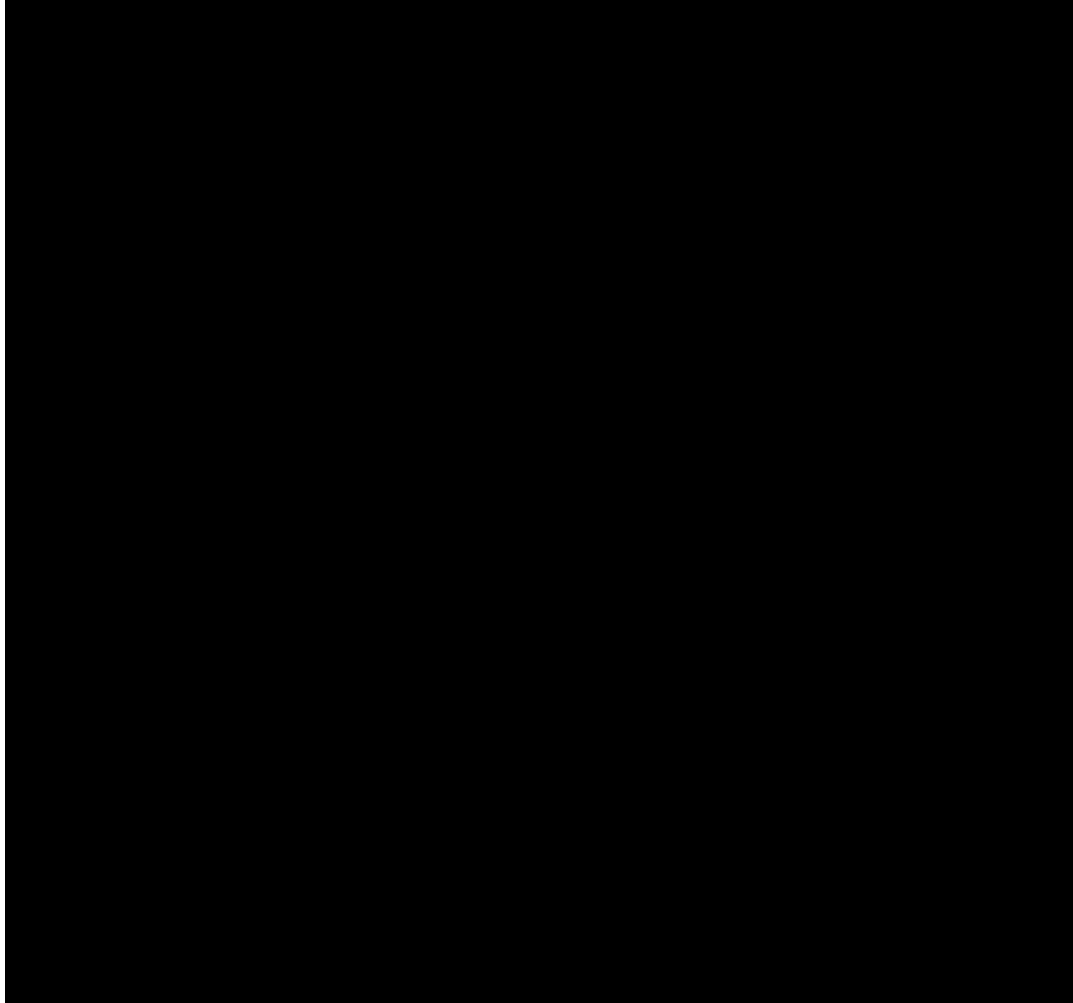


4.3 Competitor processing facilities

96 A map of south eastern Australia that graphically depicts the location of dairy processing plants located in Victoria, South Australia and southern New South Wales is **Attachment 8**.

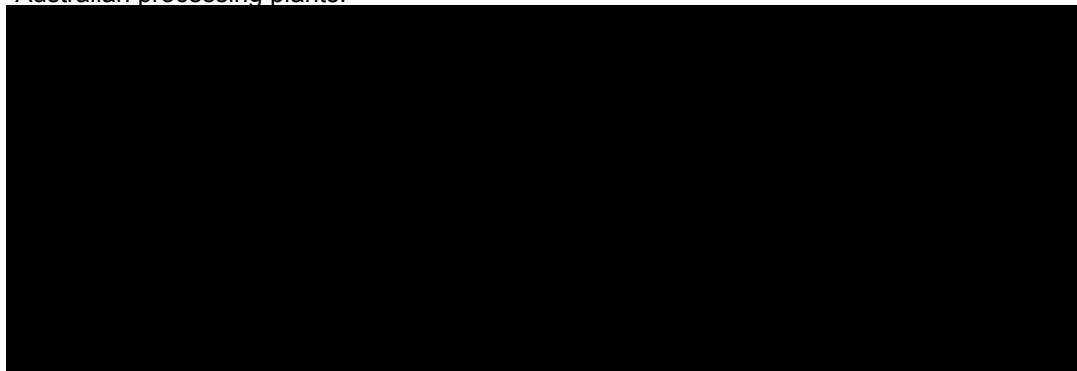
Fonterra

97 The following table summarises the production capability and utilisation of Fonterra's Australian processing plants:

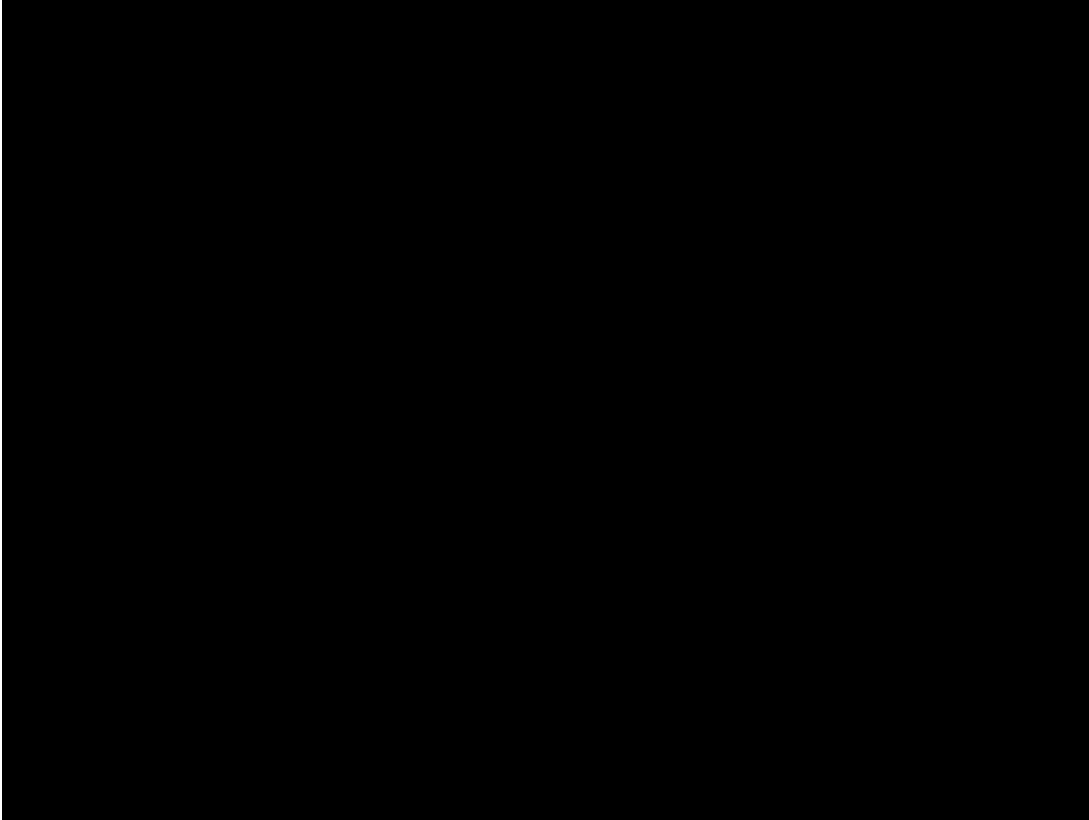


Lion

98 The following table summarises the production capability and utilisation of Lion's Australian processing plants:

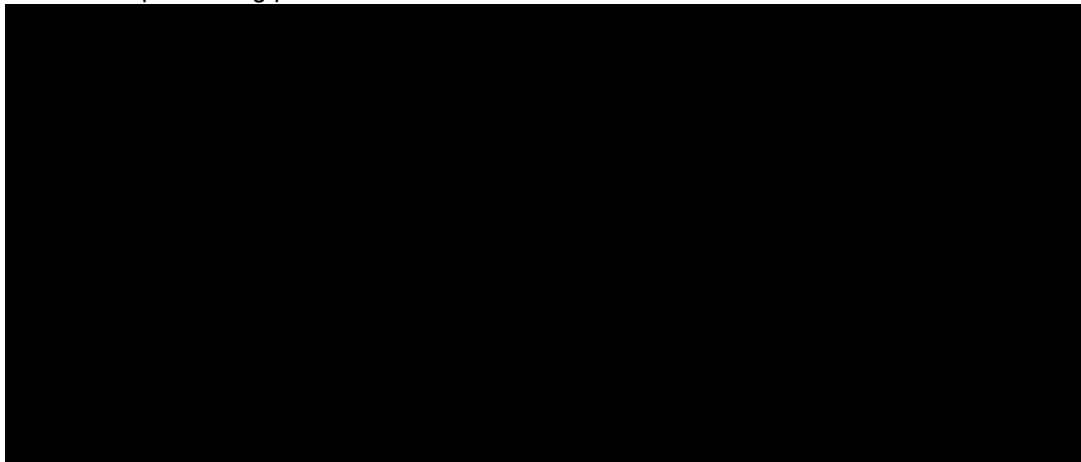


4 Dairy processing facilities in South East Australia



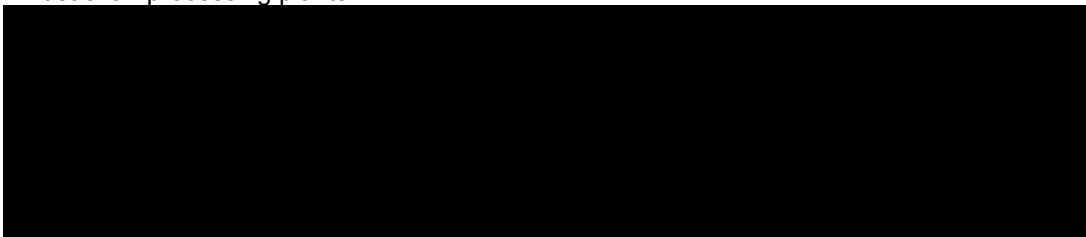
WCB

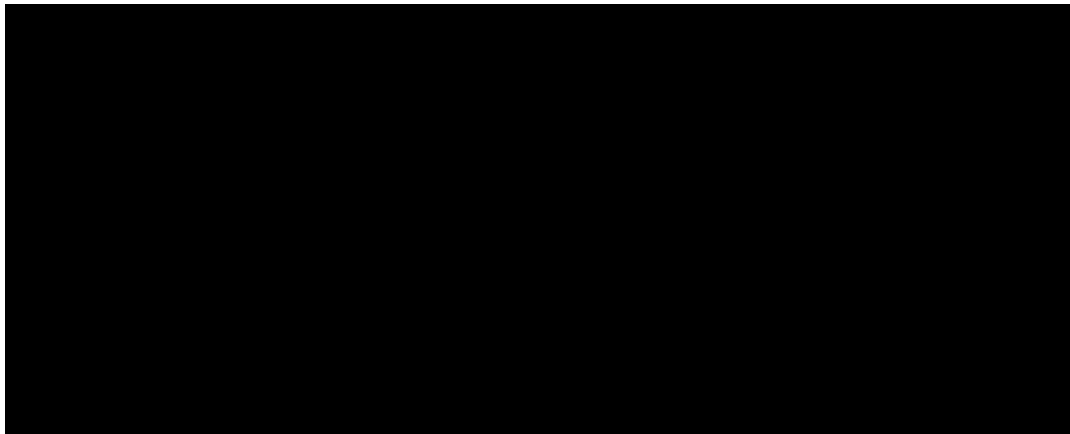
99 The following table summarises the production capability and utilisation of WCB's Australian processing plants:



Bega

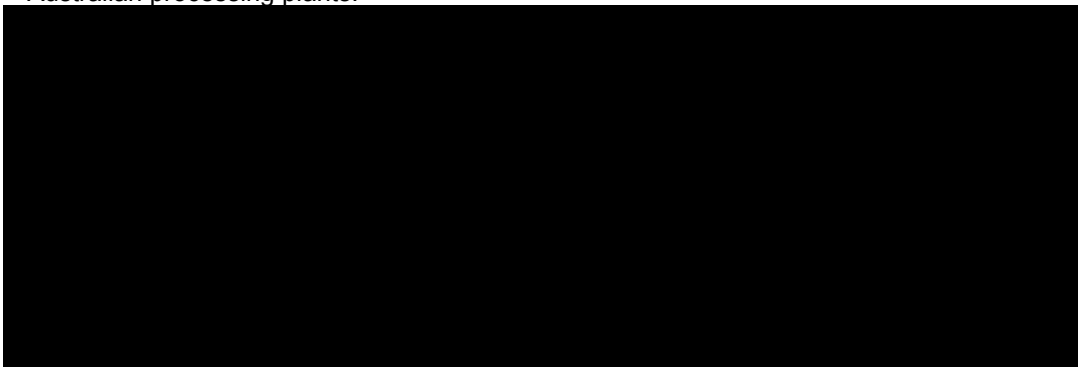
100 The following table summarises the production capability and utilisation of Bega's Australian processing plants:





Parmalat

- 101 The following table summarises the production capability and utilisation of Parmalat's Australian processing plants:

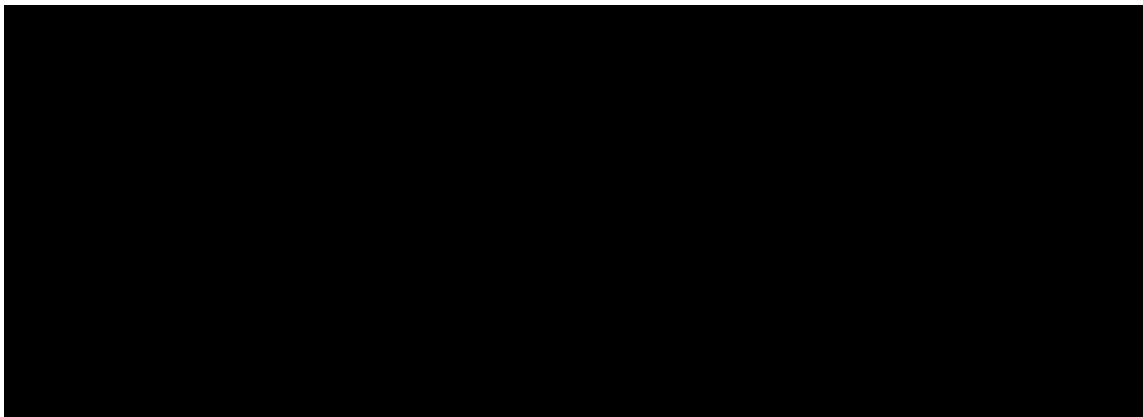


Other competitors

- 102 Other competitor dairy processors in south east Australia include:
- (a) United Dairy Power, which owns two processing facilities in South Australia, and produces and supplies various cheeses, butter and whey powders;
 - (b) Burra Foods, based in Korumburra in Victoria, and produces milk powders, nutritional milk powders, bulk cream, milk concentrates and dairy desserts; and
 - (c) Longwarry Food Park, based in Longwarry in Victoria, and produces fresh milk, long life milk, extended shelf life milk, cream cheeses, milk powders and dairy concentrates.

- 103 The following table summarises the production capability and utilisation of these competitor's Australian processing plants:





5 Supply of bulk dairy ingredients

5.1 Overview of bulk dairy ingredients

104 Murray Goulburn produces many bulk dairy ingredient products. In FY2013, Murray Goulburn produced [REDACTED] of bulk dairy ingredients, and exported most of this volume.

105 Dairy ingredients can be classified into the following categories, starting from the lower end of the value spectrum to the higher end of the value spectrum:

- (a) Base commodities, which are products that include little or no product differentiation and limited supply security;

Product
Codex skim milk powder (SMP)
Standard full cream milk powder (28% fat)
Bulk cheddar
Anhydrous milk fats (AMF)
Butter milk powder (BMP)
Casein
Caseinates
Bulk frozen cream
whey powder
Whey powder concentrate (34% protein)

- (b) Customised ingredients, which include minor product differentiation and higher supply security;

Product
High heat stabilised SMP (HHHS SMP)
Instant full cream milk powder
Full cream milk powder for Japanese blending
bulk bags

- (c) Value add ingredients, which are characterised by significant differentiation, high supply security and high levels of customer service;

Product
FNCC
Cream cheese

- (d) Nutritionals, which include infant, toddler and adult milk formulas; and

Product
Blended base powders
finished infant powders

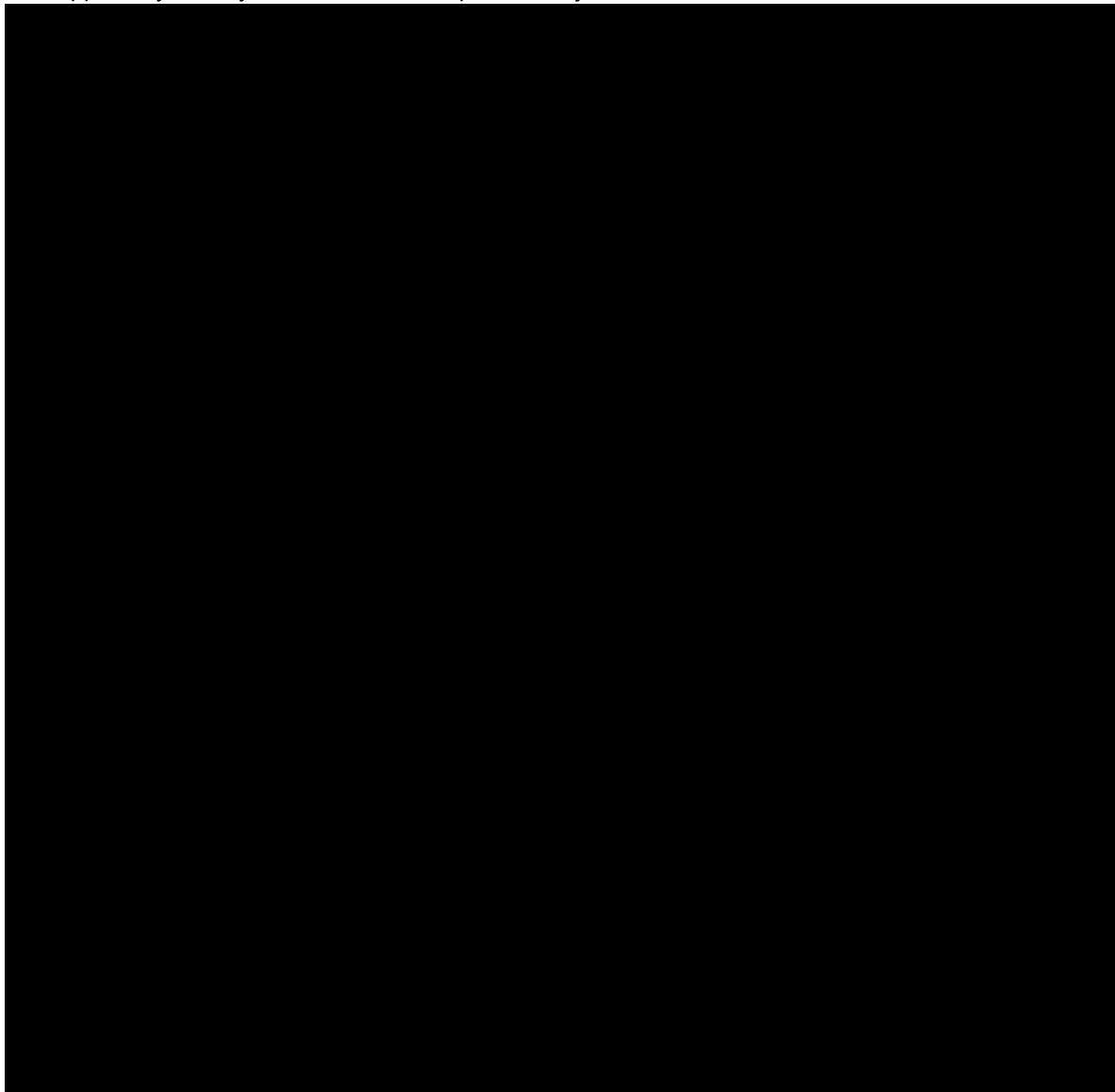
5 Supply of bulk dairy ingredients

specialised powder blends

- (e) Specialty ingredients, which are characterised by the highest product differentiation.

Product
Lactoferrin
Natra Sal MWC

- 106 Murray Goulburn supplies approximately [REDACTED] of its bulk dairy ingredients products as higher value customised, value add, nutritionals and specialty ingredients. The tables below summarise the volumes and value of each category of bulk dairy ingredients supplied by Murray Goulburn over the past three years:



- 107 There are also bulk liquid ingredients, which are summarised in the following table, along with Murray Goulburn's FY2013 volumes:

Product	Description	MG volume
---------	-------------	-----------

² Other includes international retail, downgraded products and research and development products.

³ Other includes international retail, downgraded products and research and development products. International retail now has its own sales channel from 2012 and has been excluded from consideration.

5 Supply of bulk dairy ingredients

		supplied in FY 13 (tonnes)
Bulk cream	Cream is produced when fresh milk undergoes centrifugal separation. Bulk cream is typically supplied in tankers with a 25,000 litre capacity and has a 40% minimum fat specification.	
Skim milk	Skim milk is produced through centrifugal separation of fresh milk.	
Semi-skim milk	Semi-skim milk is produced through partial centrifugal separation of fresh milk, it contains a higher fat content than skim milk due to the fact that not all of the cream is removed from the milk.	
Wholemilk concentrate	Wholemilk concentrate is produced through a process involving centrifugal separation. Through this process, the cream content of the milk is increased, so the product consists of approximately 8% fat.	
Milk permeate	Milk permeate is a natural product produced as part of the process for creating milk protein concentrate from skim milk. Skim milk is put through an ultrafiltration process, which filters the protein from the milk permeate. The protein is then spray dried to form milk protein concentrate, while the milk permeate is retained and used in other applications, such as standardisation of protein levels in milk products.	

5.2 Supply of bulk dairy ingredients in Australia

Bulk non-liquid dairy ingredients

108 Murray Goulburn supplies various dairy ingredients to customers in Australia including ingredients resellers and food manufacturers such as ice cream manufacturers and dessert and bakery manufacturers.

109 Murray Goulburn faces competition in Australia in supplying dairy ingredients from:

- (a) Imports – approximately 21% of dairy ingredients supplied in Australia are imported;
- (b) Fonterra, which is expected to supply [REDACTED] in FY2014;
- (c) Bega, which is expected to supply [REDACTED] in FY2014;
- (d) WCB, which is expected to supply [REDACTED] in FY2014;
- (e) United Dairy Power;
- (f) Burra Foods;
- (g) Longwarry food Park;
- (h) Lion; and
- (i) Richmond Dairy.

A summary table recording the ingredient volumes (excluding bulk liquid ingredients) that each dairy processor is expected to supply in Australia in FY2014 by ingredient category is [REDACTED]

Bulk cream

5 Supply of bulk dairy ingredients

- 110 Cream production in Australia is significantly affected by commodity prices and production decisions made in relation to other products such as skim milk and its derivative products, and butter.
- 111 Some customers who use bulk cream consider milk powders, in particular full cream milk powder, to be an alternative to cream. For example, milk powder is an alternative to bulk cream in producing ice cream, but not in producing table cream. Frozen cream, however, is not usually considered by customers to be a substitute for bulk cream.
- 112 Murray Goulburn and a number of other dairy processors supply bulk cream to customers in Victoria and South Australia. The table below summarises the expected bulk cream volumes that each firm will supply during FY2014 in Victoria, South Australia and New South Wales.

Product	Volume (tonnes)
[Redacted Table Content]	

Bulk processed milk

- 113 Murray Goulburn supplies skim milk, semi-skim milk, wholemilk concentrate and milk permeate to customers in Australia in the volumes summarised at 107 above.
- 114 In FY2013, Murray Goulburn supplied approximately [Redacted] of bulk processed milk in Victoria and South Australia. [Redacted]
- 115 Other dairy processors that supply bulk processed milk include Fonterra, Bega, Burra Foods, United Dairy Power and Richmond Dairy.
- 116 WCB does not currently supply bulk processed milk in Australia.

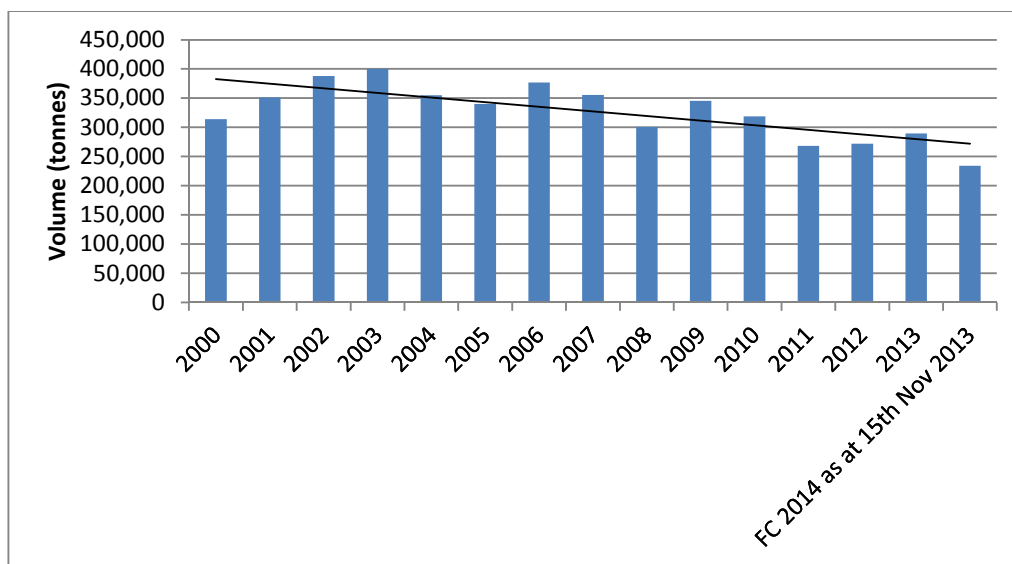
5.3 Murray Goulburn's international supply of bulk dairy ingredients

117 Murray Goulburn currently exports a full range of dairy ingredients into approximately 50 countries, with Murray Goulburn's largest export markets for FY2013 being [REDACTED]. [REDACTED] contains a full list of countries (and customers) to which Murray Goulburn exported ingredients in FY2013 and Murray Goulburn's export volumes.

118 Murray Goulburn has in-market offices in Dubai, Japan, Singapore and Vietnam. In-market offices are important for developing deep customer relationships broadly across a customer's operations, which are critical for facilitating and identifying innovative product opportunities with those customers.

119 Murray Goulburn's products are able to command a price premium in international markets because of Murray Goulburn's well regarded brand.

120 Murray Goulburn's ingredients export sales have declined significantly over the past 10 years, from over [REDACTED] in FY2003 to less than [REDACTED] in FY2013. Below is a graph that records Murray Goulburn's decline in export sales.



121 Murray Goulburn's export volumes have declined because of lower availability of raw milk volumes in Australia during this period.

122 Murray Goulburn's supply constraints have caused it reputational damage in the international marketplace, so much so that [REDACTED] of its customers are not confident that Murray Goulburn would be able to meet their supply needs.

123 Murray Goulburn is also limited in its ability to offer customers long term supply contract because its limited raw milk supply prevents it from being able to sufficiently manage commodity price risks.

5.4 Murray Goulburn's supply of nutritional products internationally

124 Murray Goulburn currently has capacity to produce approximately [REDACTED] tonnes of nutritional products per year, and in FY2013, produced and sold almost [REDACTED] tonnes of nutritional products, with China and Japan being the largest importer of Murray Goulburn's products.

125 Murray Goulburn has a processing plant in China that blends and packages nutritional products for domestic supply in China. Murray Goulburn currently exports [REDACTED] of infant formula to China to be processed in its China based processing plant.

6 Downstream supply of finished dairy products

- 126 Demand for nutritional products in Asia, especially China, is forecast to grow in excess of 10% per year, and Murray Goulburn estimates that demand from its existing customer base ██████████ by 2020. Murray Goulburn is not presently able to supply this demand.
- 127 Bega, through its joint venture with Mead Johnson, supplies nutritional products into Asia. It is currently producing approximately 30,000 to 40,000 tonnes per year, and has capacity to produce approximately 50,000 to 60,000 tonnes per year.
- 128 WCB is party to a 50/50 joint venture with Royal Friesland Campina that manufactures nutritional products.
- 129 Saputo does not currently have nutritional production capabilities.
- 130 In order to successfully produce and supply nutritional products, a dairy processor requires:
- (a) Production facilities capable of producing high quality base ingredients and access to high quality vegetable oils and specialty micronutrients;
 - (b) Development and ownership of intellectual property rights and technical know how;
 - (c) Strong customer relationships, with commitments from at least one large global customer to underwrite the necessary investment requirements;
 - (d) Control over the raw milk supply chain from farm to finished and packaged product; and
 - (e) Quality control systems.

6 Downstream supply of finished dairy products

6.1 Overview of Murray Goulburn's supply to Australian customers

- 131 Murray Goulburn supplies a range finished dairy products in Australia, which comprise:
- (a) Cheeses;
 - (b) UHT milk;
 - (c) Butter / spreads;
 - (d) Daily pasteurised milk;
 - (e) Flavoured milk;
 - (f) Dairy desserts and yoghurts;
 - (g) Milk powder; and
 - (h) Cream (fresh and UHT).
- 132 Murray Goulburn supplies these finished dairy products to the following categories of customers in Australia:
- (a) Grocery retailers – this includes the major grocery retailers (Coles, Woolworths and Aldi), Metcash, and smaller retailers such as Costco, Foodworks, Foodland and SPAR;
 - (b) Food service distributors via buying groups, who supply restaurants, hotels and cafes – this includes Bidvest, NAFDA, Countrywide Australia, Combined Foodservices and 750 independent distributors;
 - (c) Route outlets, shops and small grocery stores in the Kiewa Valley; and
 - (d) Other dairy producers under contract packing arrangements.

6 Downstream supply of finished dairy products

133 The supply of finished dairy products to these customers is highly competitive, with a number of dairy processor having well regarded brands for their retail dairy products.

Supply to grocery retailers

134 In FY2013, Murray Goulburn supplied [REDACTED] of branded finished dairy products and [REDACTED] of private label finished dairy products to grocery retailer customers.

135 Grocery retailer customers usually conduct annual or bi-annual range reviews, and commonly delete branded dairy products that have insufficient performance, even where those branded products have had high sales and margins. This provides the larger grocery retailers with considerable bargaining power against suppliers.

Supply to foodservice customers

136 In FY2013, Murray Goulburn supplied [REDACTED] of finished dairy products to foodservice customers. Other suppliers of dairy products to food service customers include Fonterra, Parmalat, Lion and Kraft, and the food service buying groups regularly buy from multiple suppliers at once.

137 WCB rarely supplies to food service customers.

Supply to route customers

138 In FY2013, Murray Goulburn supplied [REDACTED] of dairy products to route outlets, shops and small grocery stores in the Kiewa Valley.

Supply to contract pack customers

139 In FY2013, Murray Goulburn supplied [REDACTED] of dairy products under contract packing arrangements, including with [REDACTED]

6.2 Supply of cheese in Australia

140 There are a number of varieties of block, shredded and processed cheeses supplied in Australia, including cheddar, cheddar style cheeses and specialty cheeses.

141 Cheese is easily transported over long distances, as long as it is refrigerated and vacuum sealed, because it has long shelf life. Accordingly, Murray Goulburn faces competition from suppliers nationally.

142 Australian cheese consumers are price sensitive, usually have little brand loyalty, and substitute between private label and branded cheese. In Australia, [REDACTED] of cheese volume is private label, and [REDACTED] is branded. There is intense promotional activity in supplying cheese.

143 The current national share of supply volumes of branded and private label cheese by suppliers to grocery retailers is as follows:

Product	Supply volumes
Private label	[REDACTED]
Fonterra	[REDACTED]
Kraft	[REDACTED]
Lion	[REDACTED]
Murray Goulburn	[REDACTED]
WCB	[REDACTED]
Norco	[REDACTED]

Bodalla	
Other	

6.3 Supply of UHT milk in Australia

144 Although UHT milk can be used as a substitute for daily pasteurised milk, most Australian consumers prefer to drink or use daily pasteurised milk, and use UHT milk as a reserve for when they run out of daily pasteurised milk.

145 UHT milk is easily transported over long distances, because it does not need to be refrigerated and has a long shelf life. Accordingly, Murray Goulburn faces competition nationally in supplying UHT milk from a number of suppliers, including from imports from New Zealand.

146 Murray Goulburn faces competition in supplying UHT milk from Freedom Foods, Parmalat, Harvey Fresh, Burra Foods, Lion and Sanitarium (which supplies soy UHT milk).

147 The current national share of supply volumes of UHT milk by suppliers to grocery retailers is as follows:

Product	Supply volumes
Private label	
Murray Goulburn	
Lion	
Parmalat	
Fonterra	
Sanitarium	
Other	

148 WCB does not supply UHT milk.

149 Significant UHT milk capacity increases are expected in the next 2 years, with UHT manufacturing projects having been announced by Freedom Foods, Parmalat and Fonterra in New Zealand.

6.4 Supply of butter / spreads in Australia

150 There are a number of varieties of butter and spreads supplied in Australia. Butter and spreads are usually used by consumers in cooking and for spreading on breads.

151 Butter and spreads are able to be imported into Australia, and Lurpak, a Danish brand, is currently imported into Australia.

152 There is a high degree of promotional activity in the sale of butter and spreads, especially by Murray Goulburn's main competitor, Fonterra.

153 Murray Goulburn is not aware of WCB supplying retail butter or spreads in Australia.

154 The current shares of national supply volumes of branded and private label butter and spreads supplied to grocery retailers is as follows:

6 Downstream supply of finished dairy products

Product	Supply volumes
Private label	
Murray Goulburn	
Fonterra	
George Weston	
Unilever	
Goodman Fielder	
Lurpack	
Wesgold	
Other	

6.5 Supply of daily pasteurised milk in Australia

155 Daily pasteurised milk is usually consumed on its own, or added to many foods including cereal, coffee and tea.

156 Daily pasteurised milk usually has a shelf life of 14 days, and is usually sold in stores located in close proximity to its place of manufacture.

157 A substantial proportion of daily pasteurised milk sold in Australia is private label milk. In January 2011, the major grocery retailers reduced the price of private label milk to \$1 per litre, which has caused substantial switching by consumers from branded to private label milk.

158 The current shares of national daily pasteurised milk supplied to grocery retailers is as follows:

Product	Supply volumes (MAT to 20/10/2013)
Lion	
Parmalat	
Freedom Foods (A2)	
Fonterra	
Harvey Fresh	
Brownes	
Private Label	
Other	

6.6 Supply of flavoured milk in Australia

159 There are two broad categories of flavoured milk supplied in Australia – UHT flavoured milk and daily pasteurised flavoured milk.

6 Downstream supply of finished dairy products

- 160 A substantial proportion of flavoured milk is sold in pack sizes smaller than 1 litre and is purchased for immediate consumption, especially from route outlets.
- 161 UHT flavoured milk is easily transported over long distances, and can be supplied nationally.
- 162 National suppliers of flavoured milk to route stores are Lion and Parmalat, and these suppliers have well recognised flavoured milk brands.
- 163 WCB only supplies small volumes of flavoured milk.
- 164 The current share of national supply volumes of branded and private label flavoured milk supplied in grocery retailers is as follows:

Product	Supply volumes (MAT to 20/10/2013)
Private label	
Murray Goulburn	
Lion	
Nestle	
Parmalat	
Sanitarium	
Other	

6.7 Supply of dairy desserts and yoghurts

- 165 Murray Goulburn supplies UHT dairy desserts, as opposed to fresh dairy desserts. In FY2014, Murray Goulburn is forecasting that it will supply [REDACTED] of dairy desserts.
- 166 WCB does not supply dairy desserts in Australia.
- 167 Yoghurt has a short shelf life and requires constant refrigeration, which means that yoghurt is generally sold in stores in close proximity to the place of manufacture.
- 168 Murray Goulburn currently supplies a lactose free variety of yoghurt under the Liddells brand, and is forecasting that it will supply [REDACTED] of lactose free yoghurt in FY2014.
- 169 WCB does not supply yoghurt in Australia.

6.8 Supply of milk powder in Australia

- 170 There are full cream and skim varieties of milk powder sold in Australia. Although it is able to be imported, only small volumes of milk powder are imported into Australia.
- 171 The current share of national supply volumes of branded and private label milk powder supplied in grocery retailers is as follows:

Product	Supply volumes
Private Label	
Murray Goulburn	
Fonterra	

6 Downstream supply of finished dairy products

Nestle	
Other	

6.9 Supply of cream in Australia

172 There are a number of varieties of cream supplied in Australia, including reduced fat, double cream, pure cream, thickened cream and UHT cream.

173 Fresh cream has a relatively short shelf life, and is not suitable for transport over long distances.

174 The current share of national supply volumes of branded and private label cream supplied in grocery retailers is as follows:

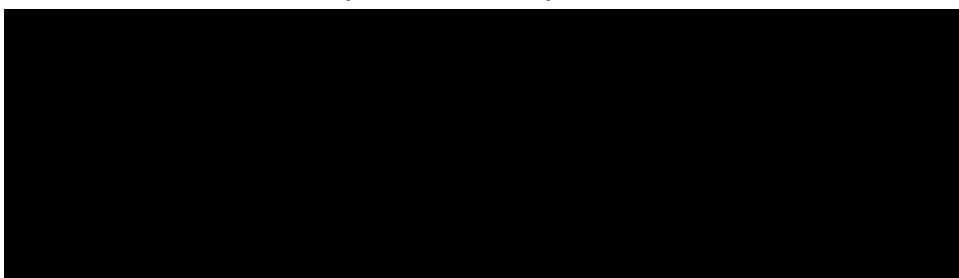
Product	Supply volumes (MAT to 20/10/2013)
Bulla	
Parmalat	
Murray Goulburn	
Bead Foods	
Brownes	
Kraft	
Lion	
Private Label	
Other	

6.10 Supply of private label dairy products in Australia

175 The major grocery retailers supply private label versions of many finished dairy products in Australia.

176 The major grocery retailers award private label contracts to dairy processors on a tender basis for a fixed term, usually for two to three years.

177



178 The table below summarises the current suppliers of private label contracts for the major grocery retailers:

Product Segment	Woolworths	Coles	Metcash	Aldi
UHT				

7 Expected synergies and benefits of the merger

Cheese	
Spreads	
Butter	
Daily pasteurised milk	
Milk powder	
Cream	
Dairy desserts	

179 Murray Goulburn has been awarded a contract to supply Coles with its private label daily pasteurised milk requirements in New South Wales and Victoria from June 2013.

7 Expected synergies and benefits of the merger

7.1 Cost savings that will accrue to Murray Goulburn

180

(a)

(b)

181

7.2 Benefits of improved international competitiveness and ability to produce higher value products

182 As a result of acquiring WCB, Murray Goulburn's international competitiveness will significantly improve. Specifically:

(a) The acquisition will significantly increase Murray Goulburn's scale.

(b) With significantly increased milk volumes and scale, Murray Goulburn will have greater ability to diversify its production, which will assist in optimising its product mix and weathering dairy commodity price volatility; and

(c) With significantly increased milk volumes and scale, Murray Goulburn will be able to leverage its existing relationships with premium customers to offer more innovative products.

183 As a result of acquiring WCB, Murray Goulburn's increased milk volumes will enable it to produce a greater proportion of its volume as higher value dairy ingredients, as opposed to base dairy commodities. This will significantly increase Murray Goulburn's profitability. For example:

184

185

186

7.3 Benefits that will accrue because Murray Goulburn will be able to pay higher farmgate milk prices

187 Because of Murray Goulburn's cooperative structure, and approach to setting its farmgate milk price, the increased profitability that Murray Goulburn is likely to achieve as a result of the merger with WCB will lead to Murray Goulburn offering significantly higher milk prices to its farmer suppliers than it otherwise would have.

188 Higher farmgate milk prices, and a more internationally competitive Murray Goulburn, are likely to substantially improve dairy farmer confidence, and encourage Australian dairy farmers to increase their production of raw milk.

189 Increased raw milk production would lead to Murray Goulburn increasing its acquisition of raw milk, with increased dairy ingredient production and further increased exports.

8 The counterfactual

8.1 Overview of the possible counterfactual scenarios

190 In addition to Murray Goulburn's takeover bid for WCB:

- (a) Bega has launched a takeover bid for WCB, and its offer is currently \$2 per share plus 1.5 Bega shares, which values the bid at approximately \$8.68 per share; and
- (b) Saputo, Inc (**Saputo**) has launched a takeover bid for WCB, and its offer is currently \$9 per share, which will increase to \$9.20 per share if it reaches a greater than 50% stake in WCB.

191 If Murray Goulburn does not acquire WCB, it is possible that:

- (a) The status quo will continue, with WCB continuing to operate as an independent business;
- (b) Bega will acquire WCB; or
- (c) Saputo will acquire WCB.

8.2 Counterfactual acquisition by Bega

- 192 If Bega were to acquire WCB, its total annual raw milk acquisition would increase from approximately 695 million litres to approximately 1.5 billion litres.
- 193 Through increased milk supply, and the possible closure and consolidation of production of Bega's existing Coburg plant to WCB's Allansford plant, Bega may be able to derive some cost savings.
- 194 Any cost savings that Bega would derive would be substantially lower than the cost savings that Murray Goulburn expects to achieve, because unlike Murray Goulburn, Bega lacks any significant geographic overlap with WCB in terms of processing plants and milk collection.
- 195 Although Bega has nutritional product capability, which is relevant to taking advantage of growing demand in Asia, Bega has no international in-market sales capability. The combined Bega / WCB would only have one office in Asia (in Japan). Bega lacks the product range, international reputation and experience to be able to fully service and win international clients.

8.3 Counterfactual acquisition by Saputo

- 196 Saputo currently has no dairy processing or milk collection presence in Australia, and would be unlikely to achieve any cost savings by acquiring WCB.
- 197 Saputo does not currently have any nutritional product manufacturing capability, and WCB's nutritionals capability and customer relationships are not strong (see assumption 185 above). As a consequence, the combined business is unlikely be able to successfully take advantage of growing nutritional demand in Asia.
- 198 Saputo would derive little synergies in respect of supplying dairy ingredients in international markets. At most, it may be able to supplement its current whey product offering into Asia with whey products produced at WCB's Allansford plant.
- 199 Saputo has limited international in-market sales capability, with only one international sales office in Shenzhen (although this office may have recently closed), and another sales office in Brazil. The combined Saputo / WCB would only have two offices in Asia (in Hong Kong and Japan).

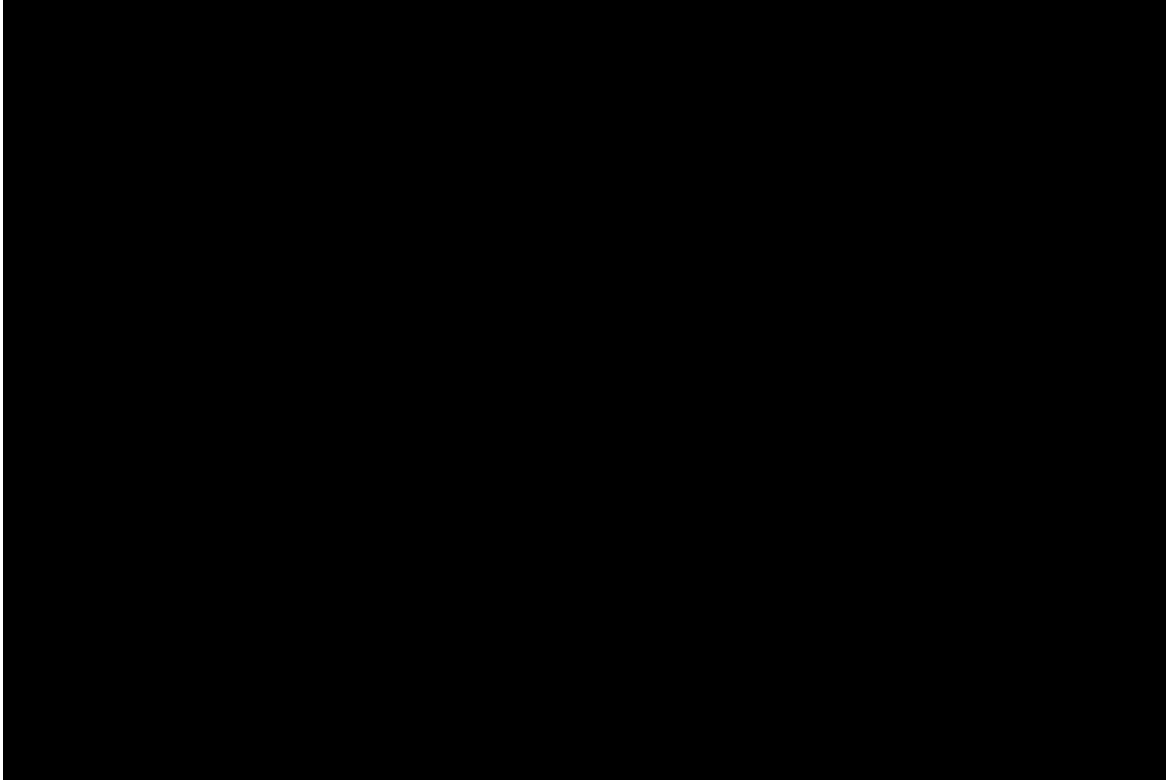
9 Further assumptions

- 200 There are firms in south east Australia that act as milk brokers, supplying milk to other dairy processors. At least United Dairy Power and ACM engage in milk brokering.
- 201 The cost of transporting raw milk, on a cents per litre basis, between Murray Goulburn's processing facilities is summarised in the following table. Further, if Murray Goulburn were to source its raw milk from farms near one of its processing plants in one region, and send it to one of its processing plants in a different region, the shaded cells below indicate the costs involved in doing so.

	Rochester	Cobram	Kiewa	Koroit	Leongatha	Maffra	City (Melbourne)
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202

203



Australian Competition Tribunal

Murray Goulburn Co-Operative Co Limited

Re: Proposed acquisition of Warrnambool Cheese and Butter Factory Holdings Limited

Corrections for further assumptions for expert economist
28 November 2013

1 Dairy processing facilities in South East Australia

Fonterra

97 The following table summarises the production capability and utilisation of Fonterra's ~~Australian~~-processing plants [across Victoria, New South Wales and Tasmania](#):

...

Lion

98 The following table summarises the production capability and utilisation of Lion's ~~Australian~~-processing plants [across Victoria, New South Wales, South Australia, Tasmania and the Australian Capital Territory](#):

...

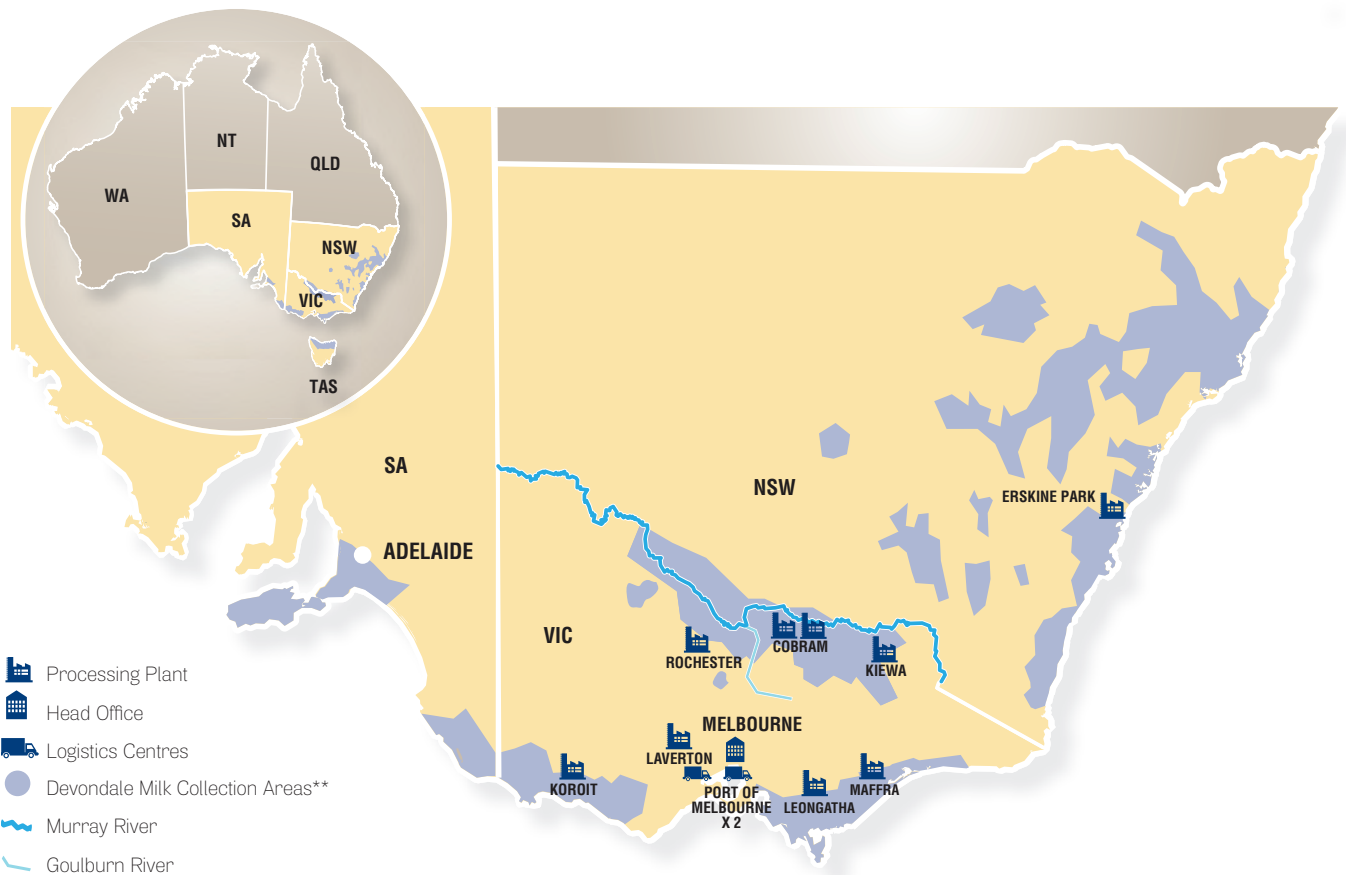
Parmalat

101 The following table summarises the production capability and utilisation of Parmalat's ~~Australian~~-processing plants [across south eastern Australia \(Parmalat also has plants in Queensland and Darwin\)](#):

...

Attachment 60

Devondale dairy regions and processing plants



HEAD OFFICE

Freshwater Place, Level 15,
2 Southbank Boulevard,
Southbank Victoria 3006
Phone: +61 3 9040 5000

DISTRIBUTION CENTRES

Laverton:

Integrated Logistics Centre
(130,000 tonne capacity)

Port of Melbourne:

Global Distribution Centre
(50,000 tonne capacity)
Global Frozen Distribution
Centre (18,000 tonne capacity)

PROCESSING PLANTS

Victoria

Rochester:

Cheese, milk powders

Cobram:

Cheese, milk powders,
infant formula

Kiewa:

Daily pasteurised milk, yoghurt,
cream cheese, cream

Maffra:

Milk powders, blends, butter

Leongatha:

Milk powders, butter and
spreads, UHT products, cream

Koroit:

Butter, milk powders and
associated products

Laverton:

Daily pasteurised milk*

New South Wales

Erskine Park:

Daily pasteurised milk*



Tasmania

Edith Creek:

UHT products

* Processing facilities at Erskine
Park and Laverton are under
construction.

** Offer to receive milk supply in
NSW-Sydney Market Region
was made July 2013.

Attachment 604

Milk payment system explained 2013-14



Devondale
MURRAY GOULBURN CO-OPERATIVE CO. LIMITED

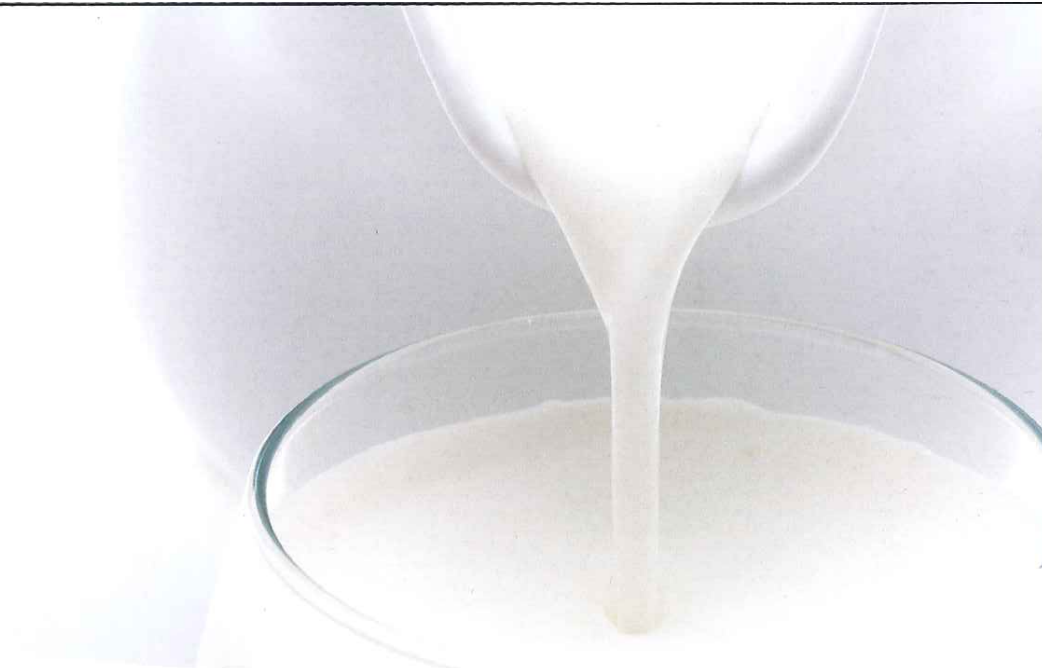
About this booklet

This booklet is designed to assist supplier/shareholders in understanding Murray Goulburn Co-operative Co. Limited's (MG) milk payment system and incentives. Please refer to the detailed Standard Milk Payment Terms 2013-14 for the precise terms to milk payments and incentives. Your local Field Services Officer is available to answer any questions you may have.

Who is Murray Goulburn?

MG is Australia's largest dairy food company and is a co-operative of Australian farmers. Accordingly, MG holds a unique leadership position in the Australian dairy industry. A rich mix of dairy ingredients, consumer products, food service and farm trading stores provides MG with a balanced portfolio of products that we can proudly sell to Australia and the world.

In 2011-12, MG's 2497 supplier/shareholders supplied 2.94 billion litres of milk, which is approximately a third of the milk produced in Australia annually. Sales revenue was \$2.4 billion and 304,000 tonnes of product was exported, primarily to Asia, Middle East/Africa and the Americas.



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The new milk payment system

MG offers its supplier/shareholders a single milk payment structure, complemented by a series of incentives that are aimed at rewarding off-peak milk production, milk production growth and efficiency improvements.

The structure was introduced for the 2013-14 season, following a comprehensive review of milk payments. The review was based on fairness and profitability for MG supplier/shareholders overall, across a range of farm systems and regions.

The specific objectives of the milk payment system are:

- To provide a simple and equitable payment system
- To reflect off-peak milk value
- To improve cashflow throughout the year
- To encourage growth
- To have transparent incentives and charges
- To provide MG with a sustainable milk supply to meet its strategic plan

The new milk payment system, developed in response to the review, is designed to improve profitability and cashflow on-farm, without impacting on-farm decision-making. It provides the basis for a sustainable pricing system.

Supplier/shareholders are now offered a single base price and the option to apply a Flat Milk Incentive. The Growth and Productivity Incentives continue, along with volume and collection charges.

The main features of the new milk payment system include:

A simpler system – MG has moved from three base prices to a single base price for all supplier/shareholders.

Improved cash flow and profitability – MG will raise the base price during peak months versus off-peak months, creating a flatter price curve.

Underpin markets – MG will retain a simpler Flat Milk Incentive (previously known as the Domestic Incentive) with an improved cash flow structure to ensure MG can supply key markets and increase the milk price for all supplier/shareholders.

Balanced – MG's milk pricing system balances the profitability drivers of a range of farm systems and MG product mix objectives.

Reflecting market signals: MG has amended the fat to protein ratio to better reflect the gradual increase in the market value of fat products. The new fat:protein ratio is 1:2.2 and will be applied to all milk payments to supplier/shareholders. Therefore, protein is valued at 2.2 times the value of butterfat.

Fair market signals (milk handling costs) – The review found that the current Productivity Incentive and volume charge fairly reflect the true costs to the MG business and therefore apportions milk handling costs fairly among supplier/shareholders. As a result, the current Productivity Incentive has been largely maintained at similar levels but simplified. However, collection charges have been amended to better reflect true costs.



The system at a glance

For the 2013-14 year, a single milk payment structure has been developed with a series of incentives.*

The main elements are as follows:

Single base price

A single base price for each month of the year will be announced at the start of the financial year. The monthly milk solid prices are available to all supplier/shareholders, regardless of region or calving pattern. The monthly values may vary throughout the season as a result of price increases, including back-pays and step-ups or, in rare instances, price decreases. Supplier/shareholders have access to incentive options which can increase their overall milk price.

Milk prices vary across the year reflecting MG's changing product mix and returns.

The aim is to provide a clear market signal to suppliers about the value of milk relative to when it is supplied. These varying monthly payments are built into the base price. MG has carefully assessed the returns to suppliers on a monthly basis, as well as the costs associated with milk production across the year. Based on this assessment, most supplier/shareholders will now be paid more per kilogram of milk solids compared to last year for milk supplied in the months of August through to March.

This change will increase the value of peak milk production relative to off-peak production and will improve cashflow for most suppliers.

Flat Milk Incentive (FMI)

The Flat Milk Incentive (formerly the Domestic Incentive) recognises the value of committed milk during the off-peak period.

Growth Incentive (GI)

The Growth Incentive recognises the value of additional milk supplied to MG. Part of this additional value is distributed back to those supplier/shareholders who provide the growth milk to MG.

Productivity Incentive (PI)

The Productivity Incentive recognises scale efficiencies in milk collection for MG.

Volume and collection charges

The volume charge distributes amongst suppliers the cost to MG in haulage and processing milk of varying composition, while the collection charge is for the costs associated with each milk collection.

* The Flat Milk, Growth and Productivity Incentives are calculated on qualifying milk solids only that are of Premium 1, Premium 2 and Base Quality (please refer to Farm Milk Quality Standards for details). The Flat Milk and Growth Incentives are loyalty-based incentives and require the supplier/shareholder to either be actively supplying MG at the time of payment or be deemed by MG to have legitimately retired.

Incentives

Flat Milk Incentive

MG is increasingly committed to higher value markets that require committed milk supply in the off-peak period.

The Flat Milk Incentive recognises the commitment made by a supplier to produce a specific proportion of their milk supply in the off-peak months of July, August, February, March, April, May and June.

Supplier/shareholders may elect to participate in the Flat Milk Incentive, providing they make the commitment by 31 August of the financial year in which the incentive is to apply.

The Flat Milk Incentive is calculated based on milk solids supplied to MG in a defined period as a percentage of total annual supply of milk solids for a given financial year. Qualifying milk solids are those supplied in July, March, April, May and June, as well as half of the supply of the milk solids supplied in the months of August and February.

Qualifying milk solids (MS) are divided by the total milk solids supplied for the financial year and expressed as a percentage as follows:

$$\left[\frac{\text{July} + ((\text{August} + \text{February}) \div 2) + \text{March} + \text{April} + \text{May} + \text{June (Kg MS)}}{\text{Total supply for season (Kg MS)}} \right] \times 100 = \text{FMI\%}$$

Figure 1: Formula for calculating suppliers' Flat Milk Incentive (FMI) percentage

Once the Flat Milk Incentive percentage has been calculated, a payment or deduction will be made with June milk proceeds by 15 July, at the rates outlined in Table 1.

The table also outlines a deduction to be made from the supplier-shareholder's milk proceeds if they do not meet their Flat Milk Incentive commitment.

Table 1: Flat Milk Incentive (FMI) payment and deduction rates

FMI % (excludes grade milk)	Cents Kg Butterfat	Cents Kg Protein
< 40.00%	-4	-9
40.00% - 40.99%	4	9
41.00% - 41.99%	14	31
42.00% - 42.99%	26	57
> 43.00%	39	86

Note: The Flat Milk Incentive payment or deduction only relates to supplier/shareholders who elect the option prior to 31 August of the relevant financial year. No deduction or payment will be made from proceeds of supplier/shareholders who do not select this option.

What's changed?

Supplier/shareholders previously on the Domestic Incentive will receive improved cashflow under the new Flat Milk Incentive. This is because they are on a higher base price. To improve the base price the end of year payment has been lowered accordingly. The new fat to protein ratio has also been applied.



Growth Incentive

MG currently has spare capacity in its processing assets. More milk means improved utilisation of assets and higher farmgate prices. The Growth Incentive recognises the value of additional milk supplied to MG.

Accordingly, the Growth Incentive payment will be paid on growth in fat and protein supplied to MG compared to the average supply to MG from that farm's previous two financial years, when a farm has a net growth in milk solids*.

Growth Incentive rates are shown below.

Table 2: Growth Incentive (GI) payment rate

	Cents Kg Butterfat	Cents Kg Protein
GI (excludes any grade milk)	33	72

The Growth Incentive will be paid automatically on qualifying milk solids following the completion of the financial year. This payment will be due with the July milk proceeds paid around 15 August.

MG is committed to the Growth Incentive until 15 August 2015.

* There are other mechanisms for calculating the Growth Incentive where the farm has not supplied MG for all of the previous two financial years. You should discuss these with your local Field Services Officer.

What's changed?

The only change with respect to the Growth Incentive is the fat to protein ratio.

Productivity Incentive

As part of the milk payment review, MG carefully assessed the costs of handling milk and found existing payment rates did reflect costs. The Productivity Incentive recognises scale efficiencies in milk collection for MG.

Calculated and paid monthly, the new Productivity Incentive improves returns for smaller suppliers whilst two further production bands have been added to reflect continued size increases of supplying farms above the previous top productivity levels.

MG's commitment to the Productivity Incentive payment is ongoing.

Table 3: Productivity Incentive (PI) payment rates

Total kg's fat & Protein kg's (excludes grade milk)	Cents Kg Butterfat	Cents Kg Protein
1,701 – 3,800	2	5
3,801 – 5,800	3	7
5,801 – 8,000	5	12
8,001 – 10,000	7	15
10,001 – 12,500	8	17
12,501 – 15,000	9	19
15,001 – 17,500	10	22
17,501 – 20,000	11	24
20,001 – 25,000	12	26
25,001 – 30,000	13	29
30,001 – 40,000	14	31
40,001 – 60,000	15	34
60,001 – 80,000	16	36
80,001 – 100,000	17	38

What's changed?

The first band has been increased to receive a higher payment whilst two further production bands have been added. The new fat to protein ratio has been applied.



Milk handling charges

Volume charge

A volume charge is intended to reflect the cost to MG in haulage and processing milk of varying composition.

MG applies differential volume charges based on milk tanker size to reflect efficiency gains from trucks of a larger capacity.

Volume charge will now be simplified to two rates as outlined in Table 4.

Table 4: Volume charge rates

Tanker size	Rate
B-Double	2.5c/litre
Tri-axle	2.7c/litre

Collection charge

A collection charge is intended to reflect the costs associated with each milk collection.

The collection charge for the first collection in one day remains unchanged at \$7.50, whilst the charge for the second collection requested by the supplier/shareholder in the same 24 hour period has increased to a flat rate of \$40.

If a farm has a daily collection, but has a vat capacity which is sufficient for skip-a-day collection all year, then the collection charge will be applied on a skip-a-day basis with the appropriate collection charge rebated on 15 August the following year.

If a supplier/shareholder has upgraded their vat capacity to 1.4 times peak daily production and in accordance with the Farm Milk Quality Standards in a financial year, and notifies their local Field Services Officer before 30 June, then the supplier/shareholder will be entitled to a refund of all second collection charges they incurred in that financial year (up to a maximum of \$4000).

What's changed?

The volume charge has been simplified and the second collection charge within 24 hours has increased to a flat rate of \$40.



Discounts

Milk quality system

MG is focused on maintaining a high standard for milk quality and commits to a complete milk quality system review during 2013-14.

The prices set out in the opening price circular are for the supply of Premium 1 milk. If the milk supplied is classified as Base Quality or Premium 2 (as set out in the Farm Milk Quality Standards), then the price payable by MG is discounted as follows:

Table 5: Discounts for Premium 2 and Base Quality milk

Milk quality	Discount Cents Kg Butterfat	Discount Cents Kg Protein
Premium 2	-10	-24
Base Quality	-18	-41

Bactoscan, Thermoduric and Bulk Milk Cell Count (BMCC) results have independent rolling grade records and are tested at least once every 10 days. The BMCC is measured every time milk is collected. Inhibitory substances testing is conducted from a dip sample taken directly from the vat by the tanker driver. If, on routine farm testing or by trace back from tanker testing, a farm has a positive test for inhibitory substances, a 10 day second grade penalty will apply (ie. a 30% discount for 10 days of milk collection).

MG operates a grade system that includes milk grades received in the rolling 12-month period previous to the current 10 day period.

What's changed?

The new fat to protein ratio has been applied.

The following table demonstrates how milk is graded.

Table 6: Grade milk discounts

Number of rolling grades		Discount levels
BACTOSCAN		
1 – 5	1 Average Day Penalty	First Grade - 10%
		Second Grade - 30%
6 and over	10 Day Penalty	First Grade - 10%
		Second Grade - 30%
THERMODURIC		
1 – 5	1 Average Day Penalty	First Grade - 10%
		Second Grade - 30%
6 and over	10 Day Penalty	First Grade - 10%
		Second Grade - 30%
BMCC		
1 – 5	1 Average Day Penalty	First Grade - 10%
		Second Grade - 30%
6 and over	10 Day Penalty	First Grade - 10%
		Second Grade - 30%

Bactoscan, Thermoduric and BMCC penalties will be cumulative to a maximum of 60%.

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Please contact your local MG Field Services team for further information.

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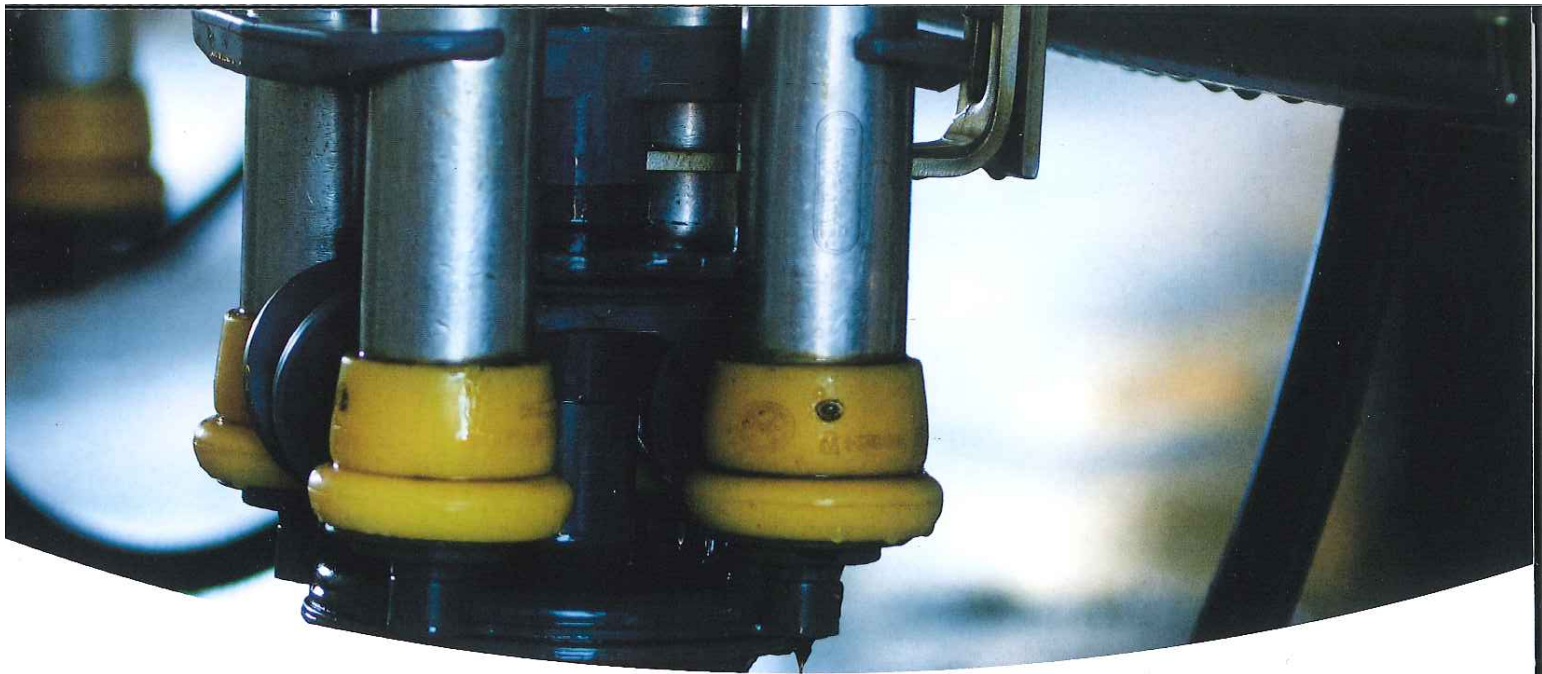
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Attachment 605

Milk payment system explained 2013-14



New South Wales-Sydney Market Region



Devondale
MURRAY GOULBURN CO-OPERATIVE CO. LIMITED

About this booklet

This booklet is designed to assist prospective New South Wales - Sydney Market Region supplier/shareholders in understanding Murray Goulburn Co-operative Co. Limited's (MG) milk payment system and incentives. Please refer to the detailed Standard Milk Payment Terms 2013-14: NSW-Sydney Market Region for the precise terms to milk payments and incentives. Field Services Officers are available to answer any questions you may have. Their contact details are on the back of this booklet.

Who is Murray Goulburn?

MG is Australia's largest dairy food company and is a co-operative of Australian farmers. Accordingly, MG holds a unique leadership position in the Australian dairy industry. A rich mix of dairy ingredients, consumer products, food service and farm trading stores provides MG with a balanced portfolio of products that we can proudly sell to Australia and the world.

In 2011-12, MG's 2497 supplier/shareholders from Victoria, South Australia and southern New South Wales supplied 2.94 billion litres of milk, which is approximately a third of the milk produced in Australia annually. Sales revenue was \$2.4 billion and 304,000 tonnes of product was exported, primarily to Asia, Middle East/Africa and the Americas.

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The system at a glance

MG offers its NSW-Sydney Market Region supplier/shareholders a single milk payment structure, complemented by a series of incentives that are aimed at rewarding a year-round milk supply.

The specific objectives of the milk payment system are:

- To provide a simple and equitable payment system
- To improve cashflow throughout the year
- To encourage year-round milk supply
- To have transparent incentives and charges
- To provide MG with a sustainable milk supply to meet its strategic plan for the NSW-Sydney Market Region

Single base price

A single base price for each month of the year will be announced at the start of the financial year. The monthly milk solid prices are available to all NSW-Sydney Market Region supplier/shareholders, regardless of region or calving pattern. The monthly values may vary throughout the season as a result of price increases, including back-pays and step-ups or price decreases, although these pricing changes, and particularly price decreases, will be rare in the NSW-Sydney Market Region. Supplier/shareholders have access to incentive options which can increase their overall milk price.

Milk prices are flat across the year, reflecting MG's need for supply year-round for its Sydney processing facility and Sydney market.

Seasonal Incentive (SI)

The Seasonal Incentive provides a clear market signal to suppliers about the value of milk relative to when it is supplied.

The milk payment system, is designed to improve profitability and cashflow on-farm, without impacting on-farm decision-making. It provides the basis for a sustainable pricing system.

Supplier/shareholders are offered a single base price with a Seasonal Incentive and a Productivity Incentive. They are required to make a monthly volume commitment and are also subject to volume and collection charges.

For the 2013-14 year, a single milk payment structure has been developed with a series of incentives.*

The main elements are as follows:

Productivity Incentive (PI)

The Productivity Incentive recognises scale efficiencies in milk collection for MG.

Volume commitments

Supplier/shareholders will be required to commit to a monthly milk allocation which is their commitment to producing flat milk all year round. MG will work collaboratively with suppliers to establish this allocation.

Suppliers will be required to ensure their monthly total farm production meets this allocation plus or minus 10 percent.

Volume and collection charges

Volume and collection charges reflect the cost of handling milk the various regions of NSW.

* The Productivity Incentive is calculated on qualifying milk solids that are of Premium 1, Premium 2 and Base Quality (please refer to Farm Milk Quality Standards for details).



Incentives

Seasonal Incentive

The Seasonal Incentive provides a clear market signal to suppliers about the value of milk relative to when it is supplied.

Table 1: Seasonal Incentive rates

Month	Cents Kg Butterfat	Cents Kg Protein
July	32	48
August	16	24
September	0	0
October	0	0
November	0	0
December	16	24
January	32	48
February	48	72
March	64	96
April	64	96
May	64	96
June	48	72

Productivity Incentive

The Productivity Incentive recognises scale efficiencies in milk collection for MG.

Milk handling costs vary between farms depending on their volumes. MG reflects these costs via the Productivity Incentive, which is calculated and paid monthly.

Table 2: Productivity Incentive payment rates

Total Kg's Fat & Protein (excludes grade milk)	Cents Kg Butterfat	Cents Kg Protein
1,701 – 3,800	3	5
3,801 – 5,800	4	6
5,801 – 8,000	7	10
8,001 – 10,000	9	13
10,001 – 12,500	10	15
12,501 – 15,000	11	17
15,001 – 17,500	12	19
17,501 – 20,000	14	21
20,001 – 25,000	15	22
25,001 – 30,000	16	24
30,001 – 40,000	18	27
40,001 – 60,000	19	29
60,001 – 80,000	21	31
80,001 – 100,000	22	32

Milk handling charges

Volume charge

A volume charge is intended to reflect the cost to MG in haulage from each zone and processing milk of varying composition.

MG applies differential volume charges based on milk tanker size to reflect efficiency gains from trucks of a larger capacity.

Volume charge is calculated at two rates specific to each zone. These are outlined in Table 3.

Table 3: Volume charge rates (cents per litre)

Zone	B-double	Tri-axle
Inner zone Sydney area; Southern Highlands	1.5	1.7
Main zone South Coast; Hunter Valley; Manning Valley	2.5	2.7
Outer zone Central West; Tamworth	3.5	3.7
Far outer zone Combyne area; Dubbo area	4.5	4.7

For information about the boundaries of each zone, please speak to Field Services. MG ultimately has the discretion to determine which zone a farm is in.

Collection charge

A collection charge is intended to reflect the costs associated with each milk collection.

The collection charge for the first collection in one day is \$7.50, whilst the charge for the second collection requested by the supplier/shareholder in the same 24 hour period is a flat rate of \$40.

If a farm has a daily collection, but has a vat capacity which is sufficient for skip-a-day collection all year, then the collection charge will be applied on a skip-a-day basis with the appropriate collection charge rebated on 15 August the following year.

If a supplier/shareholder has upgraded their vat capacity to 1.4 times peak daily production and in accordance with the Farm Milk Quality Standards in a financial year, and notifies their local Field Services Officer before 30 June, then the supplier/shareholder will be entitled to a refund of all second collection charges they incurred in that financial year (up to a maximum of \$4000).



Discounts

Milk quality system

MG is focused on maintaining a high standard for milk quality and commits to a complete milk quality system review during 2013-14.

The prices set out in the opening price circular are for the supply of Premium 1 milk. If the milk supplied is classified as Base Quality or Premium 2 (as set out in the Farm Milk Quality Standards), then the price payable by MG is discounted as follows. First and Second Grade milk will receive a further discount from the Base Quality price, as follows:

Table 4: Discounts for Premium 2 and Base Quality milk

Milk Quality Discount	Butterfat /Kg	Protein /Kg
Premium 2	-14c	-21c
Base Quality	-24c	-36c
First Grade	10% discount from Base Quality	
Second Grade	30% discount from Base Quality	

Bactoscan, Thermoduric and Bulk Milk Cell Count (BMCC) results have independent rolling grade records and are tested at least once every 10 days. The BMCC is measured every time milk is collected. Inhibitory substances testing is conducted from a representative sample taken directly from the vat by the tanker driver. If, on routine farm testing or by trace back from tanker testing, a farm has a positive test for inhibitory substances, a 10-day second grade penalty will apply (ie. a 30 percent discount for 10 days of milk collection).

Grade System for below standard milk

MG operates a grade system that includes milk grades received in the rolling 12-month period previous to the current 10 day period. Refer to the Rolling Grade System section of the Farm Milk Quality Standard.

The following table demonstrates how milk is graded.

Table 5: Grade milk discounts

Number of rolling grades		Discount levels from Base Quality price
BACTOSCAN		
1 – 5	1 Average Day Penalty	First Grade - 10%
		Second Grade - 30%
6 +	10 Day Penalty	First Grade - 10%
		Second Grade - 30%
THERMODURIC* (OR TOTAL PLATE COUNT EQUIPMENT)		
1 – 5	1 Average Day Penalty	First Grade - 10%
		Second Grade - 30%
6 +	10 Day Penalty	First Grade - 10%
		Second Grade - 30%
BMCC		
1 – 5	1 Average Day Penalty	First Grade - 10%
		Second Grade - 30%
6 +	10 Day Penalty	First Grade - 10%
		Second Grade - 30%

Bactoscan, Thermoduric and BMCC penalties will be cumulative to a maximum of 60 percent.

* Thermoduric is mainly used for the southern region and may not always apply in the NSW-Sydney Market Region.



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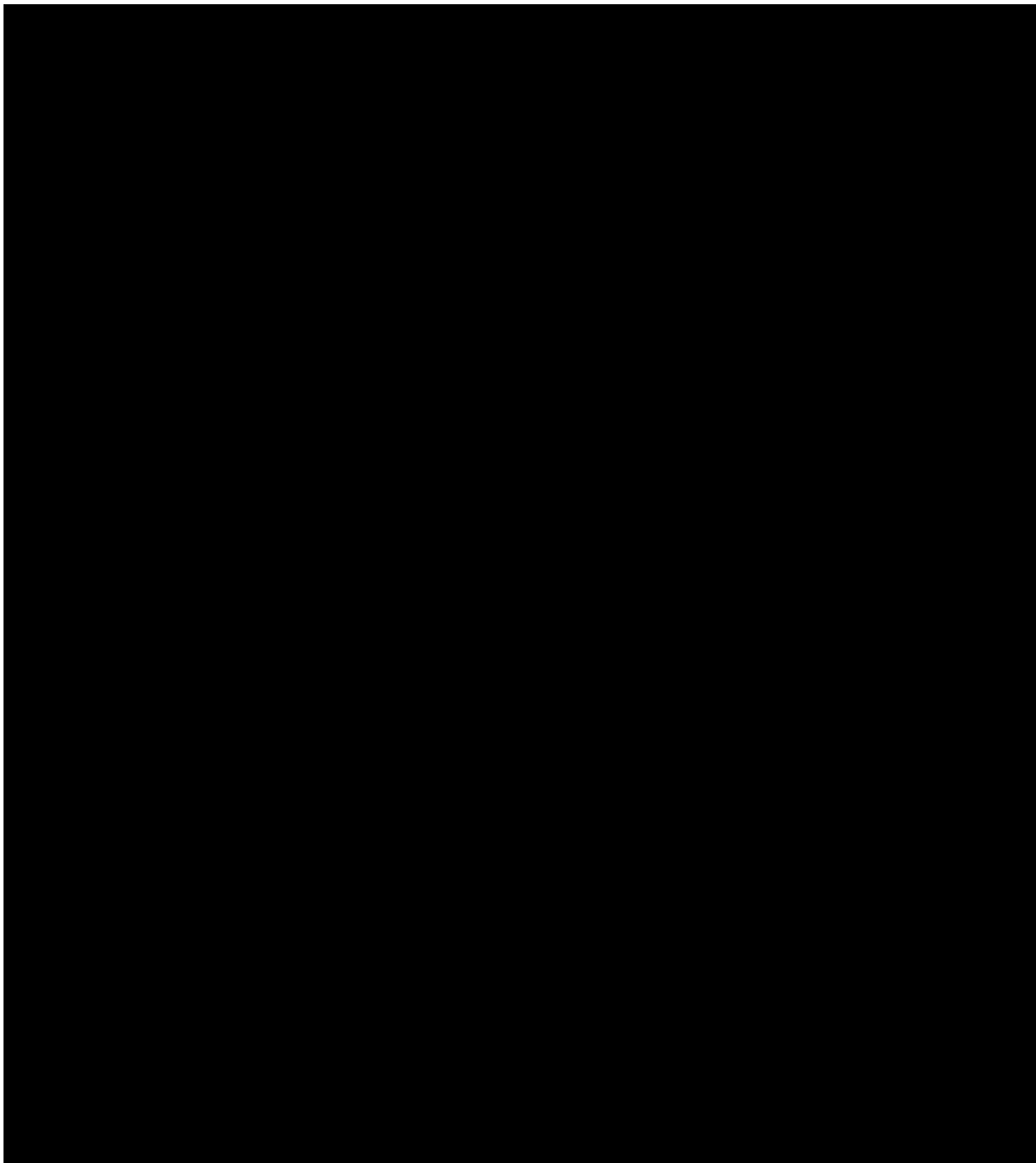
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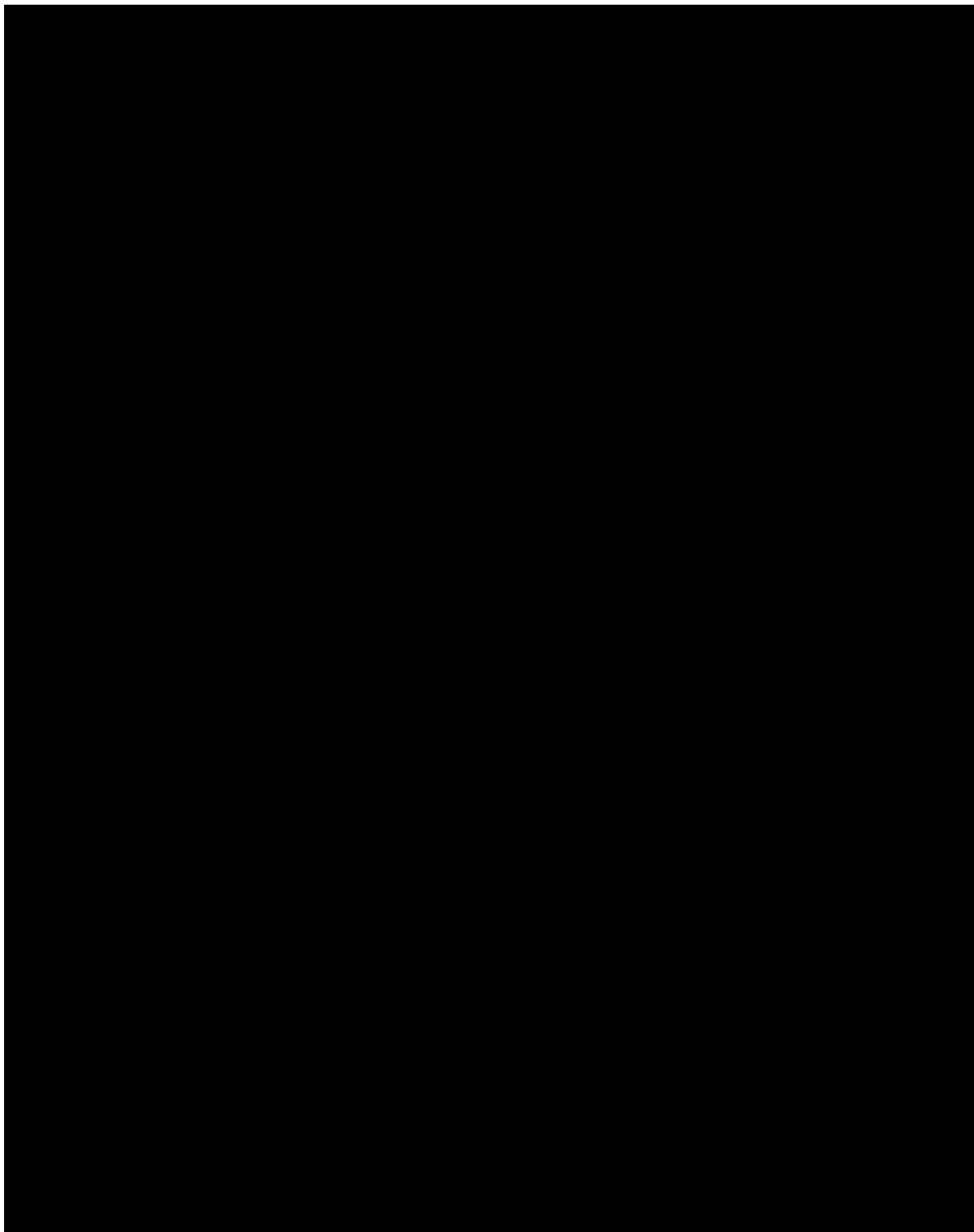
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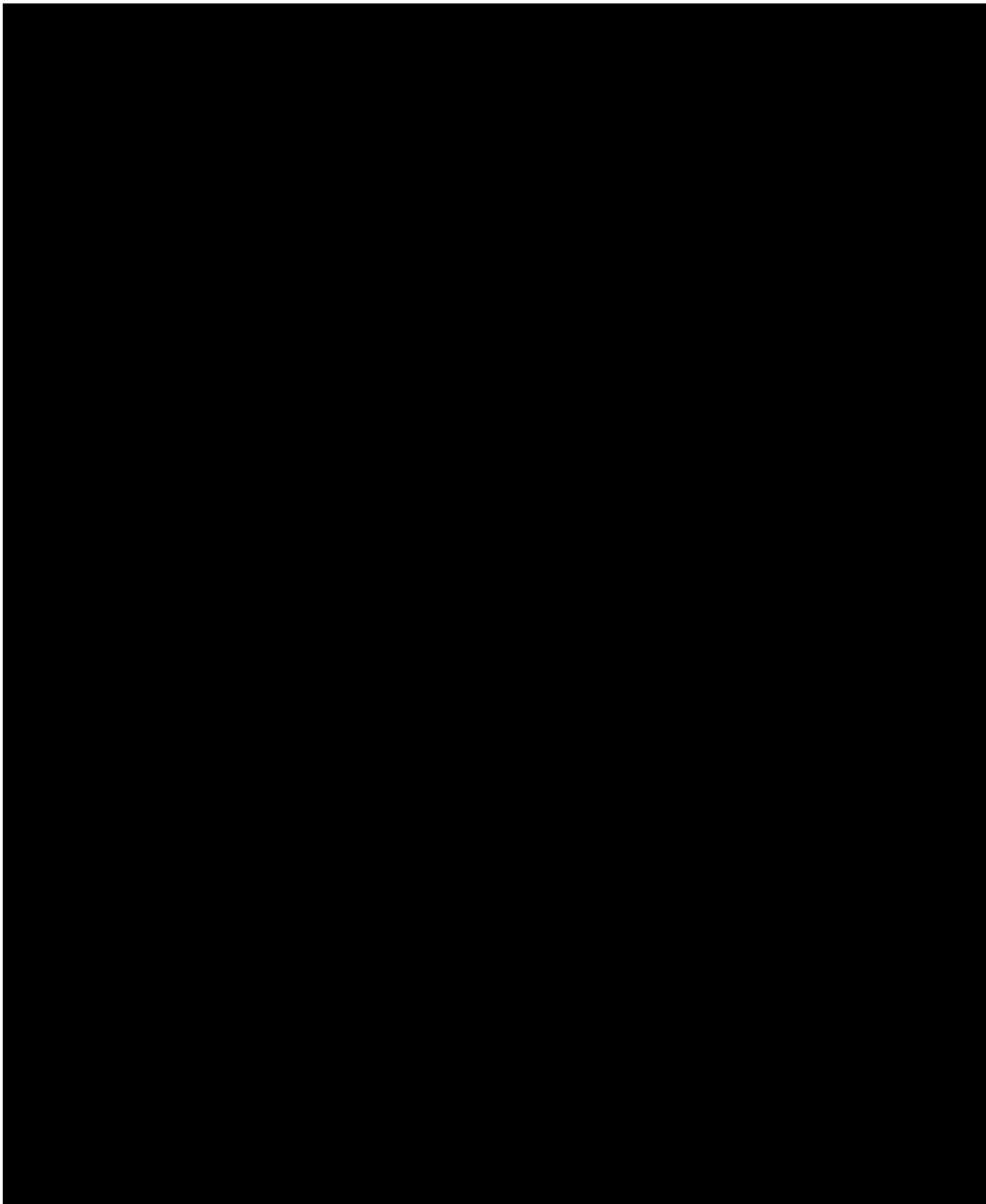
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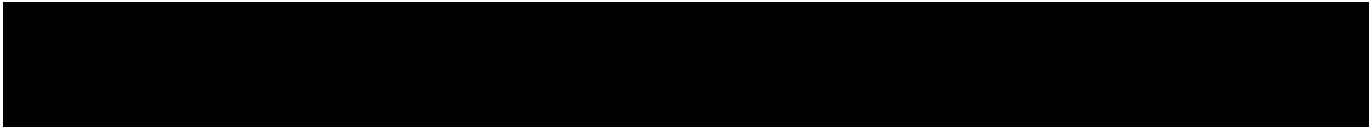
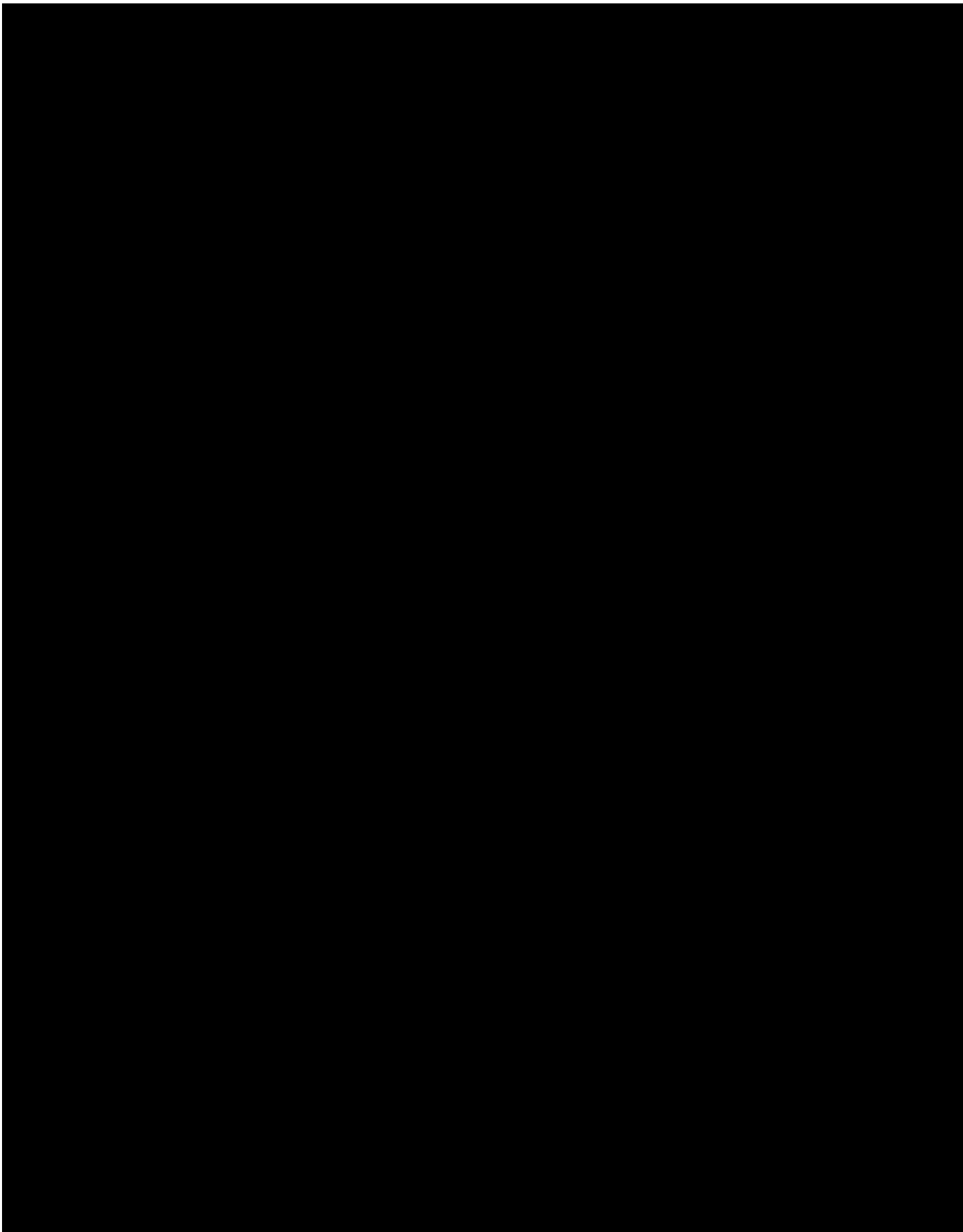
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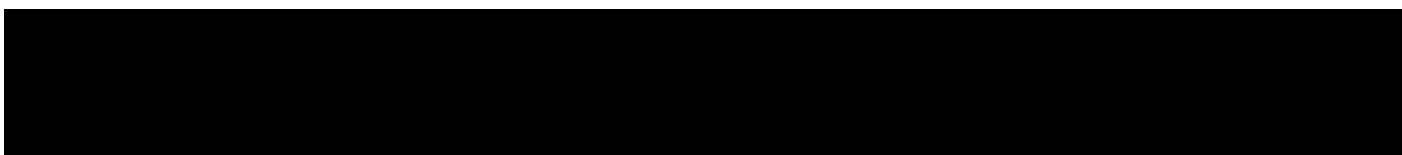
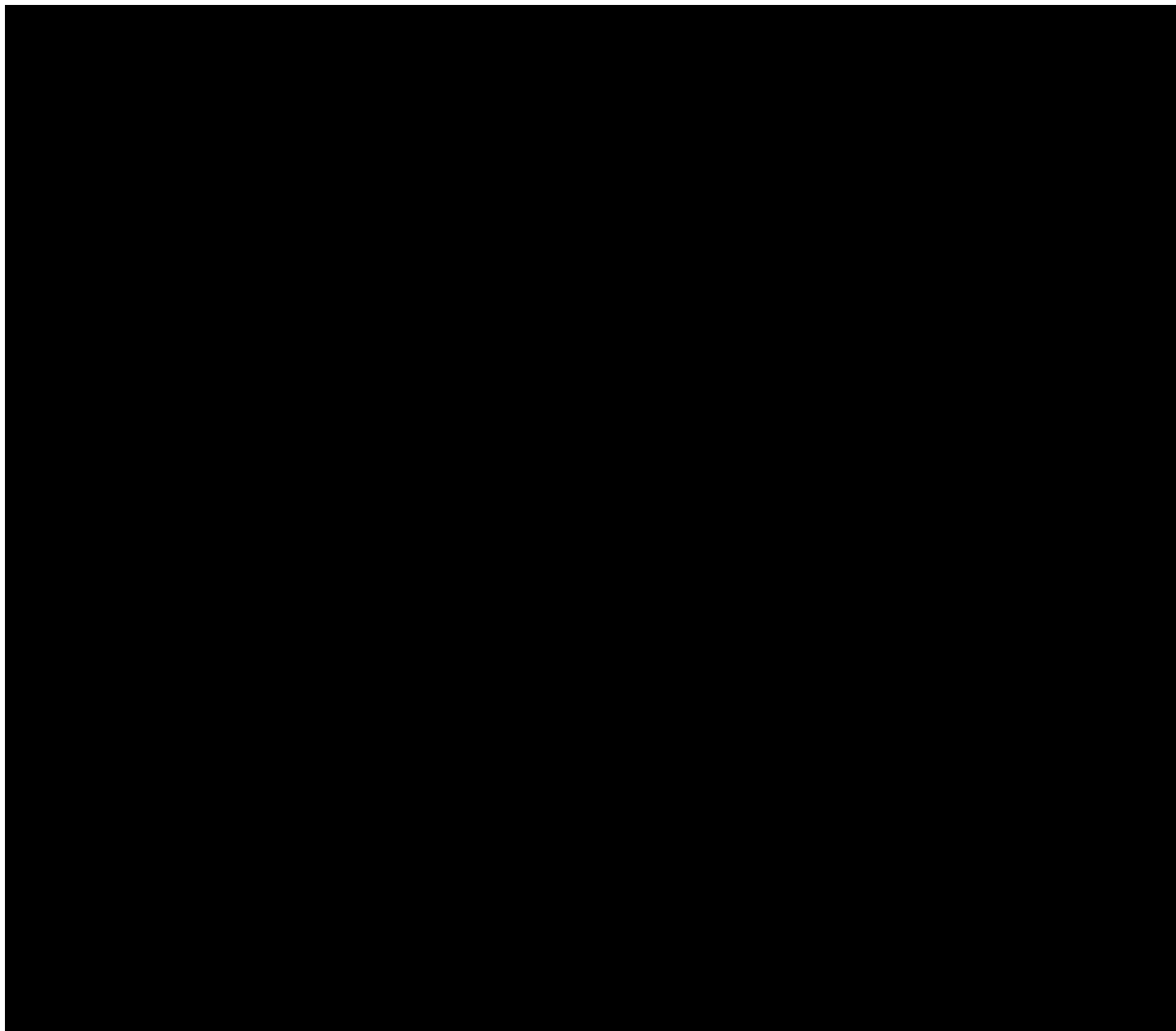
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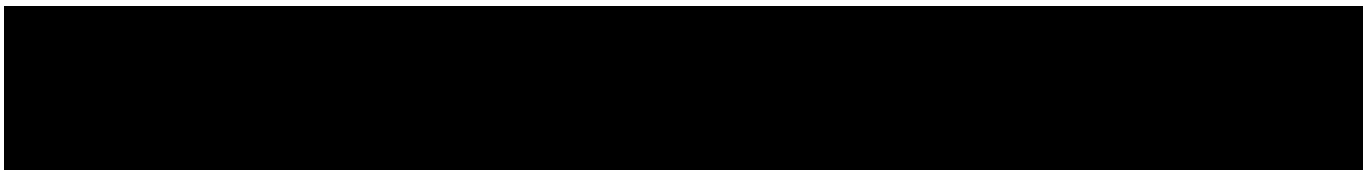
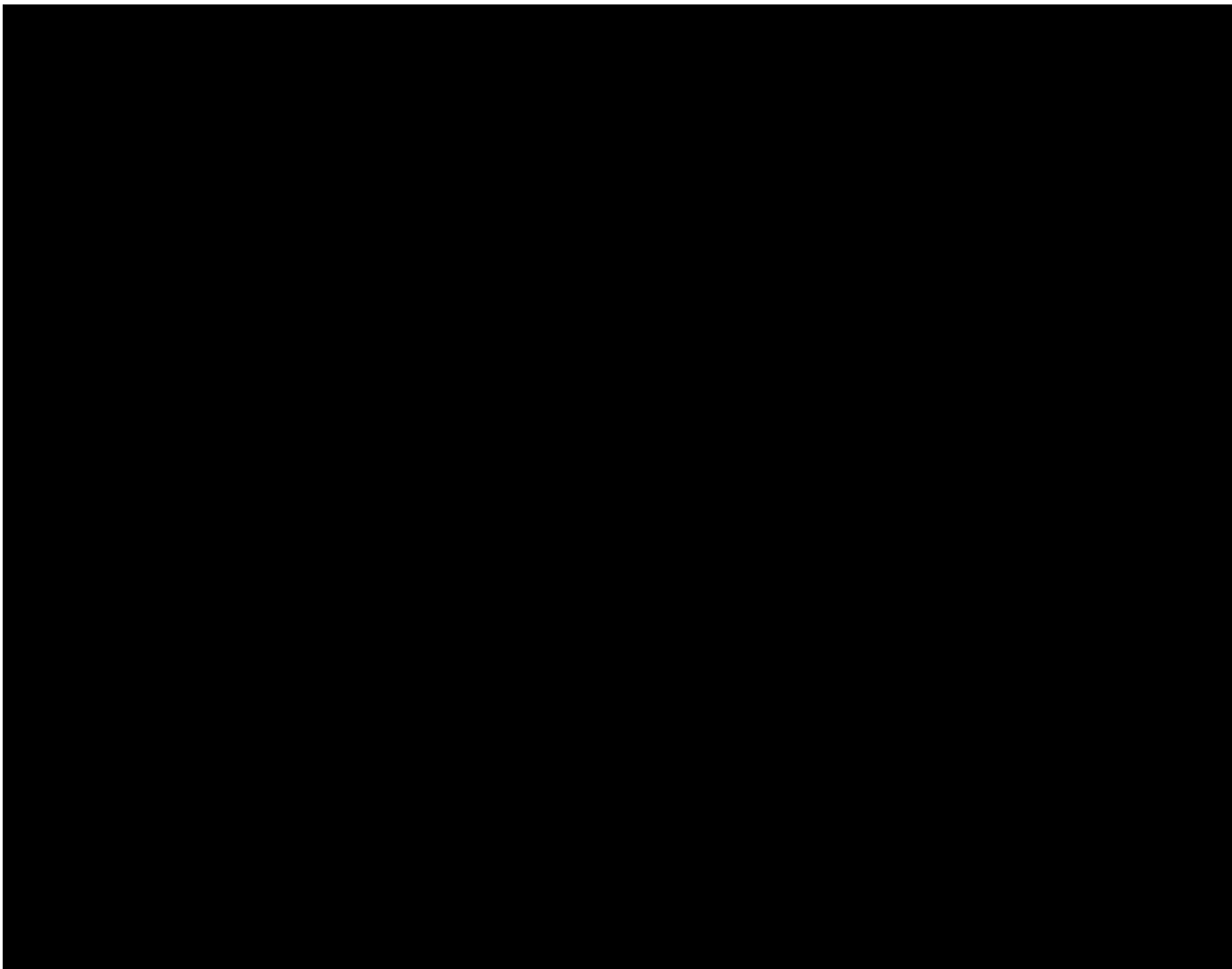


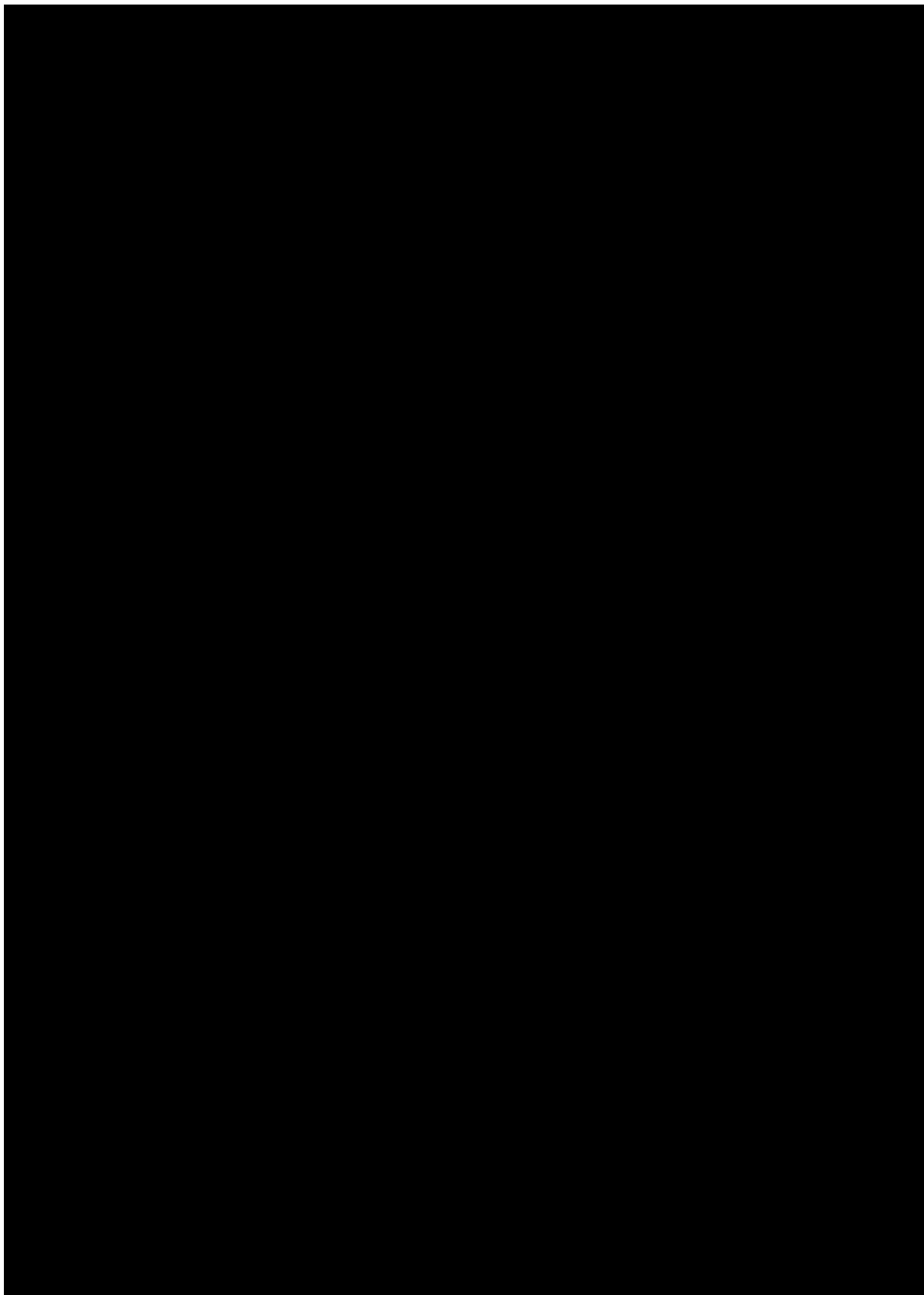


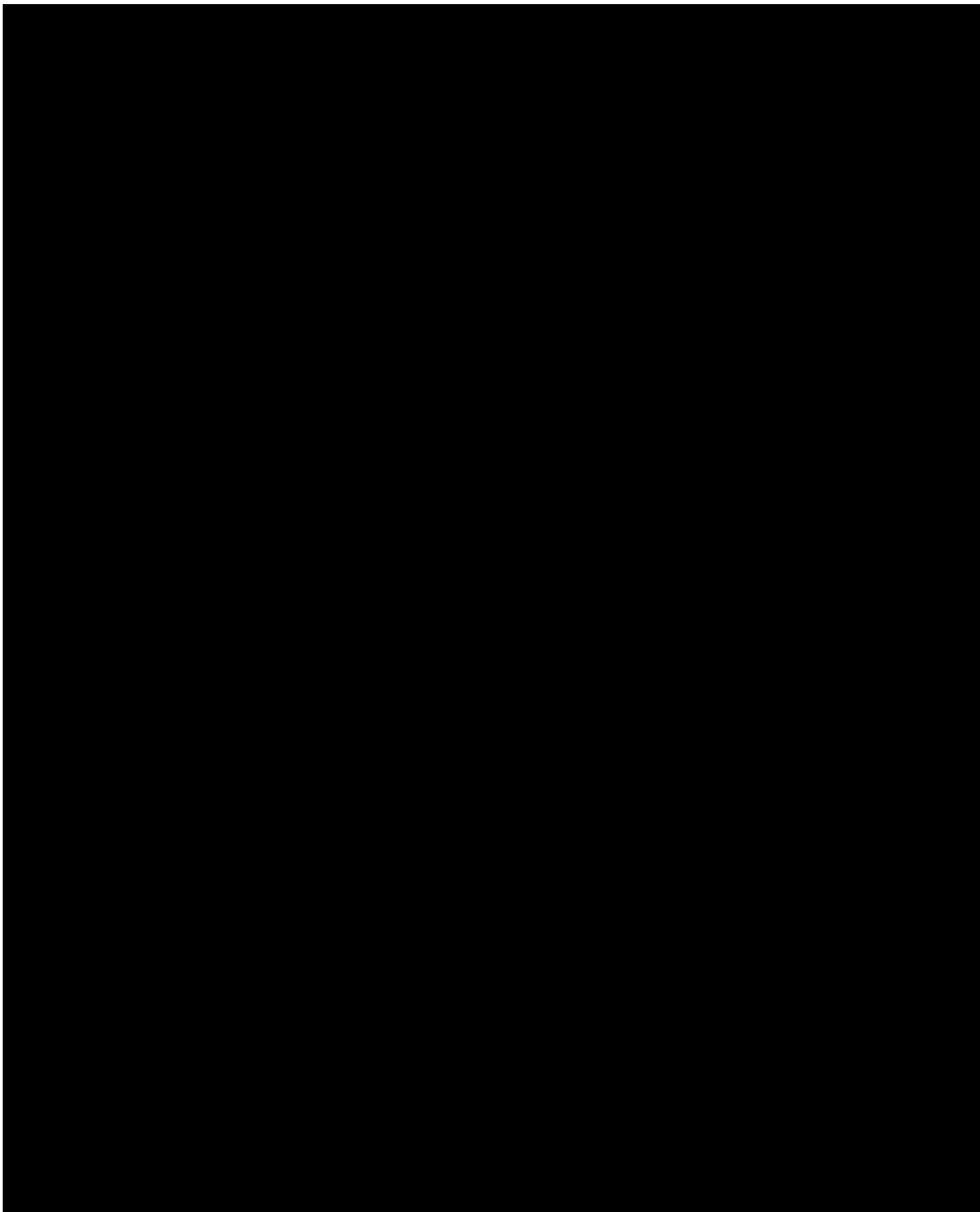


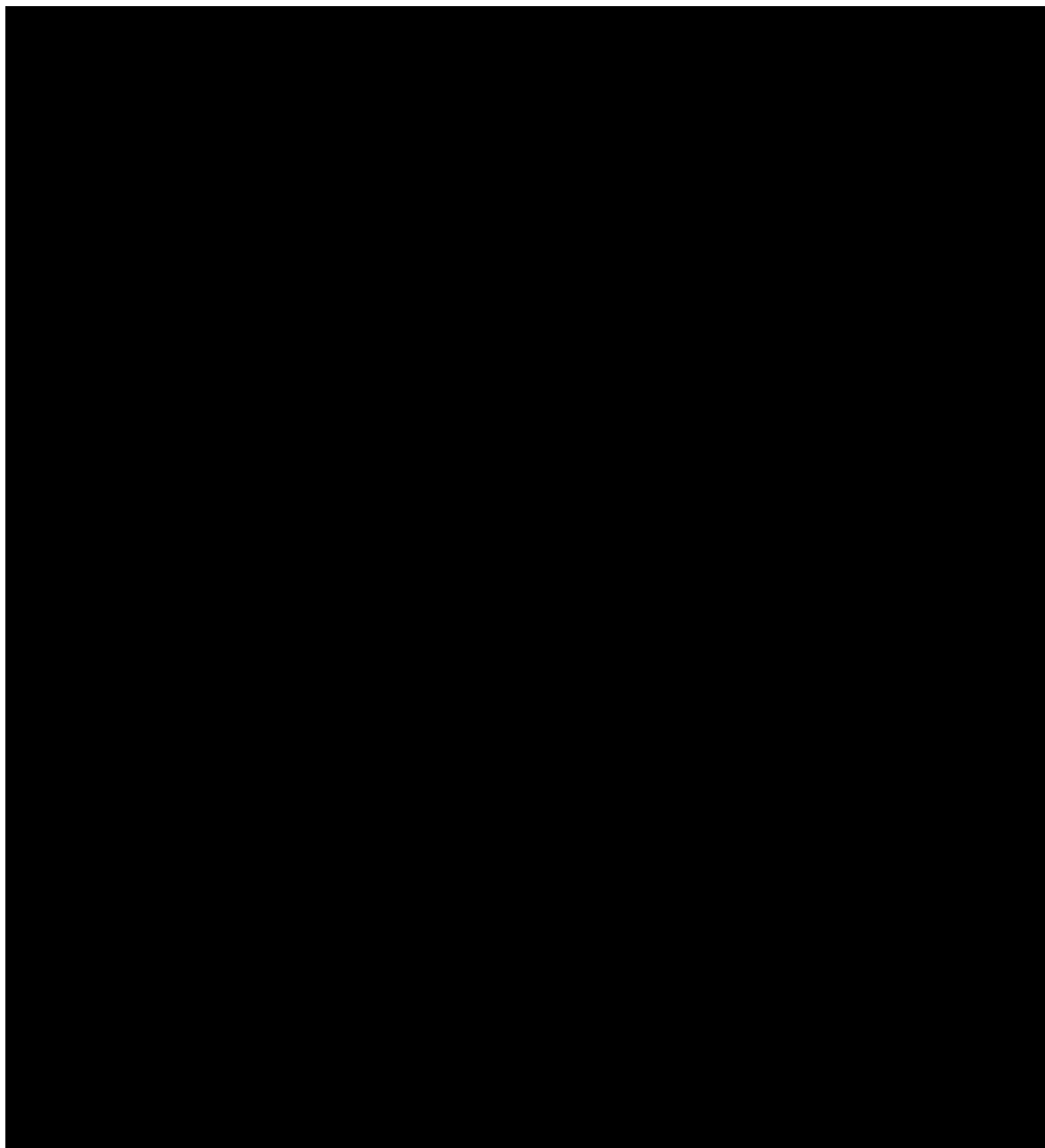


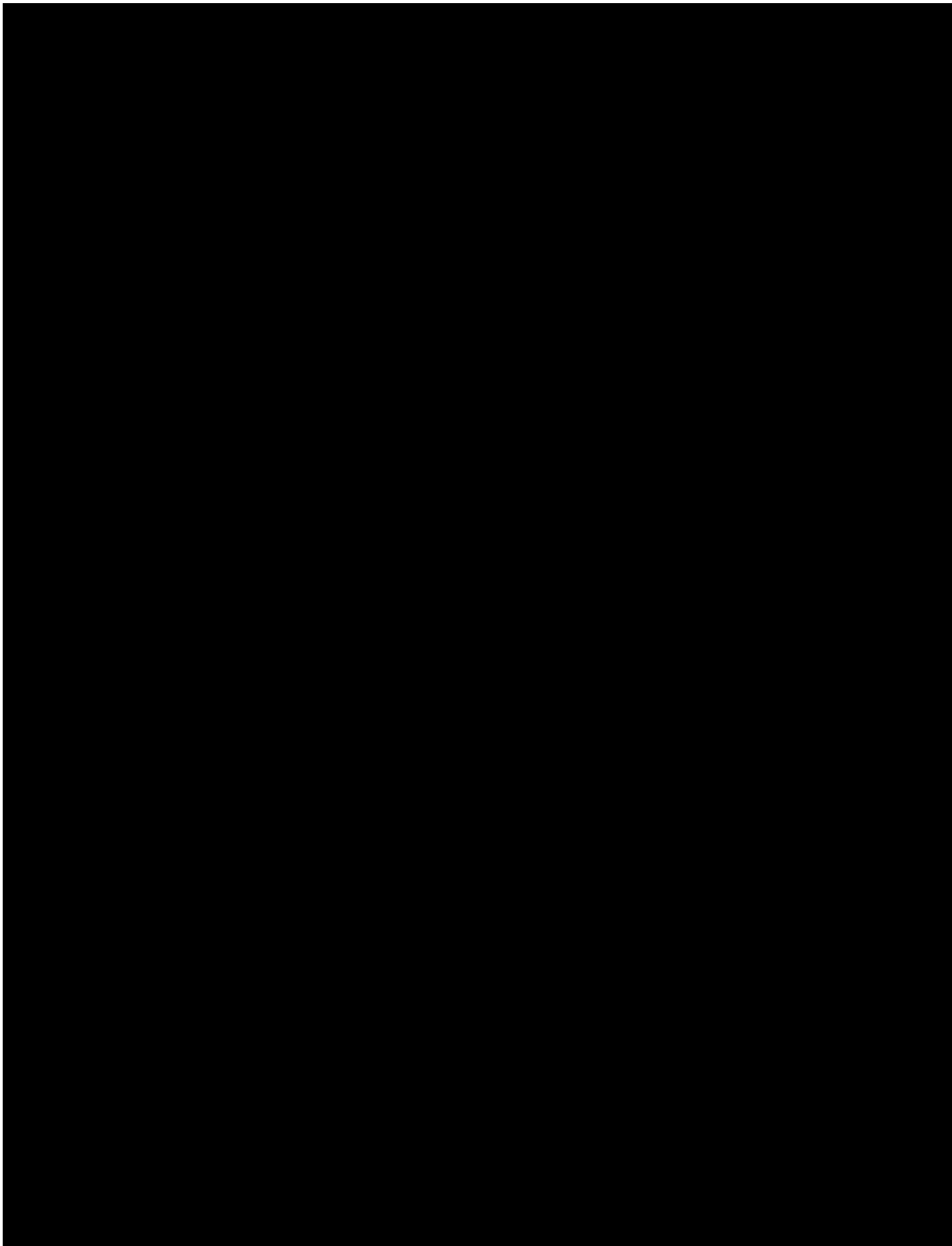




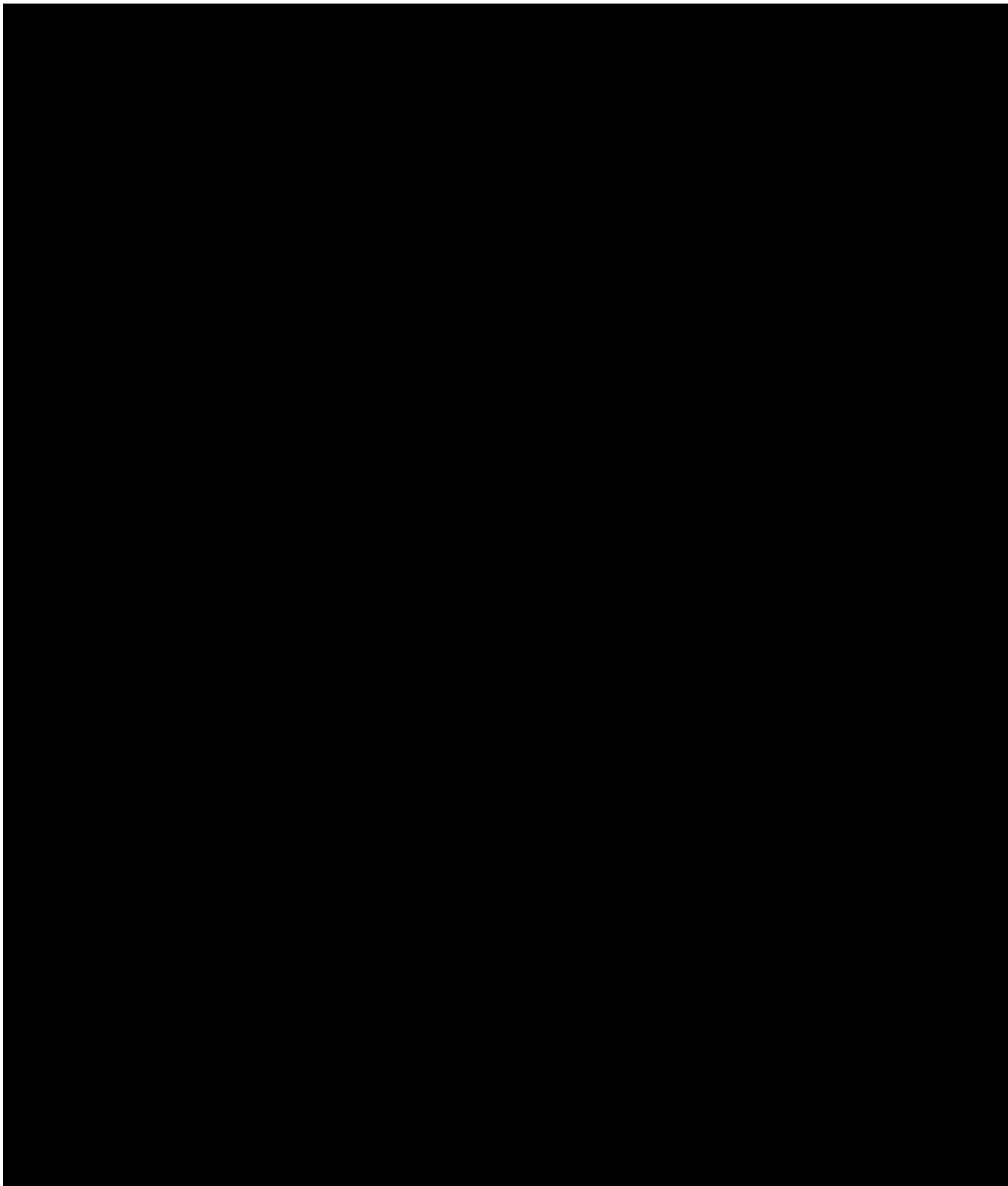


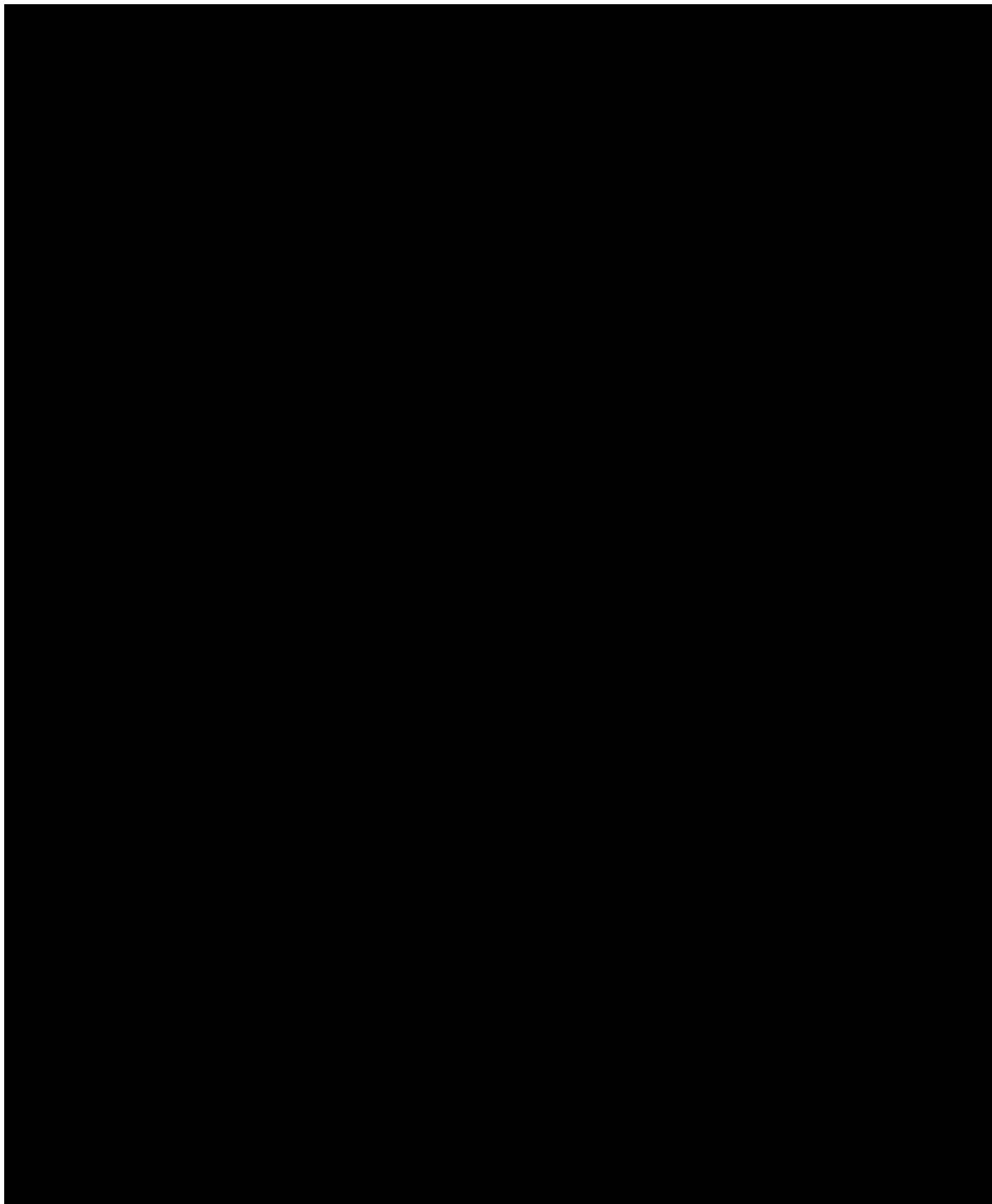


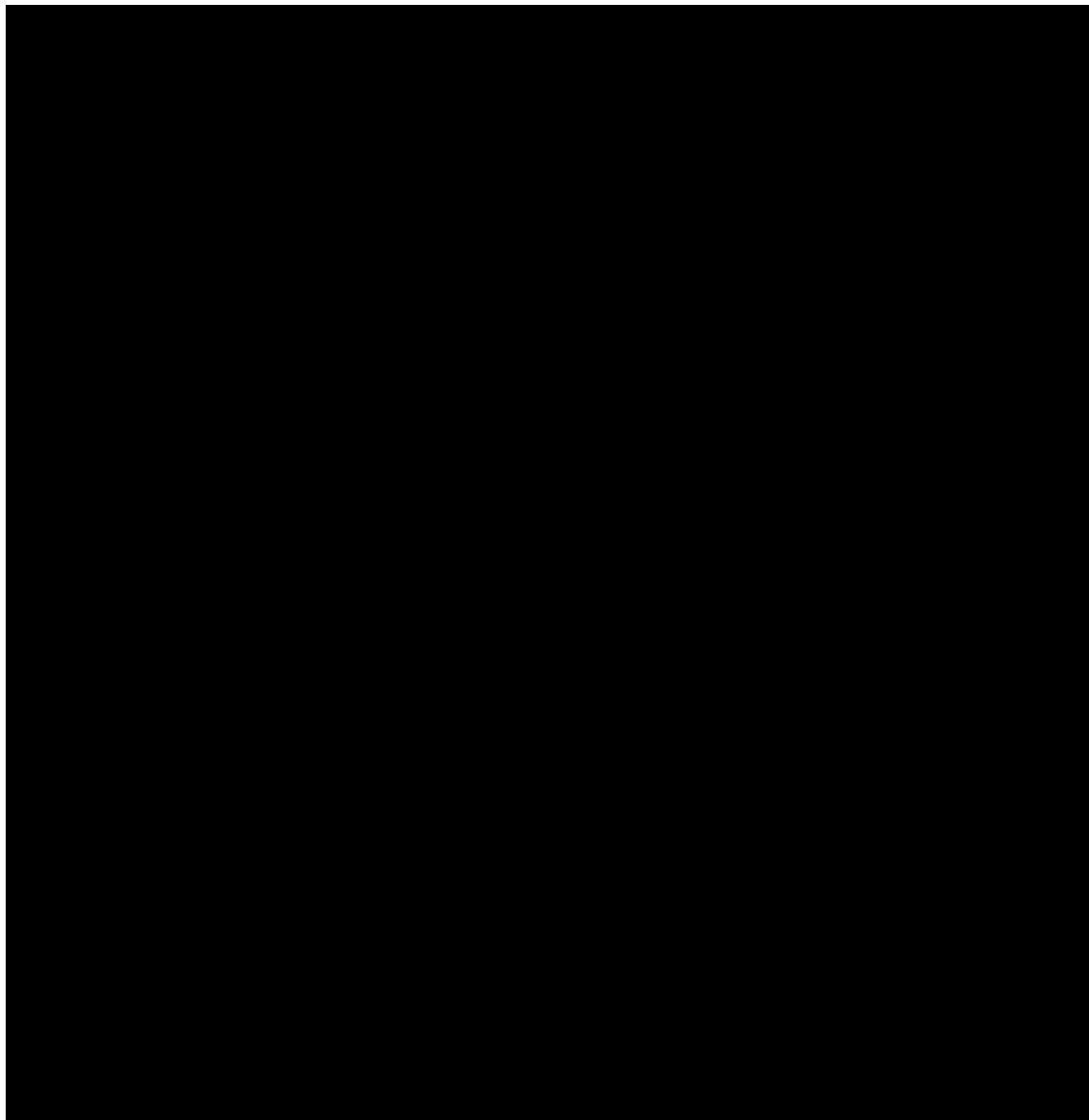


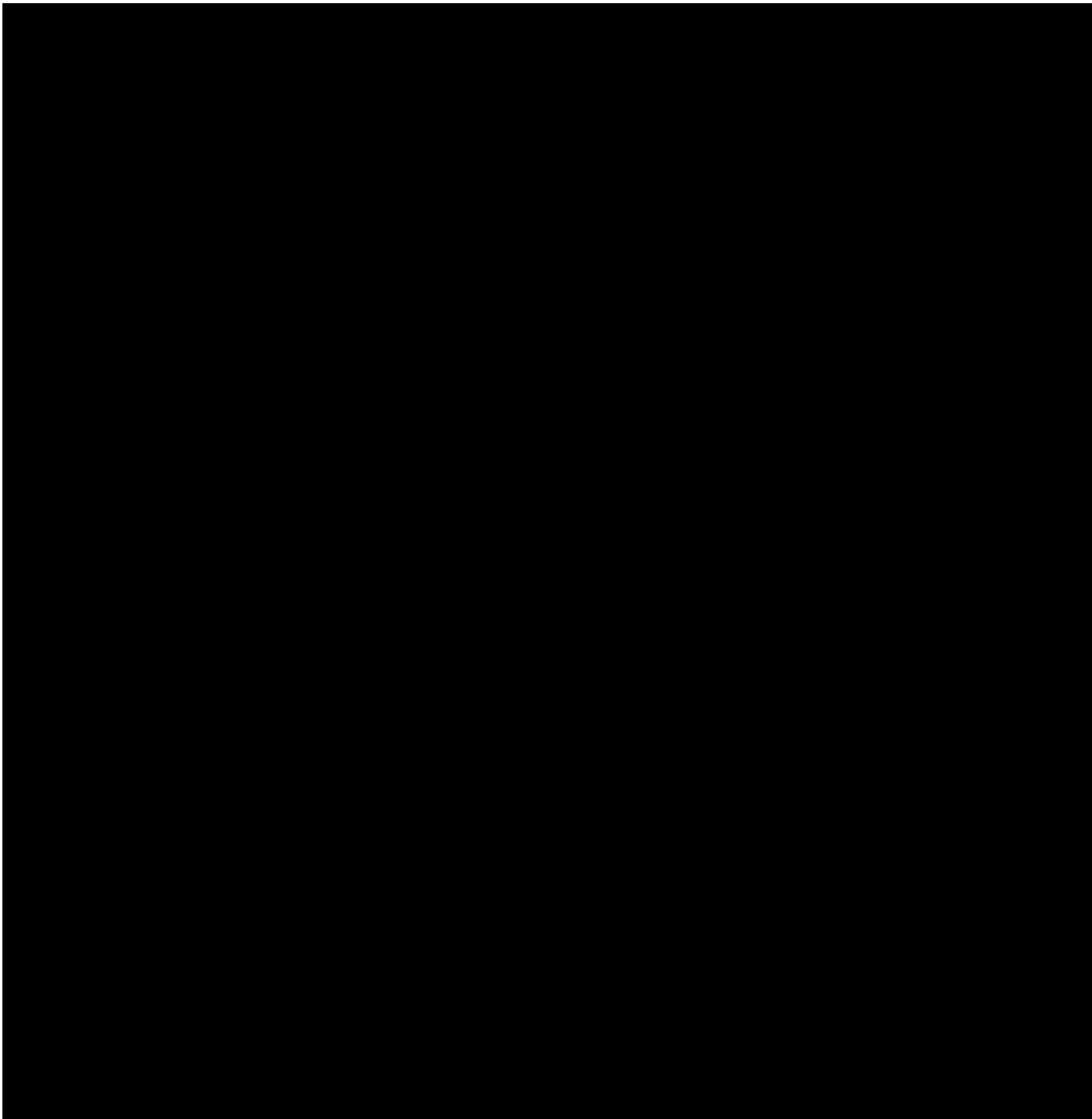


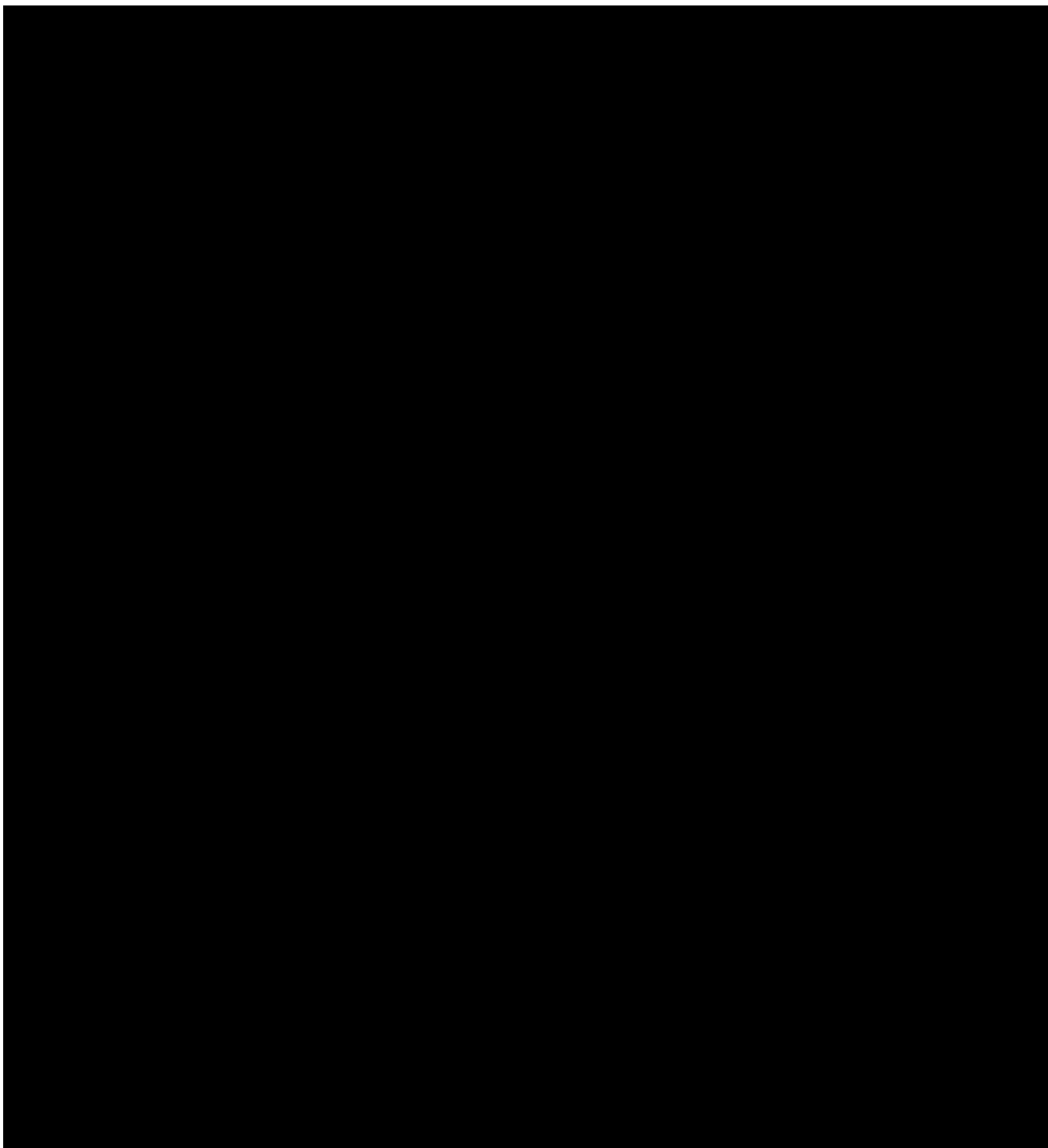
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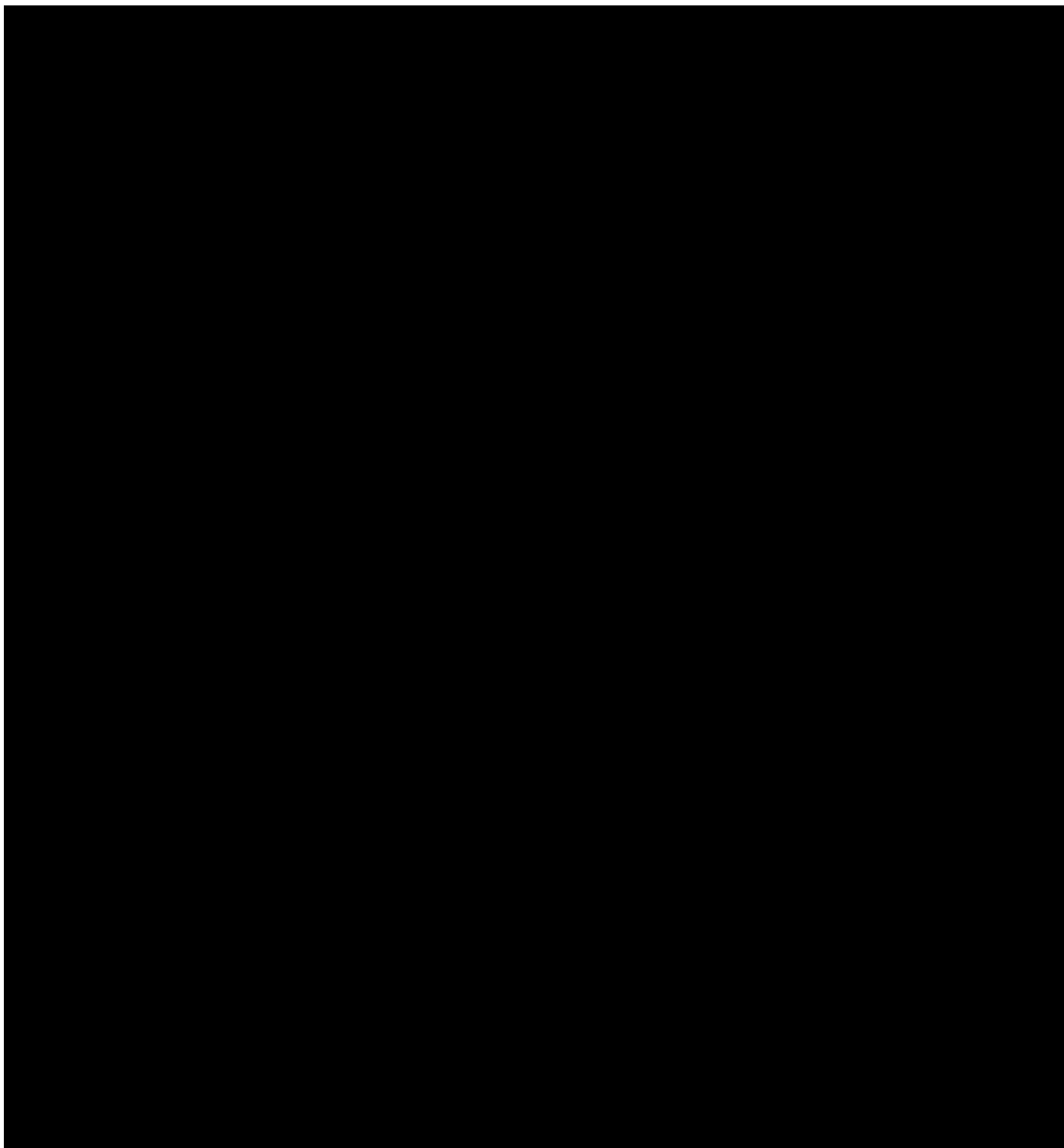


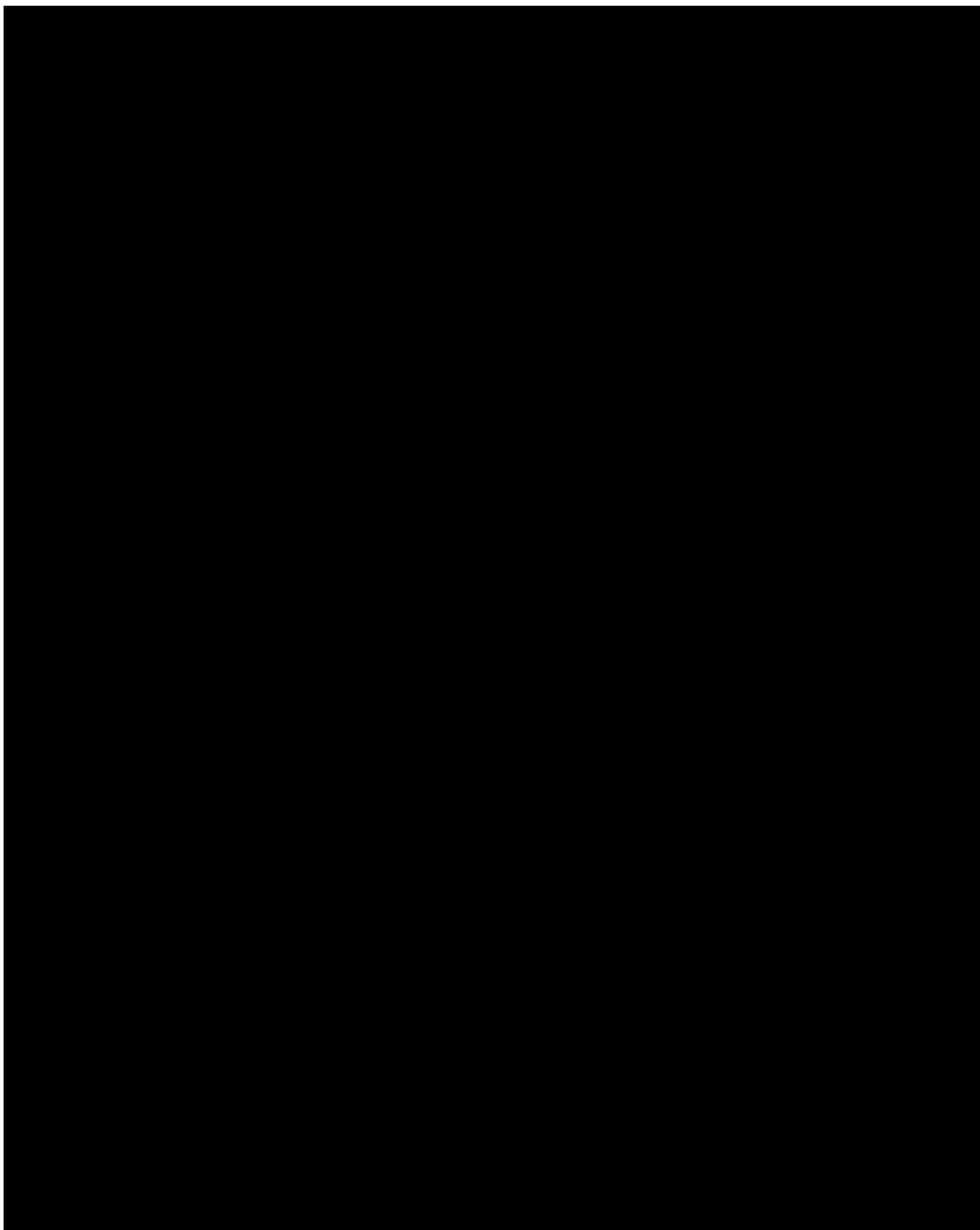


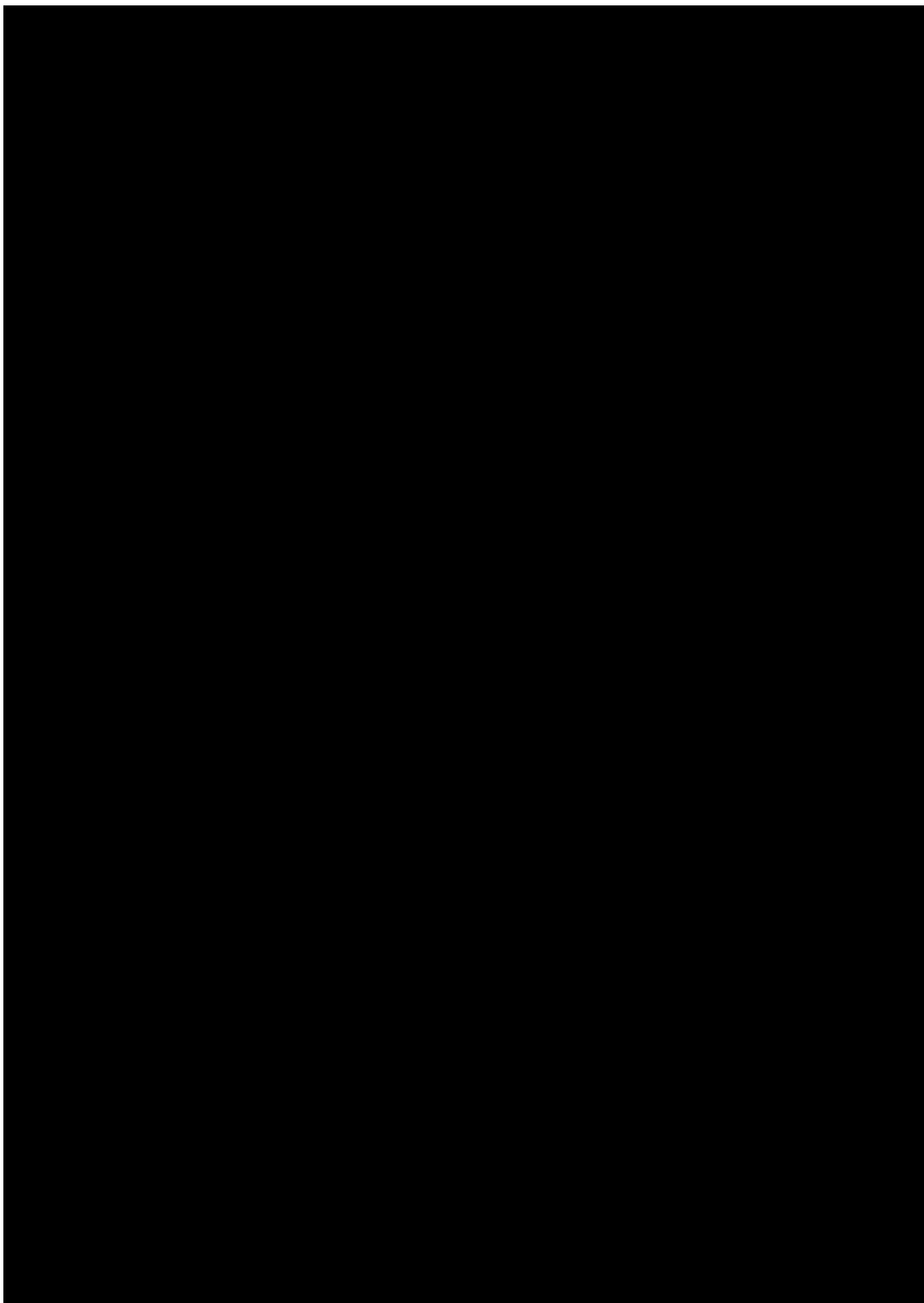


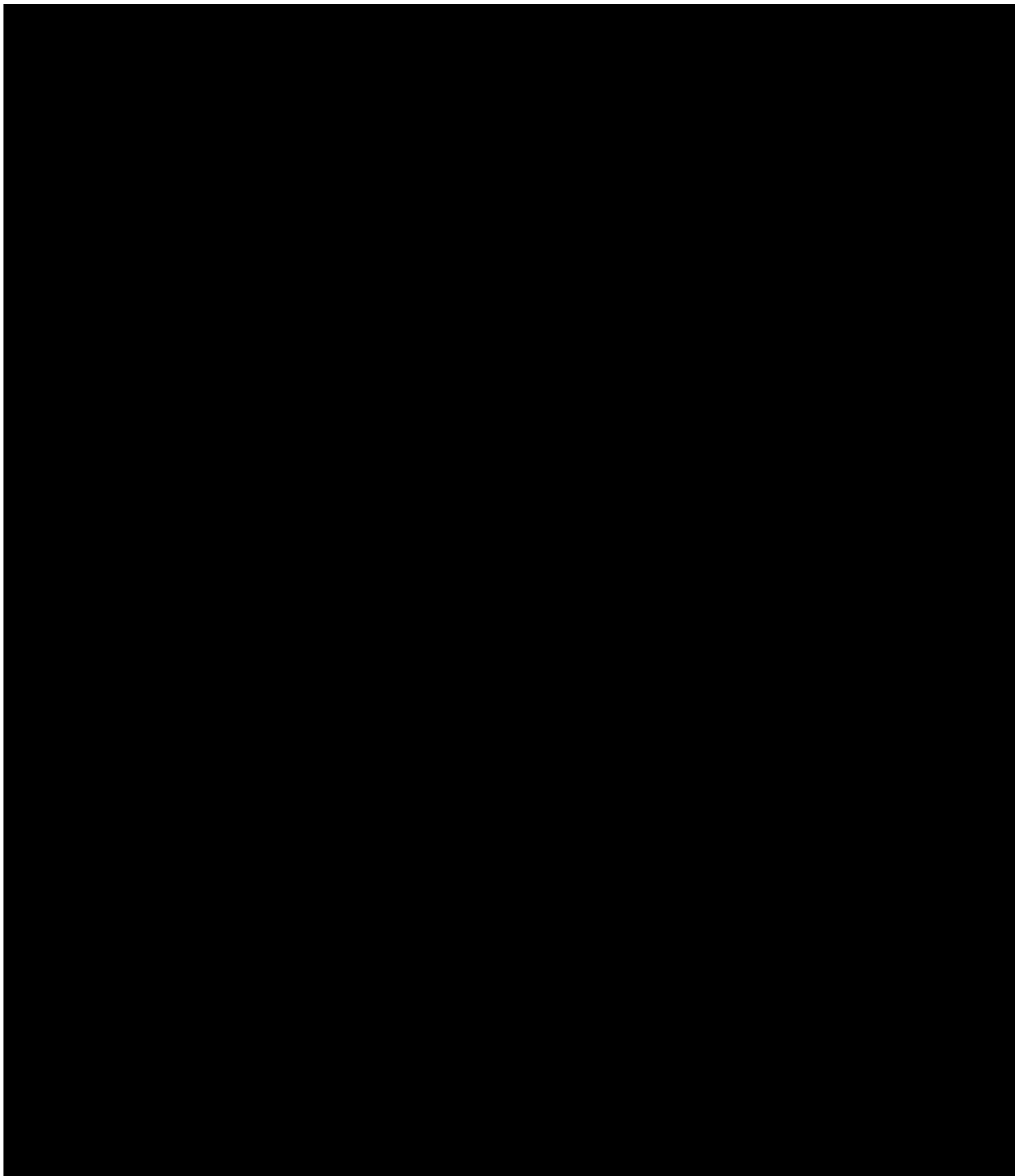


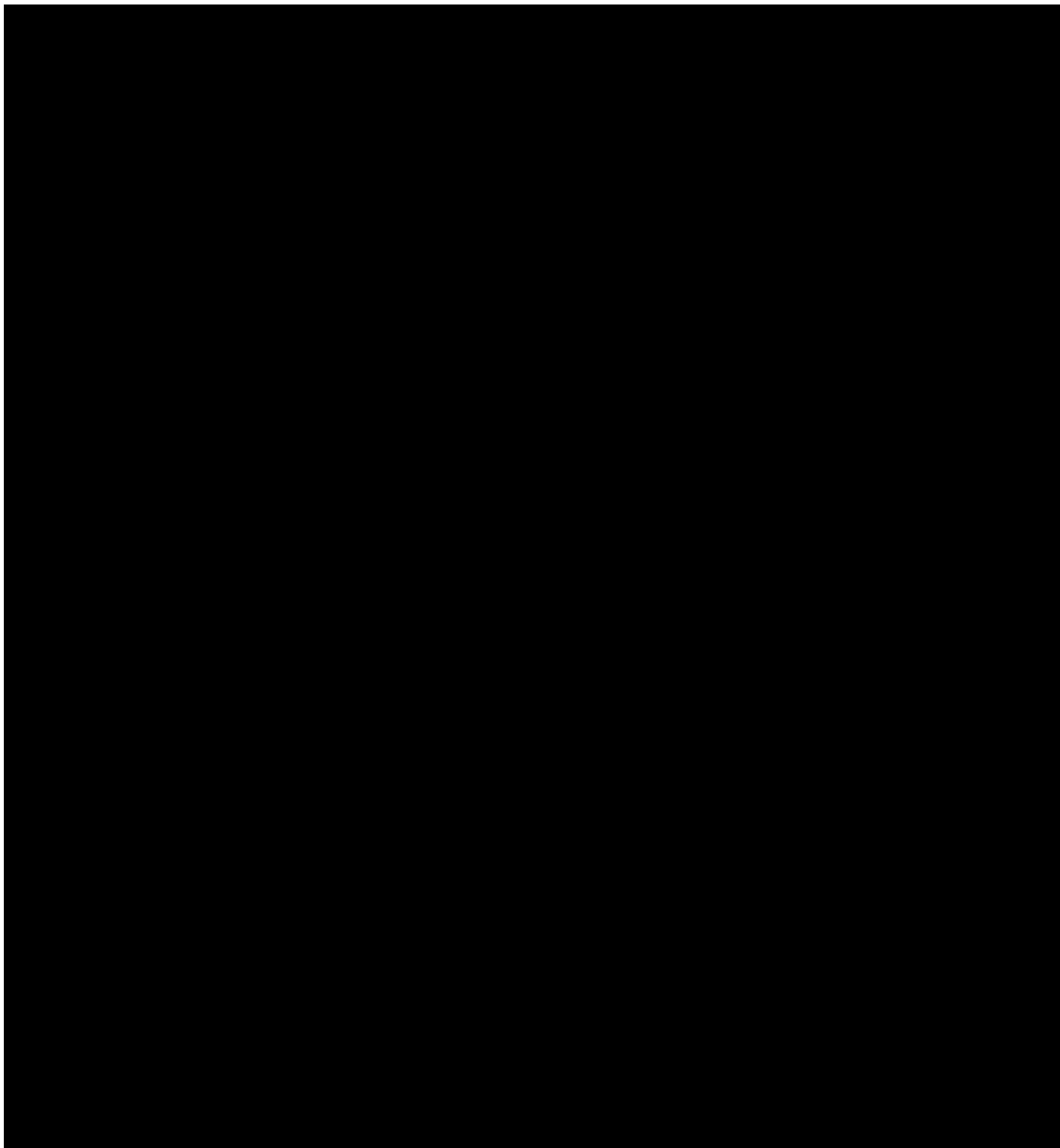


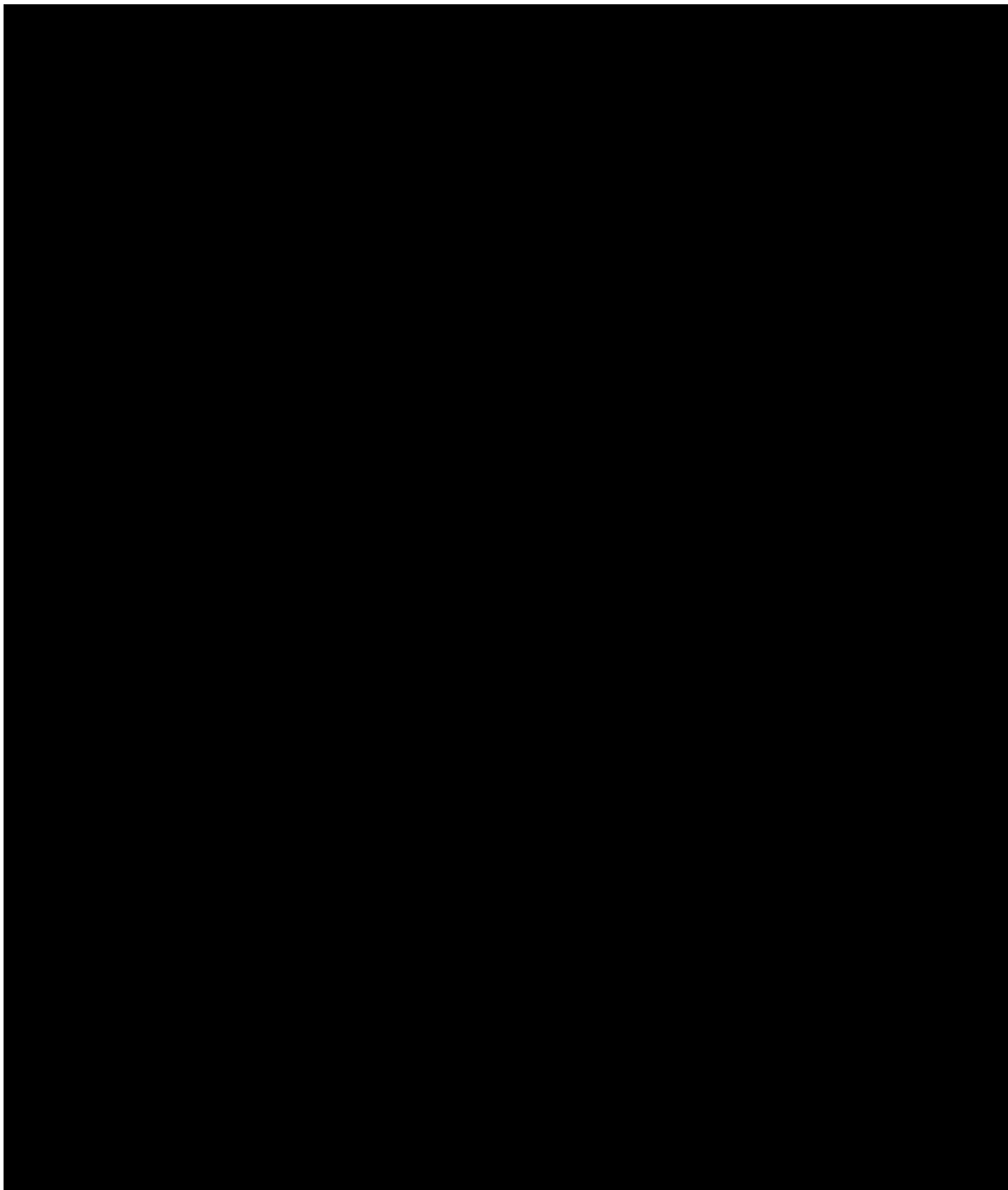




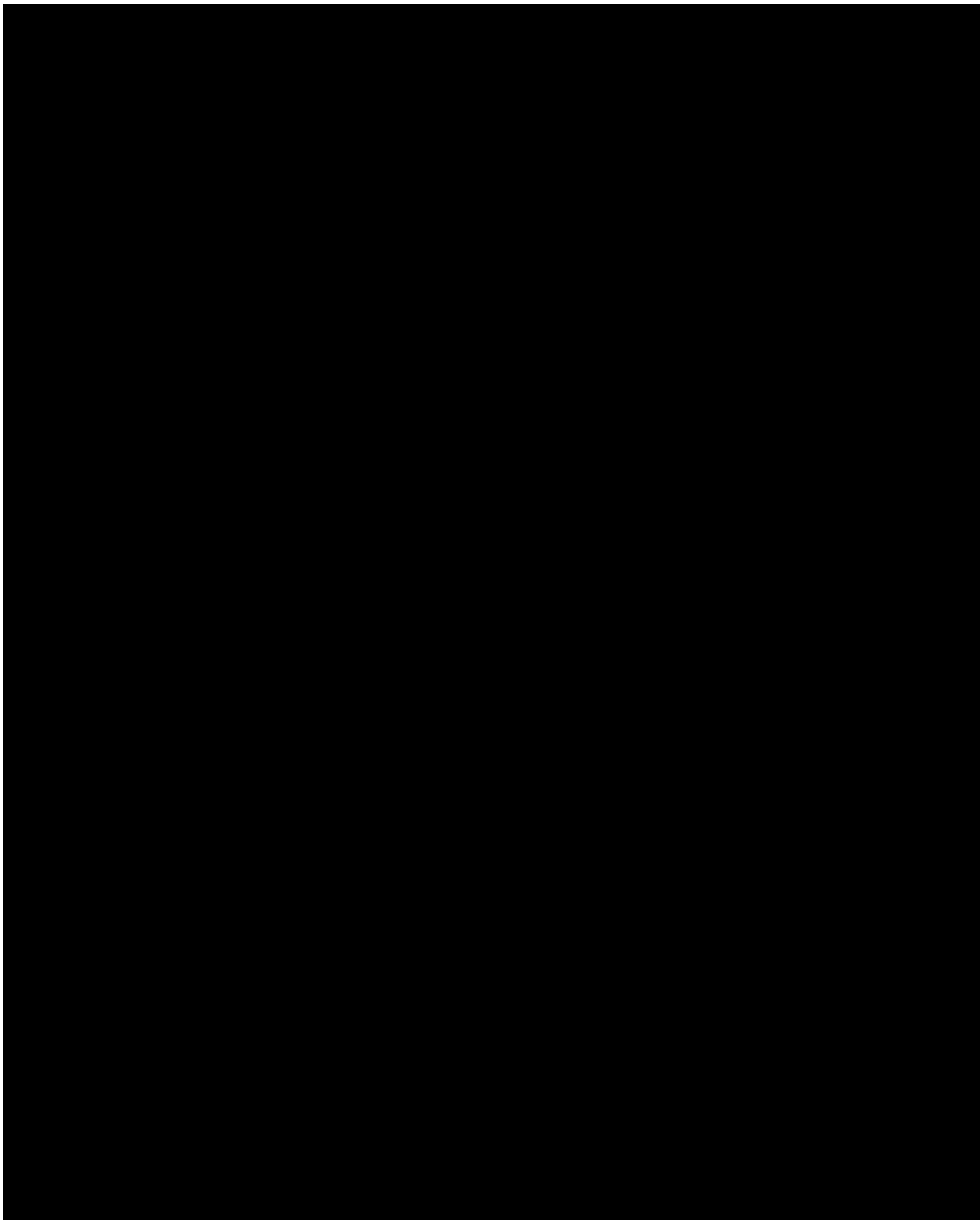


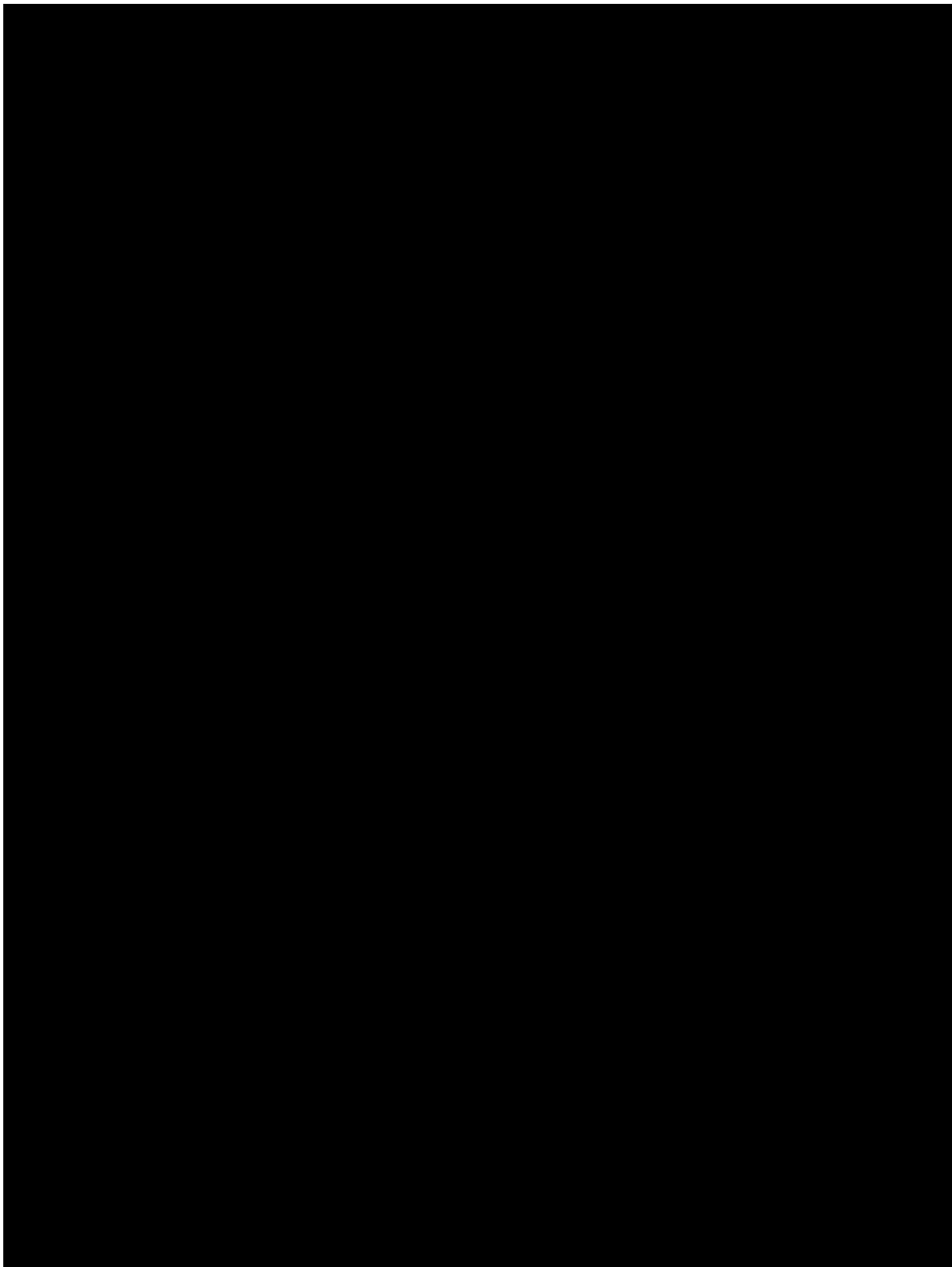


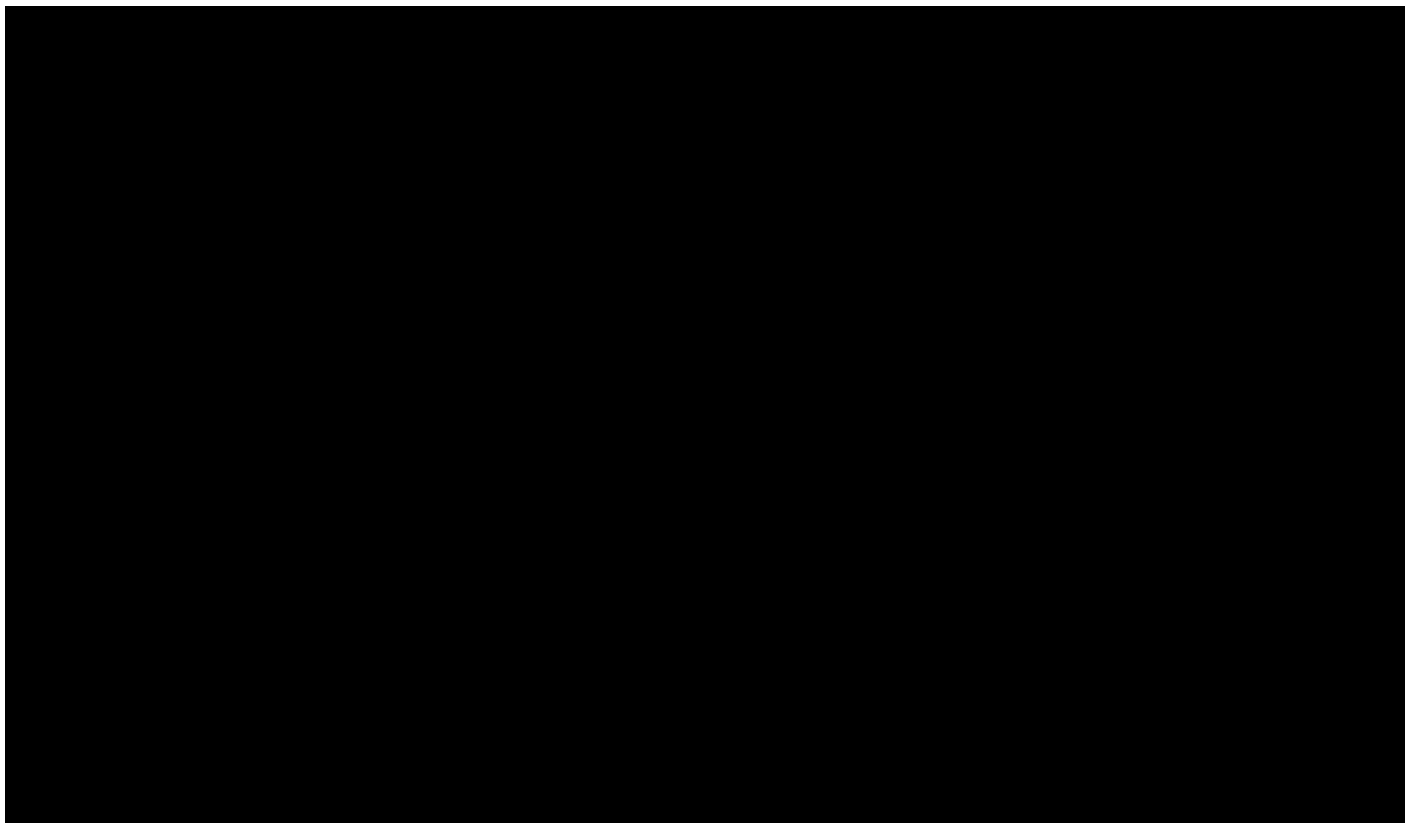


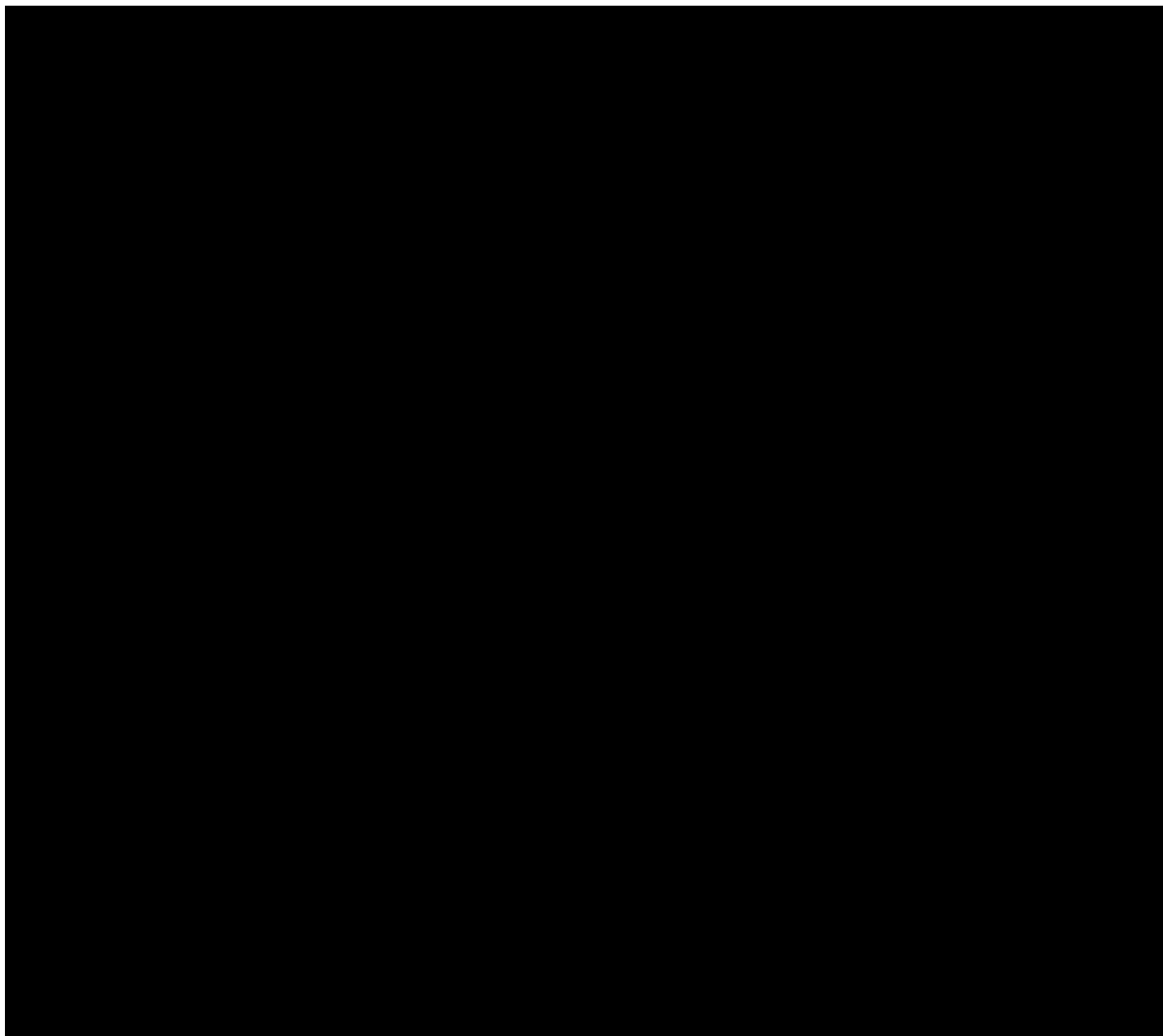


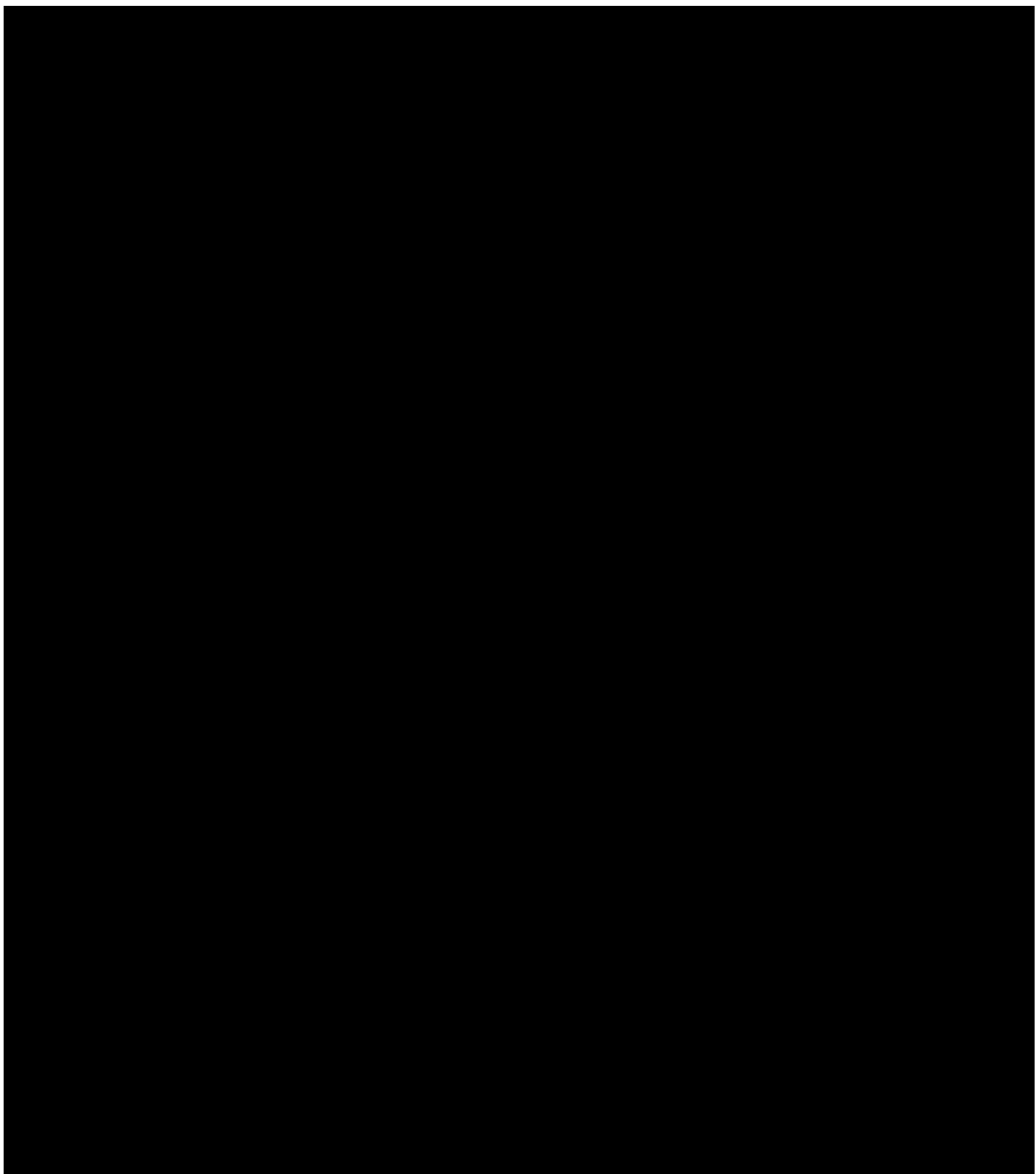
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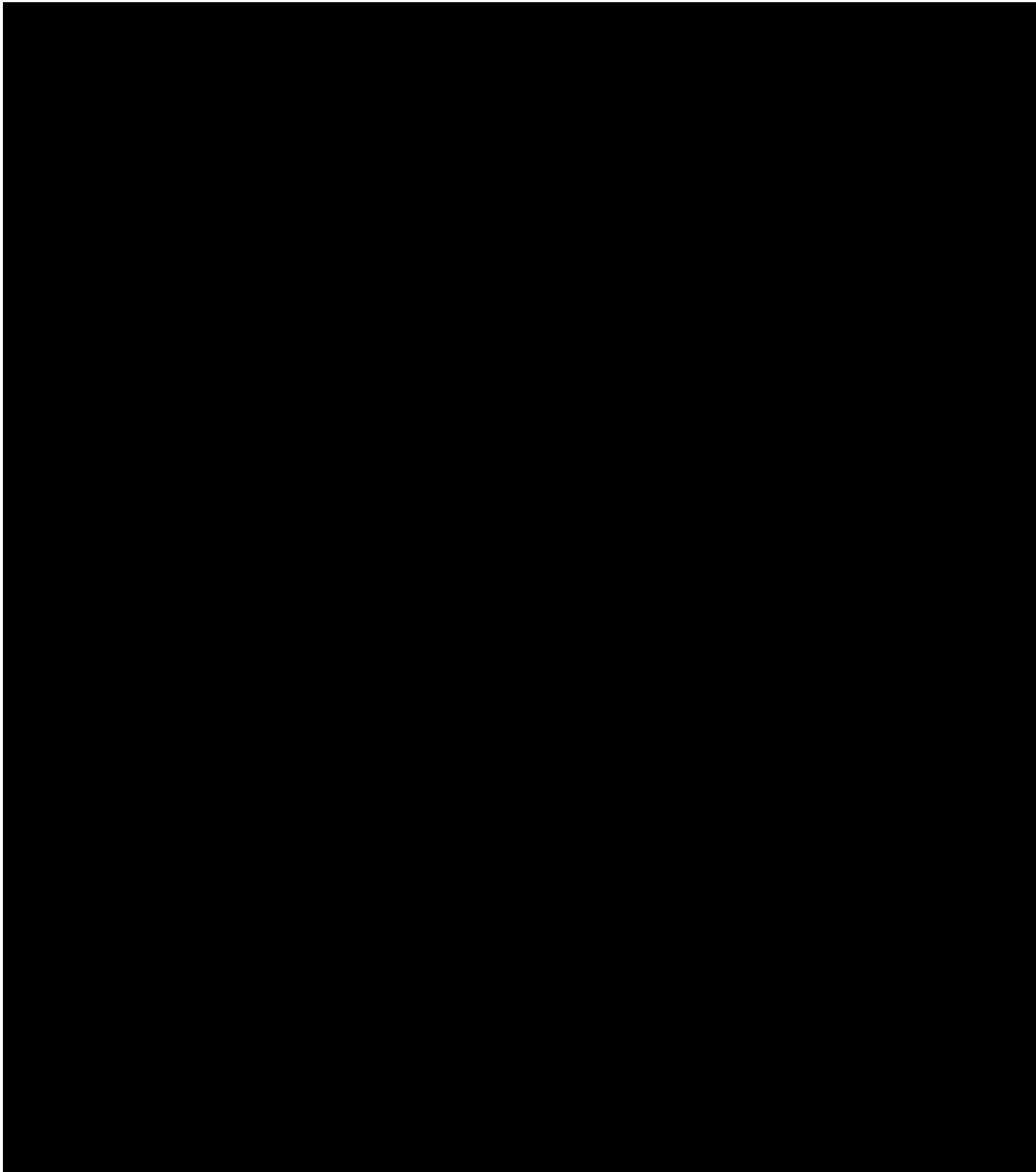


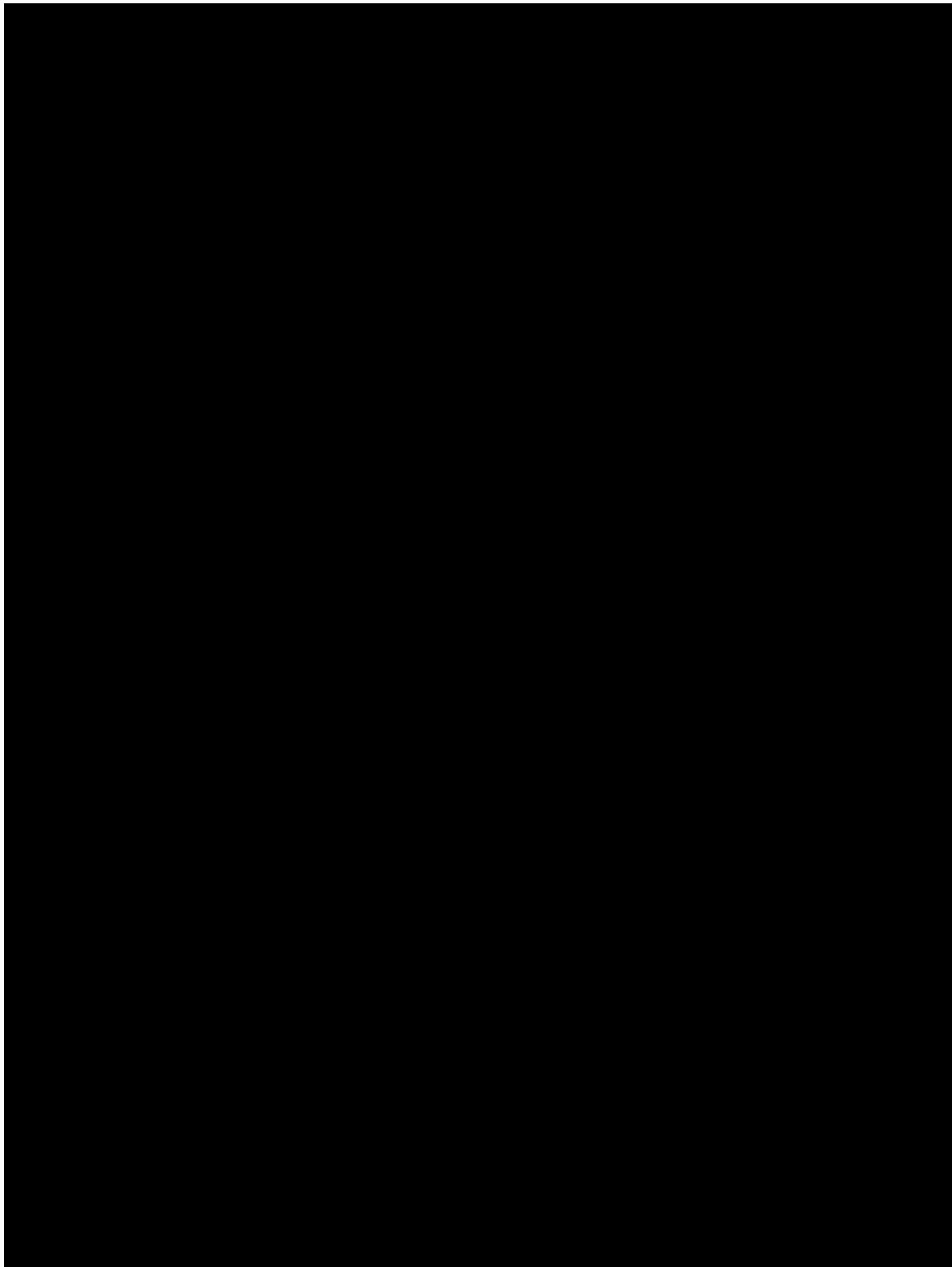


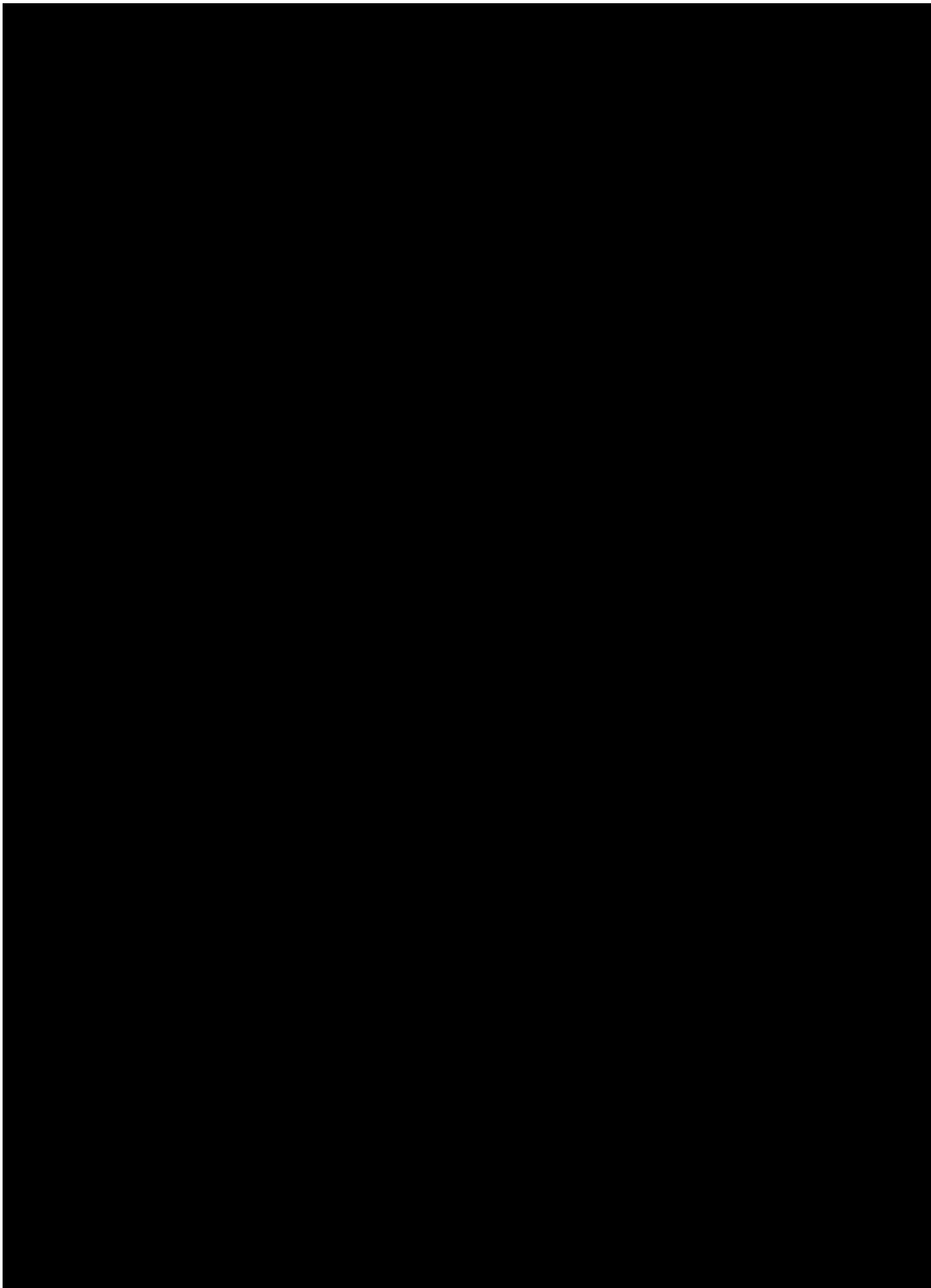


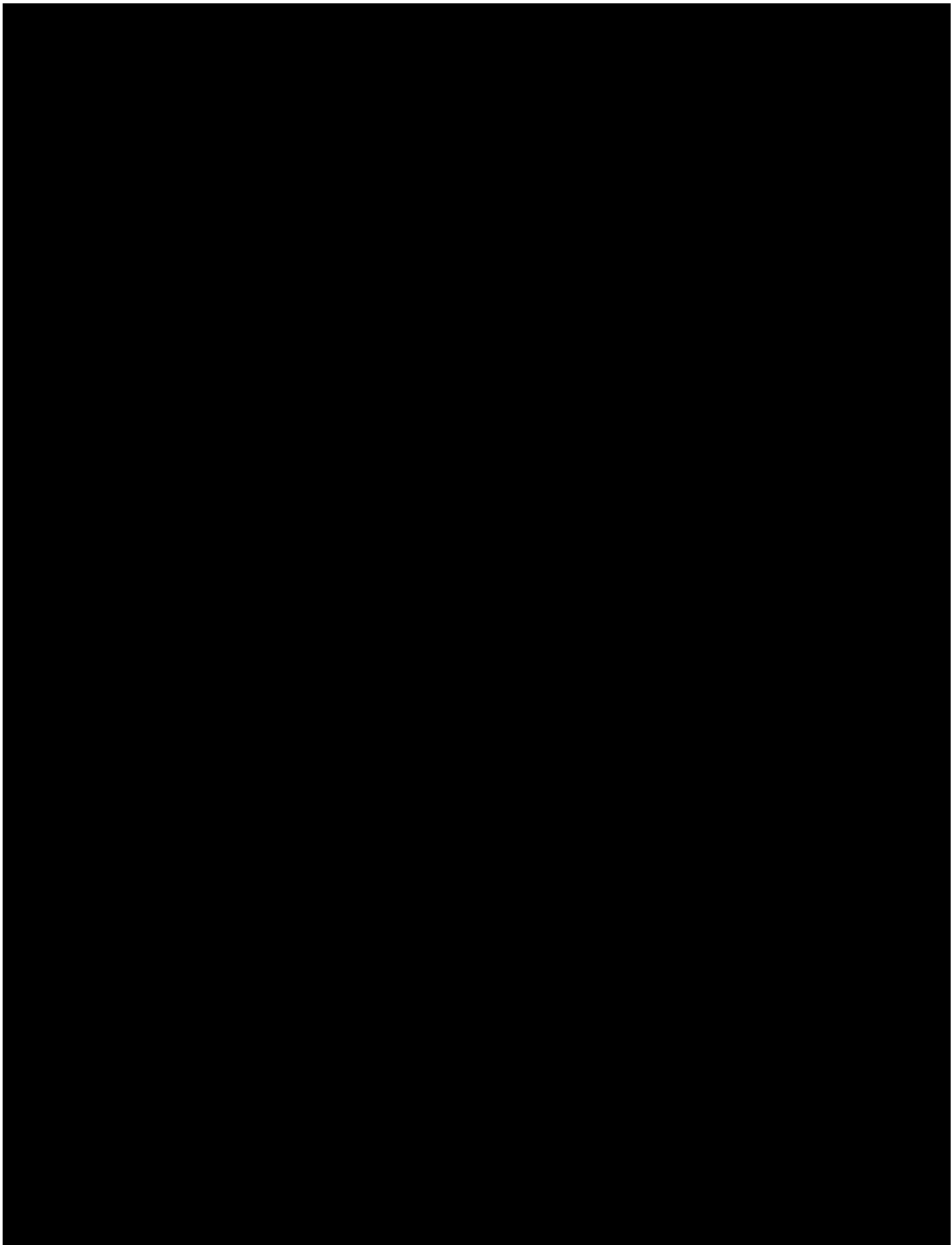


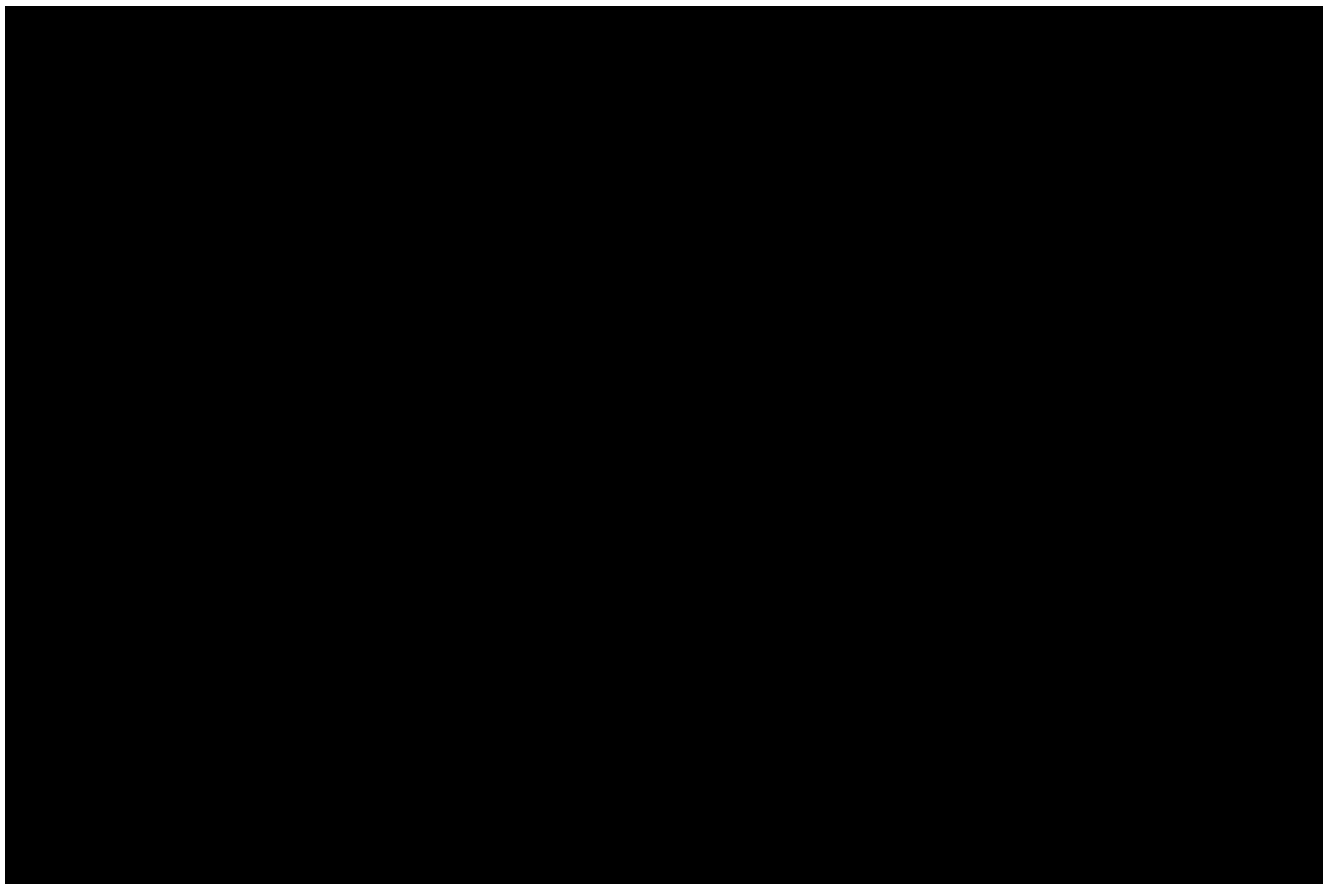






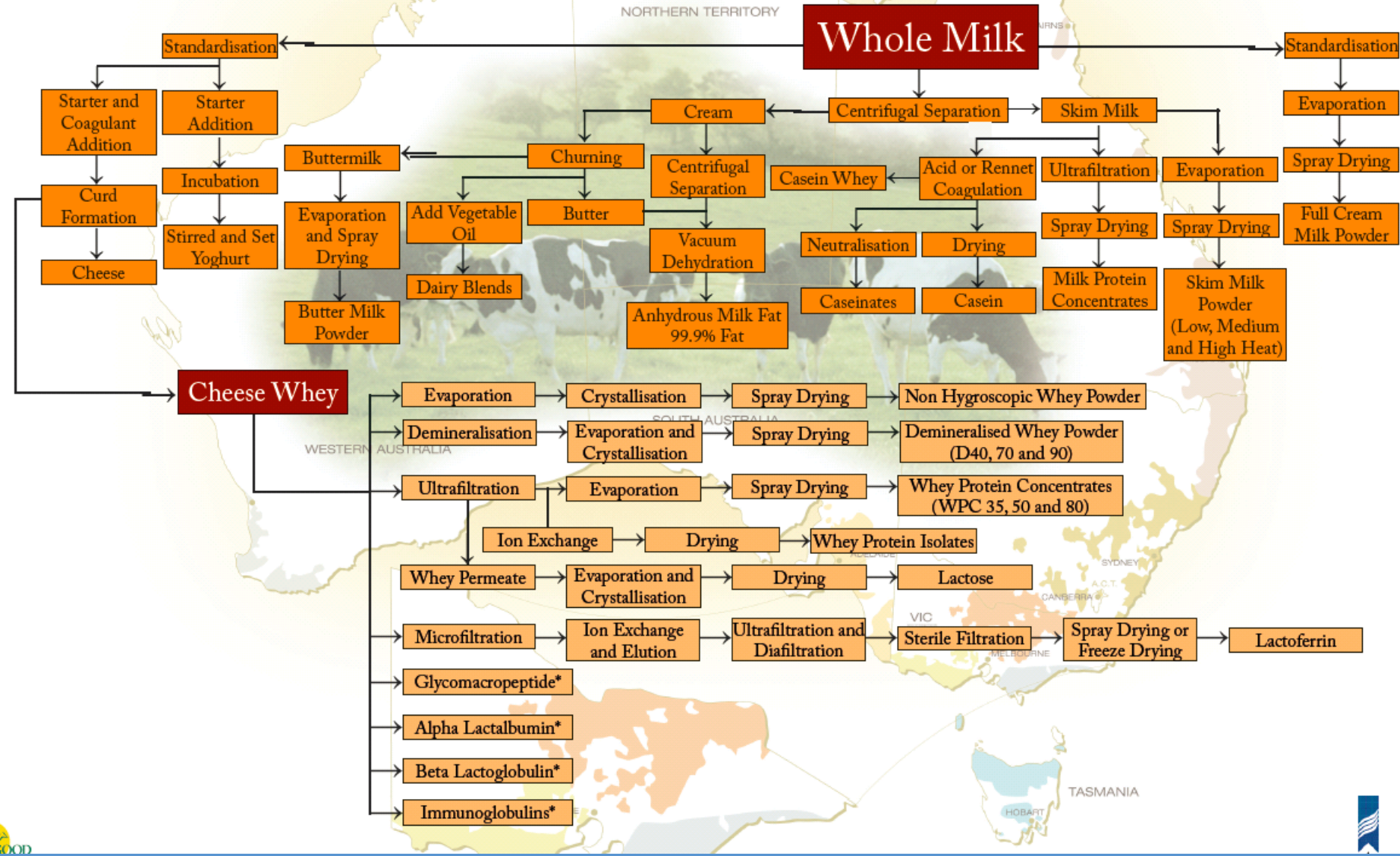






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Australian Dairy INGREDIENTS



Attachment 60

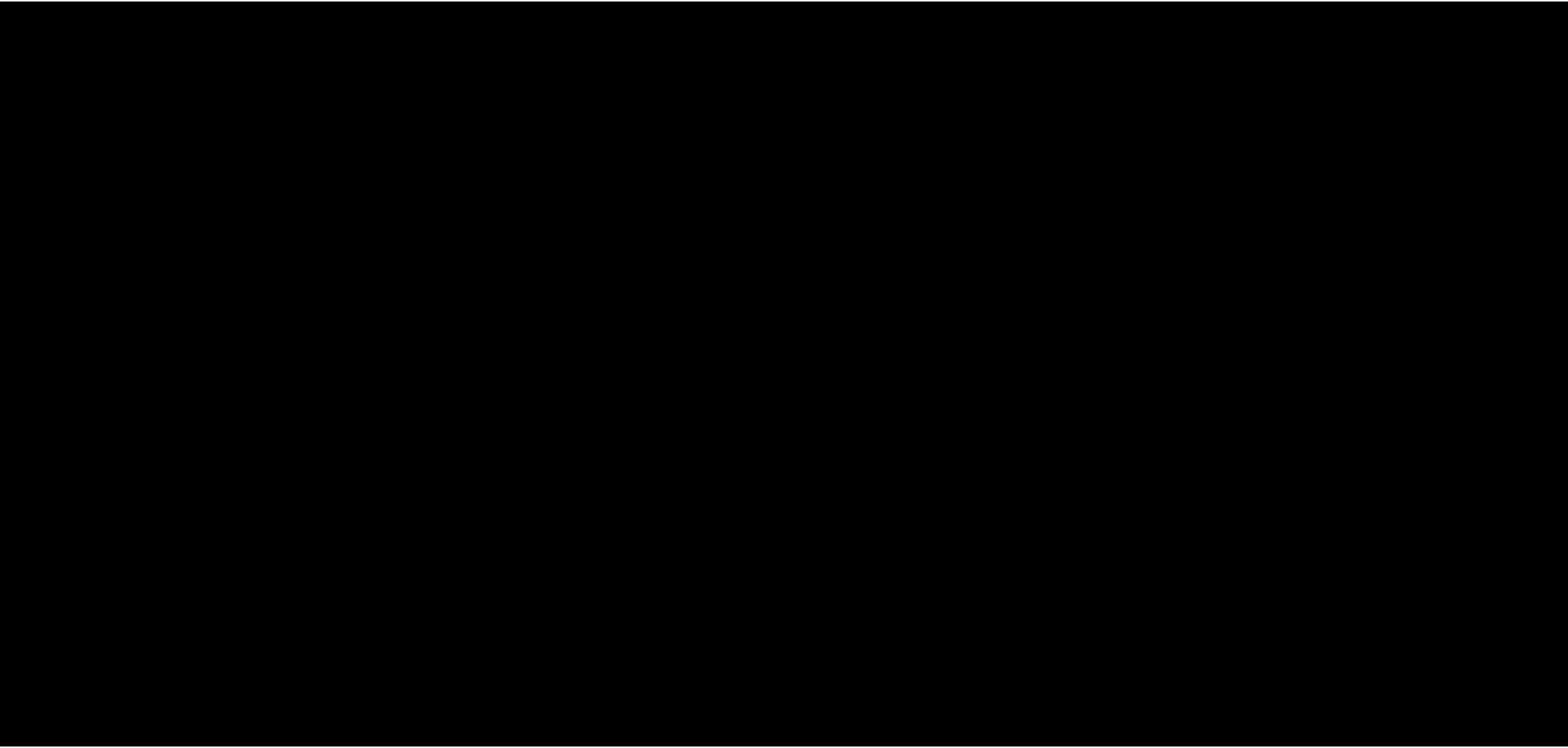
LOCATION OF MILK PROCESSING PLANTS

SOUTH EAST AUSTRALIA

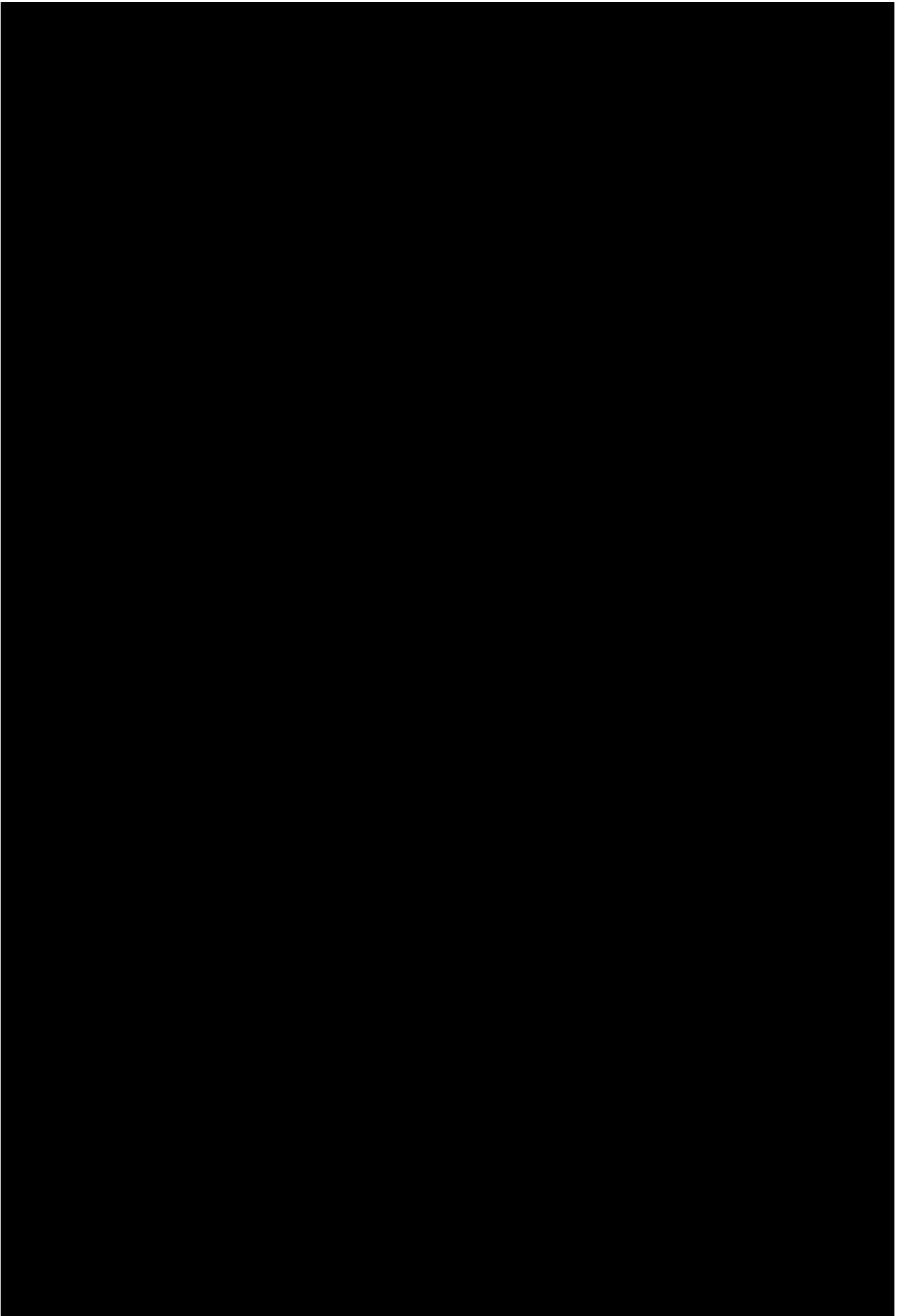


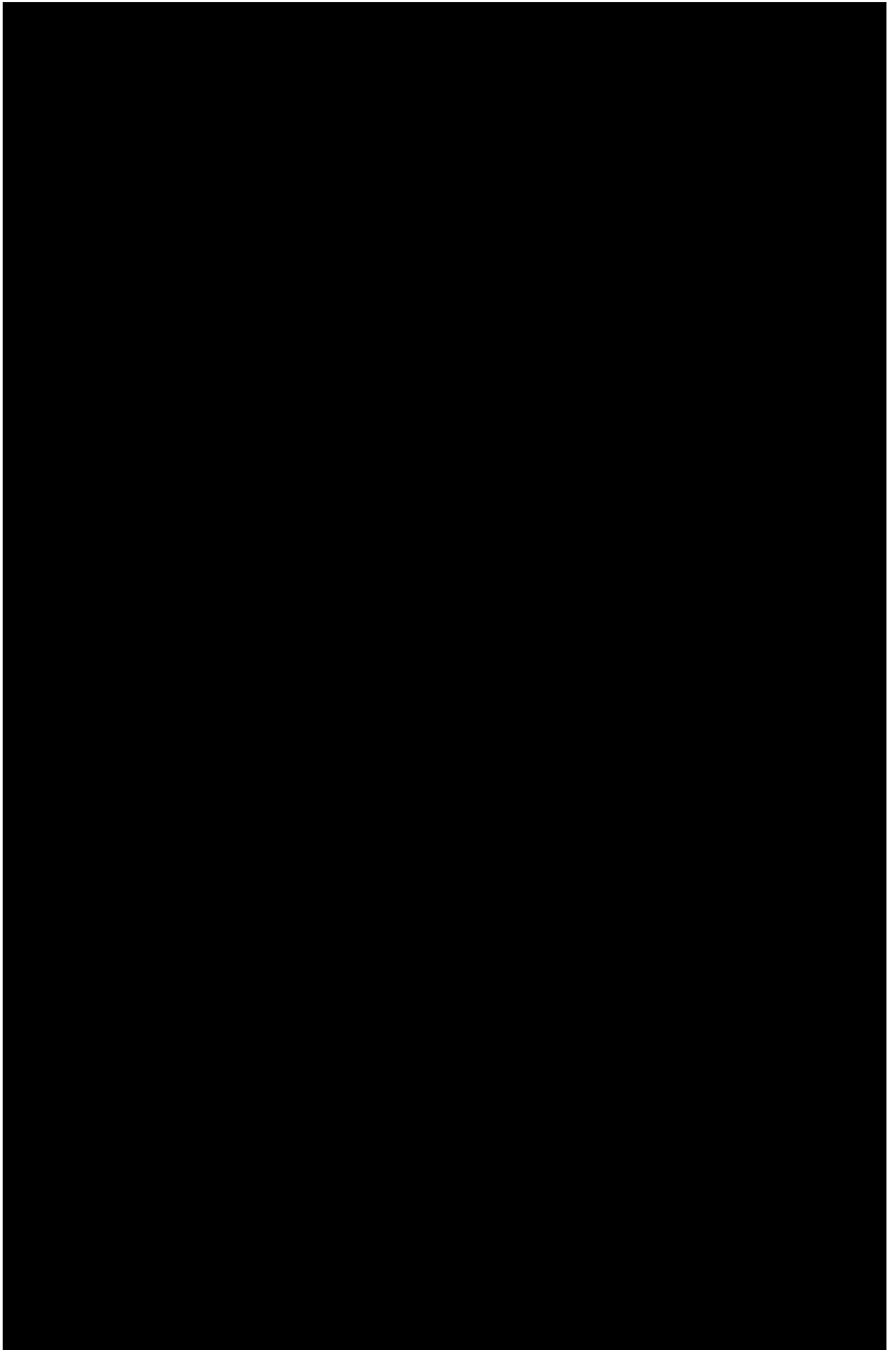
- Bega ● Bulla Dairy ◆ Burra Foods ▲ Fonterra ▲ Fonterra – closed facilities ● Kraft/Mondelez ★ Lion ★ Lion – closed facilities
- △ Longwarry Food Park ● MGC ⊕ MGC – closed facilities ■ Pactum ■ Parmalat ■ United Dairy Power ◆ WCB

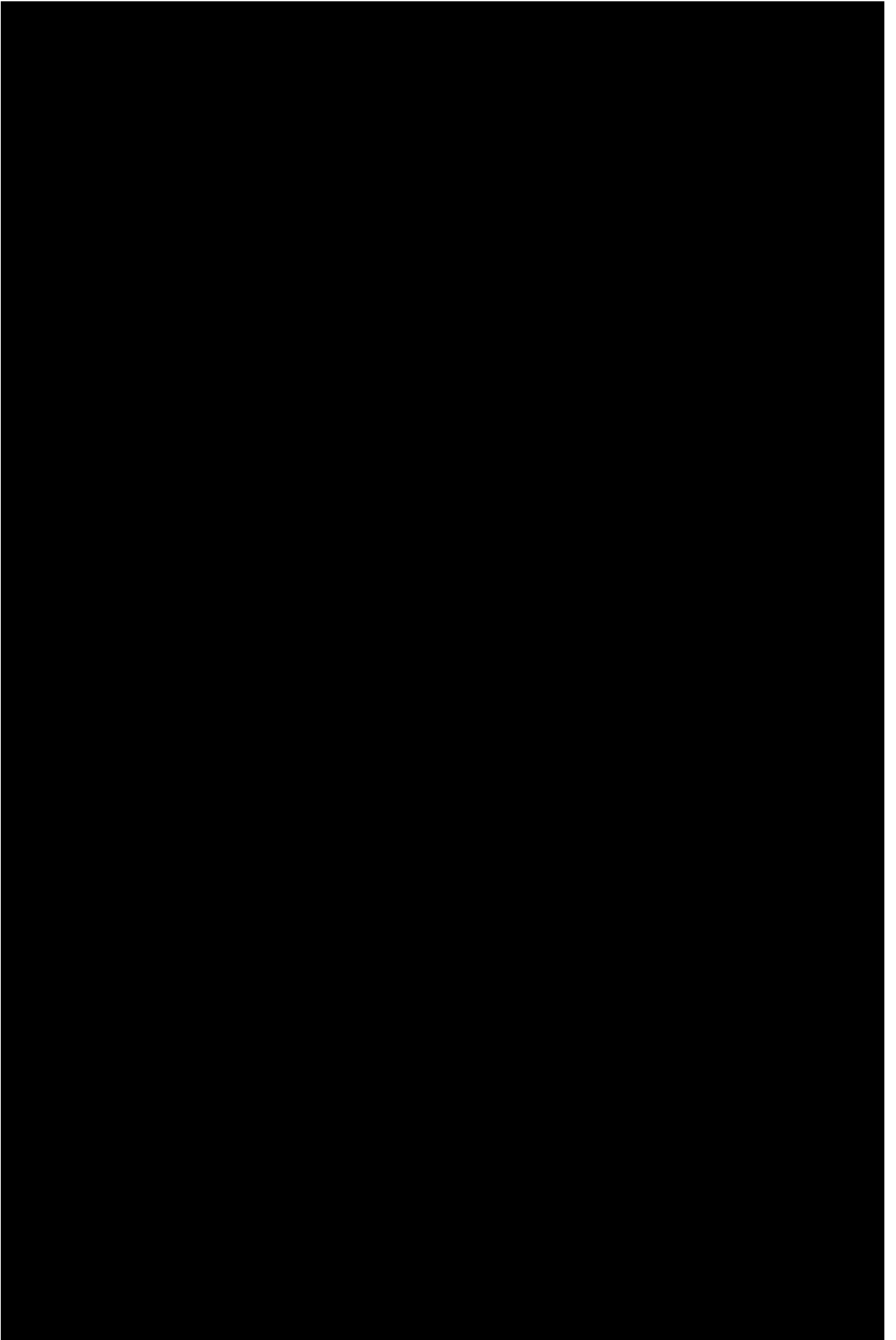
Attachment 60

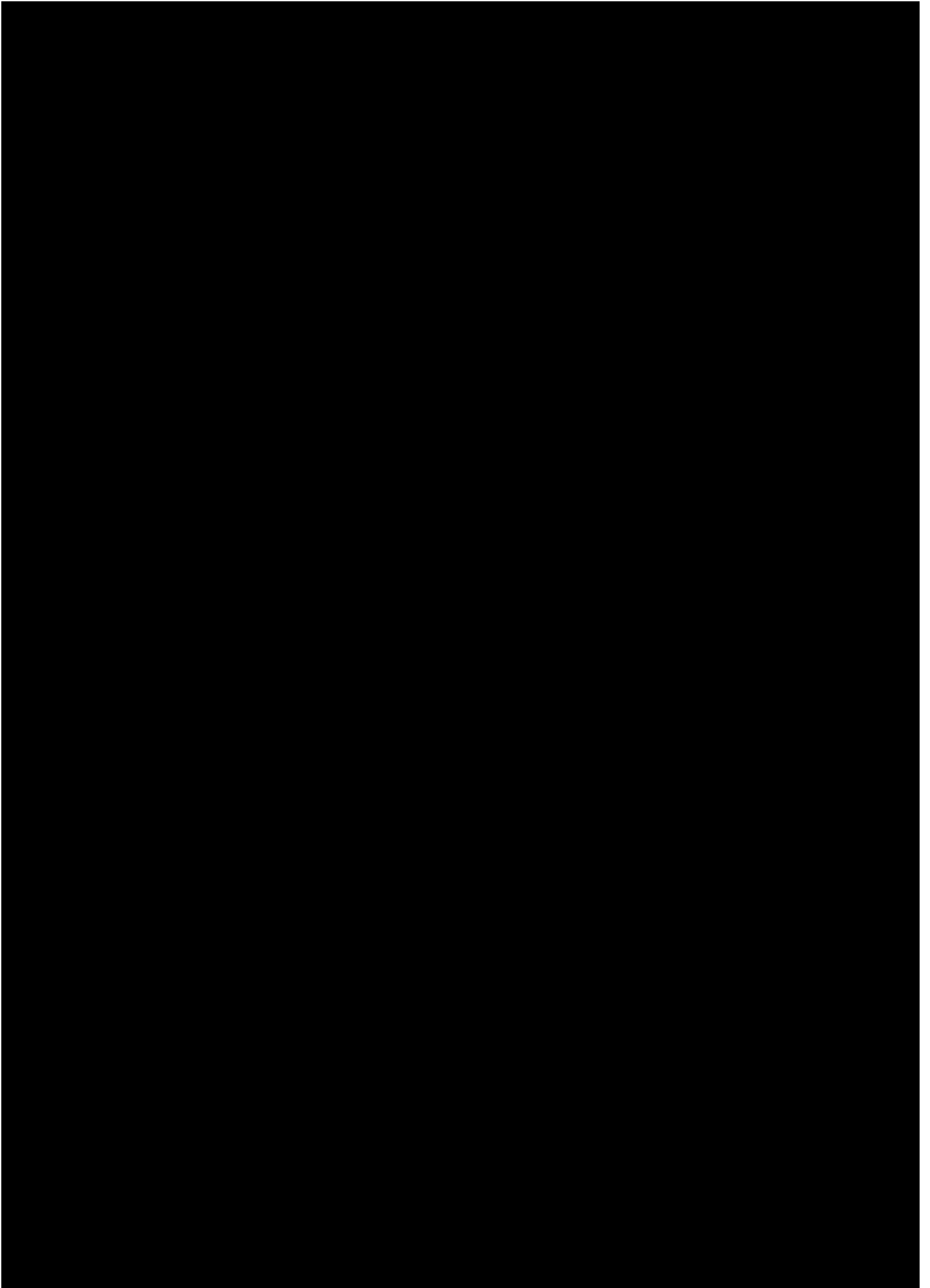


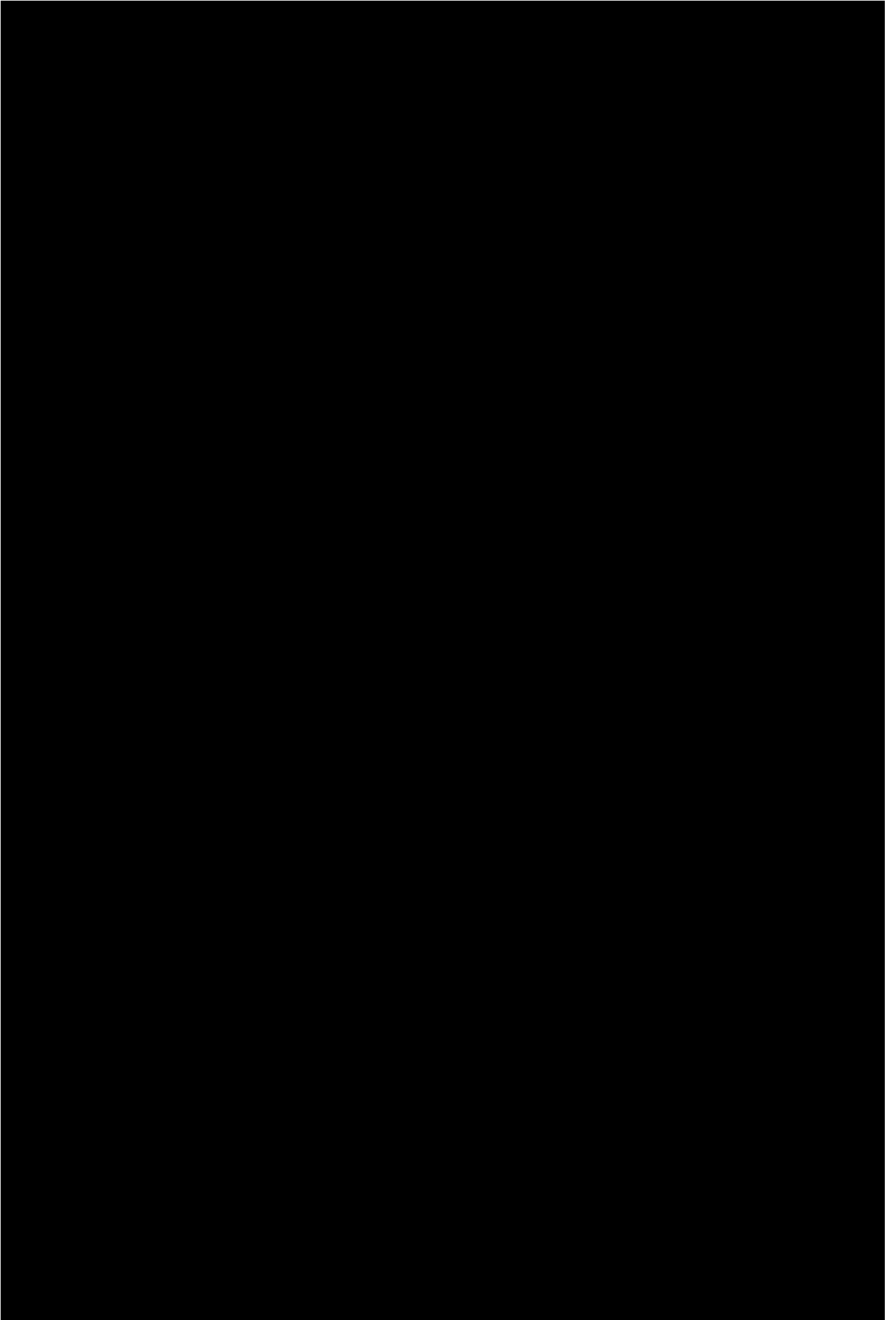
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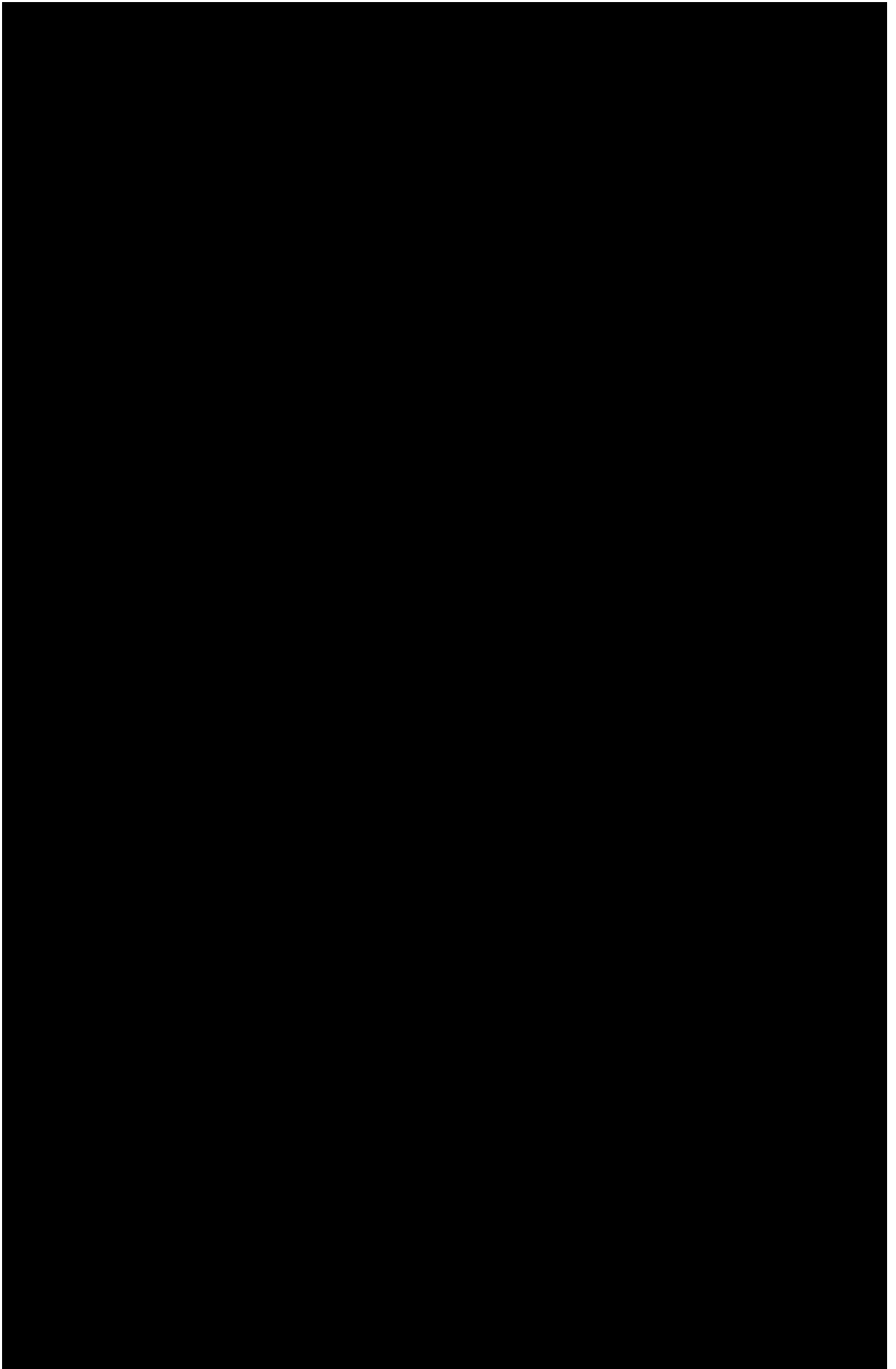


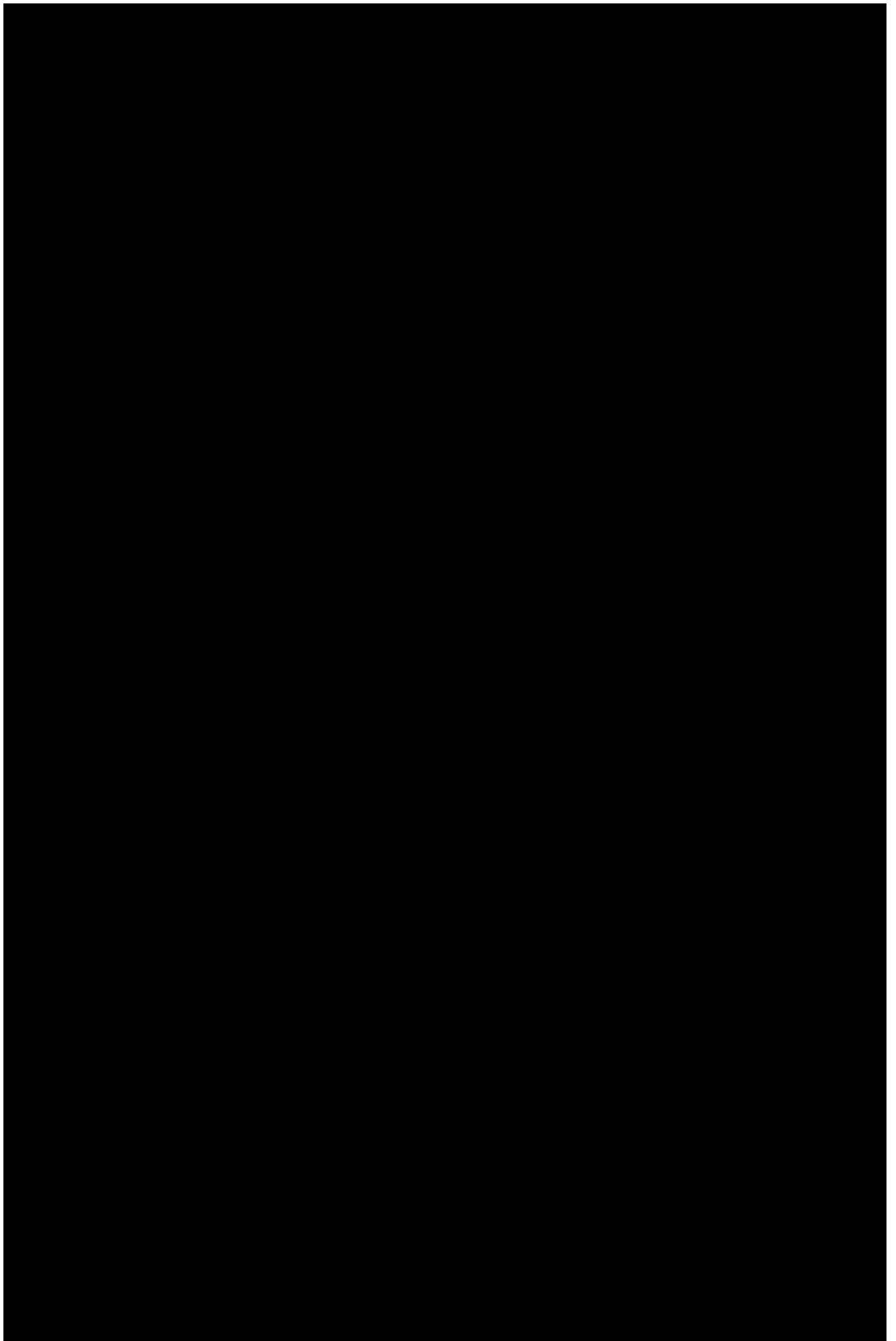


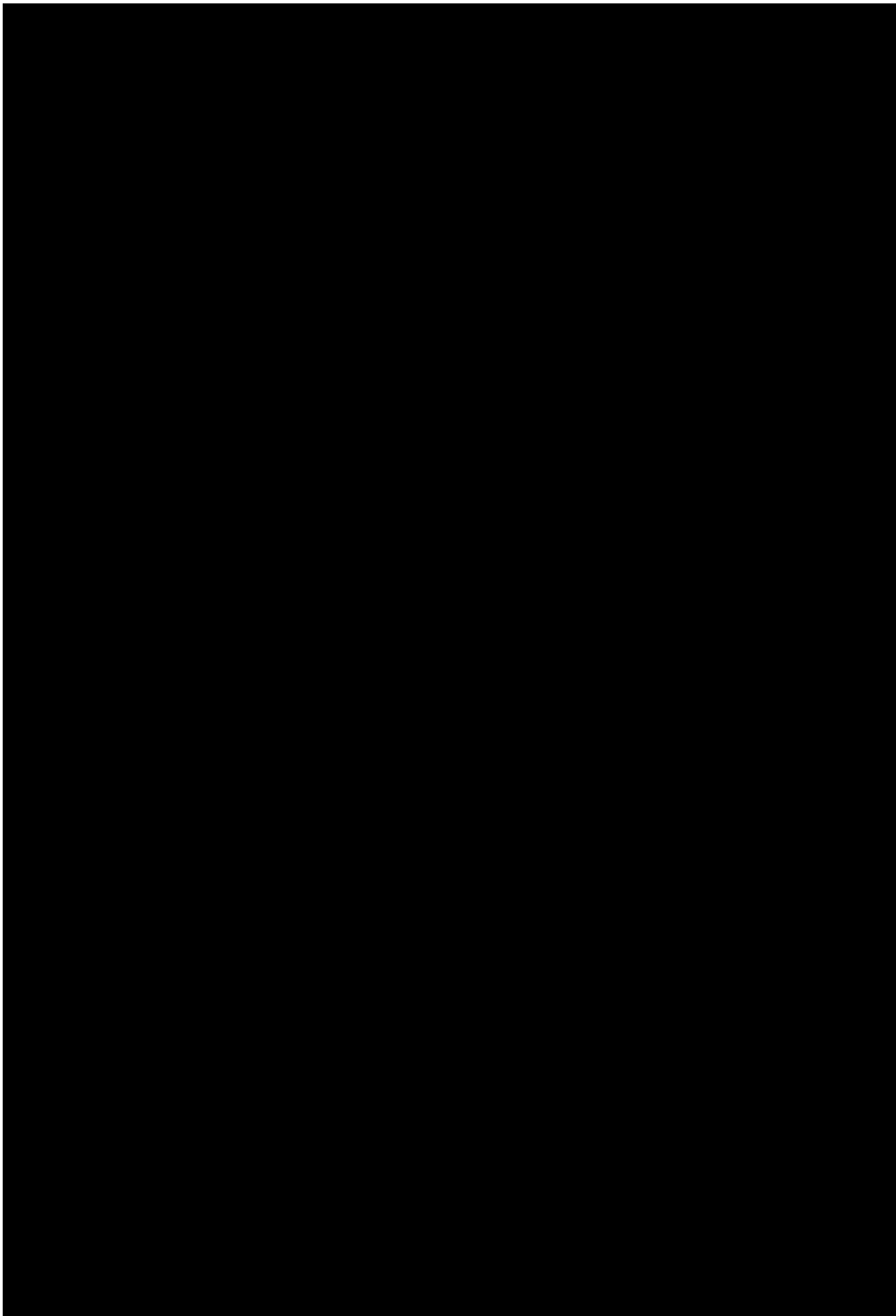


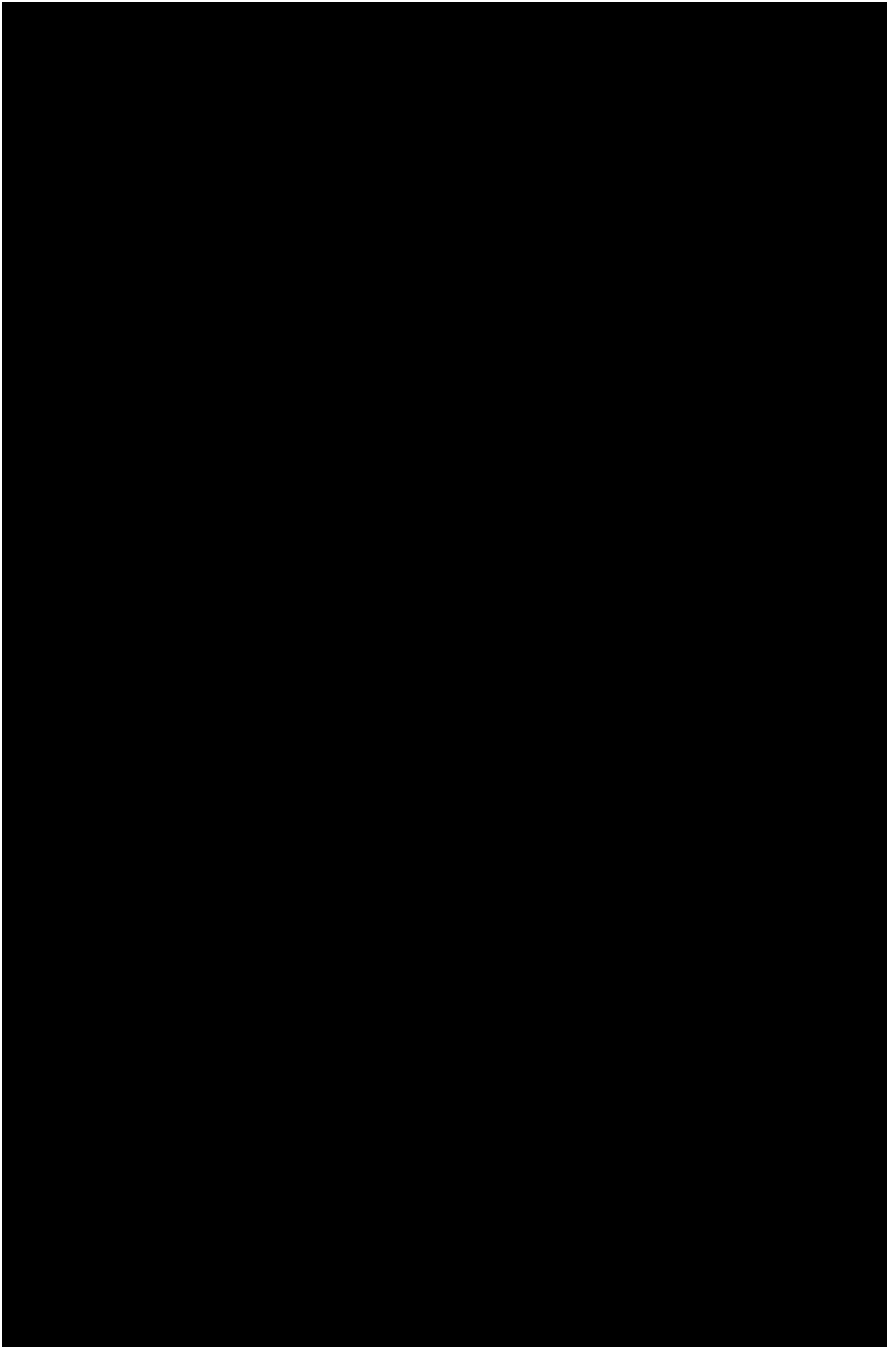


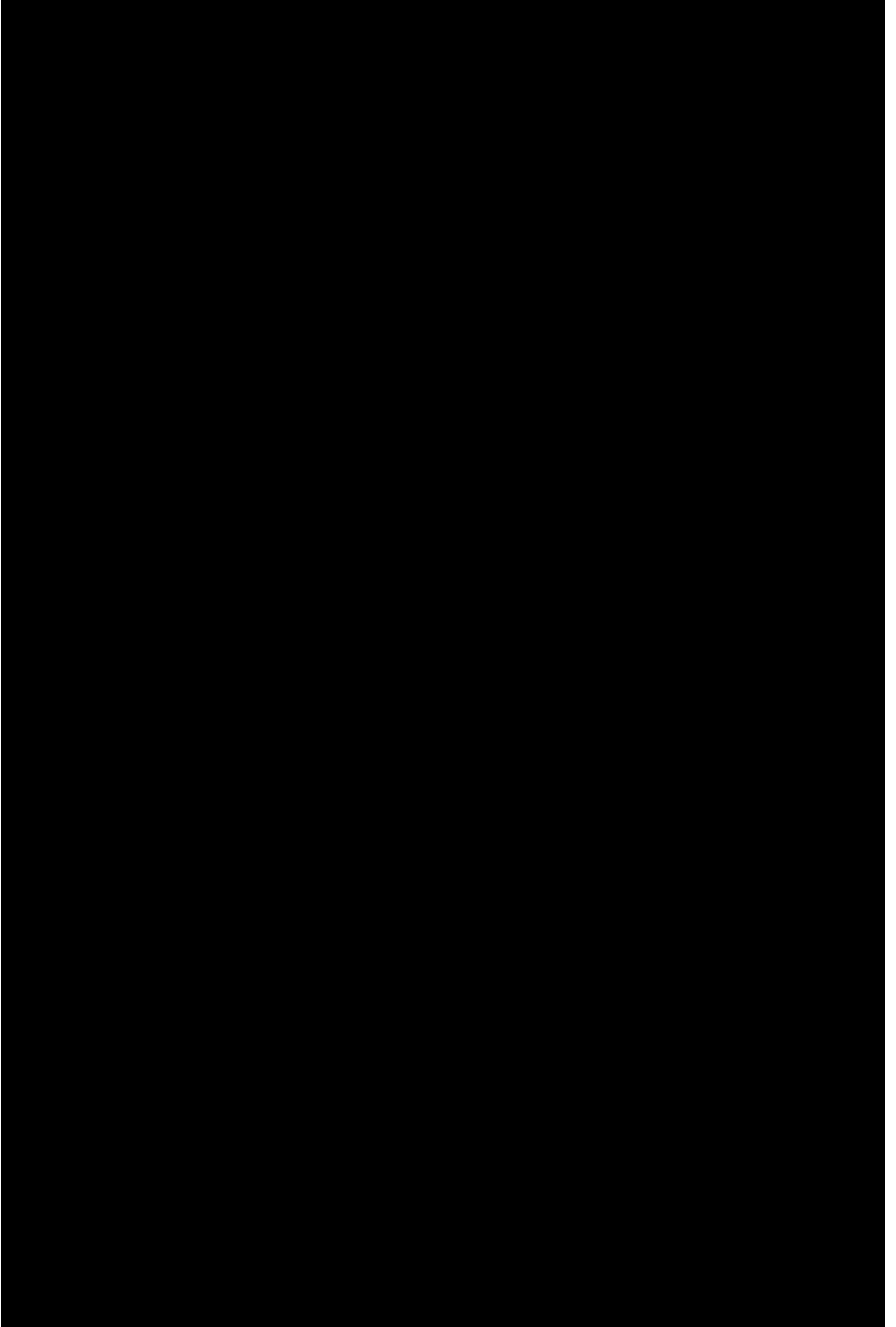


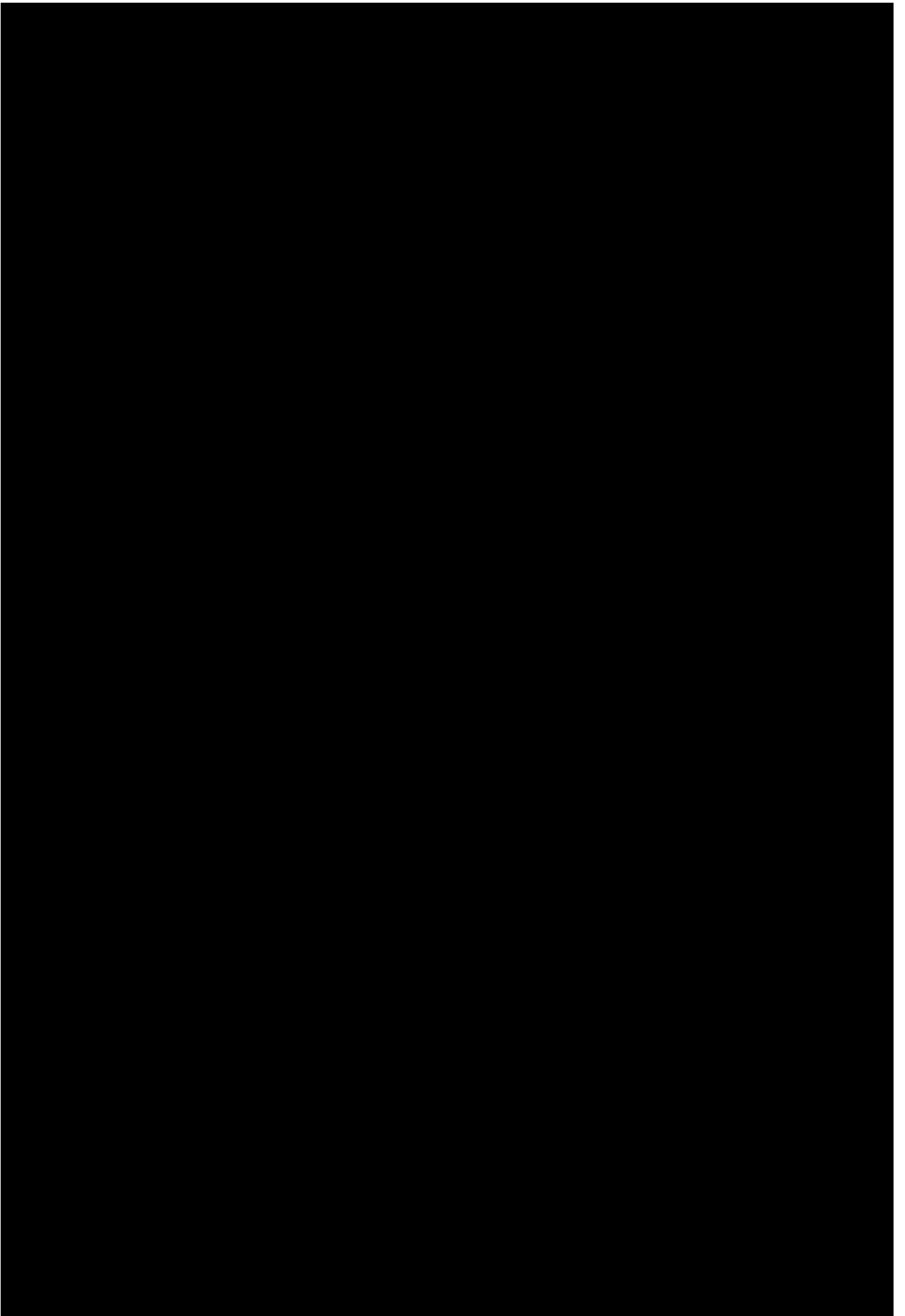


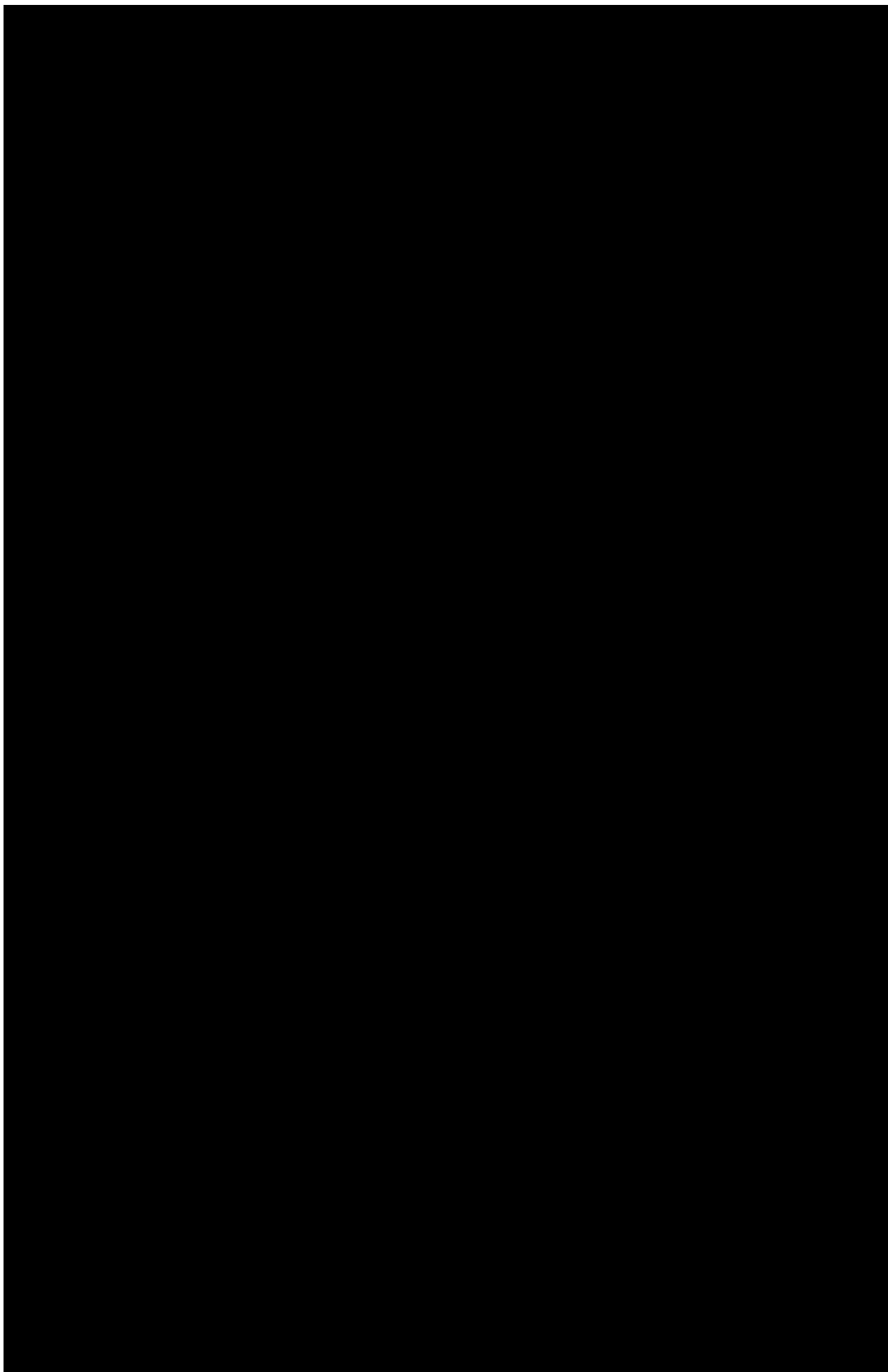














Attachment 7



Australian
Competition &
Consumer
Commission

22 April 2010

Statement of Issues — Murray Goulburn Co-operative Co. Limited – proposed acquisition of Warrnambool Cheese and Butter Factory Company Holdings Ltd

1. Outlined below is the Statement of Issues released by the Australian Competition and Consumer Commission (ACCC) in relation to the proposed acquisition of Warrnambool Cheese and Butter Factory Company Holdings Ltd (WCB) by Murray Goulburn Co-operative Co. Limited (Murray Goulburn) (proposed acquisition).
2. A Statement of Issues published by the ACCC is not a final decision about a proposed acquisition, but provides the ACCC's preliminary views, drawing attention to particular issues of varying degrees of competition concern, as well as identifying the lines of further inquiry that the ACCC wishes to undertake.
3. In line with the ACCC's *Merger Review Process Guidelines* (available on the ACCC's website at www.accc.gov.au) the ACCC has established a secondary timeline for further consideration of the issues. The ACCC anticipates completing further market inquiries by 7 May 2010 and anticipates making a final decision by 3 June 2010. However, the anticipated timeline can change in line with the *Merger Review Process Guidelines*. To keep abreast of possible changes in relation to timing and to find relevant documents, market participants should visit the Mergers Register on the ACCC's website at www.accc.gov.au/mergersregister.
4. A Statement of Issues provides an opportunity for all interested parties (including customers, competitors, shareholders and other stakeholders) to ascertain and consider the primary issues identified by the ACCC. It is also intended to provide the merger parties and other interested parties with the basis for making further submissions should they consider it necessary.

Background

5. In February 2010, Murray Goulburn provided a submission to the ACCC seeking clearance of its proposed acquisition of WCB under section 50 of the Act.
6. At this time, Murray Goulburn's offer to acquire WCB has been rejected. In December 2009, WCB revealed that it had rejected two indicative takeover proposals – one made by Murray Goulburn and one made by a third party. On

29 January 2010 Murray Goulburn made a proposal to WCB's Board to acquire WCB. This proposal was also rejected. On 19 February 2010 WCB rejected a revised takeover offer from Murray Goulburn.

7. On 22 February 2010 the ACCC commenced its review of the proposed acquisition at the request of Murray Goulburn.

The parties

Murray Goulburn Co-operative Co. Limited

8. Murray Goulburn is an integrated dairy co-operative company, which was formed in 1950, and is owned by approximately 2,600 supplier shareholders. Murray Goulburn's turnover for the 2008/2009 financial year was reported to be approximately \$2.4 billion.
9. Murray Goulburn's principal activities are the processing, manufacturing, packaging, distribution, marketing and wholesale supply of a range of milk and dairy products, including fresh dairy products (fresh white milk and cream), and 'non-fresh' dairy products (cheese, UHT milk, milk powder, butter, and whey products). Its products are produced under both private label and manufacturer brands.
10. In 2008/09 Murray Goulburn acquired approximately 3.25 billion litres of raw milk from dairy farmers. This represents approximately 36% of Australia's milk supply. Murray Goulburn currently sources raw milk from farms in the south east region of Australia comprising Victoria, the Riverina area of New South Wales, central and south east of regions of South Australia and Tasmania.
11. Murray Goulburn produces dairy products for both domestic consumption and export, with exports accounting for over half of Murray Goulburn's sales. Murray Goulburn exports to more than 100 countries and its international business accounts for approximately 45 per cent of Australia's dairy exports and approximately 9 per cent of world dairy trade. It is Australia's largest exporter of processed food.
12. Murray Goulburn's operations are organised across a number of business units. The majority of Murray Goulburn's products are sold under the retail brands shown in Table 1. Murray Goulburn also supplies cheese, milk, and cream products domestically as industrial ingredients to other food manufacturers.

Table 1 Murray Goulburn's branded products

Product	Brands
Fresh White Milk	Devondale
UHT Milk	Devondale Full Cream Milk, Devondale Skim Milk, Devondale Semi-Skim Milk, Devondale Point One, Devondale Smart Milk, Devondale Smart Plus, Devondale Reduce, Liddels Lactose Free Milk (full cream, low fat, skim)
Flavoured UHT Milk	Liddels Lactose Free Chocolate Milk
Cheese	Devondale Moo Zoo, Devondale Organic Tasty, Devondale Mild, Devondale Colby, Devondale Tasty, Devondale Light'N Tasty, Devondale Vintage, Devondale Sandwich Slices, Devondale Seven, Cobram Vintage Cheddar
Butter & Spreads	Devondale Butter, Devondale Dairy Soft, Devondale Extra Soft, Devondale Light, Devondale Light with Calcium
Yoghurt	Liddels Yoghurt
Creams	Devondale Thickened Cream, Devondale Long Life Thickened Cream, Devondale Sour Light, Liddels Lactose Free Thickened Light Cream
Other	Devondale Skim Milk Powder

Source: Murray Goulburn

13. Murray Goulburn has eight manufacturing sites located in Victoria and one in Tasmania which manufacture dairy products derived from processed raw milk.¹

Warrnambool Cheese and Butter Factory Company Holdings Ltd

14. WCB was established as a private company in 1888 and is the oldest surviving dairy company in Australia. WCB was publicly listed on the Australian Stock Exchange in May 2004. Many of WCB's shareholders also supply raw milk to WCB. In 2009 WCB's total revenue was \$441.1 million.
15. WCB has a raw milk intake of approximately 922 million litres acquired from farmers in south western Victoria – principally the regions surrounding Allansford, Simpson, and Ballarat; and the Adelaide Hills and Fleurieu Peninsula regions of South Australia.
16. WCB produces dairy products for both domestic and export markets, with exports accounting for over half of WCB's sales. WCB manufactures the following products:
- Cheese – the majority of the cheese produced at WCB's plant is standard cheddar which is on-sold in an unpackaged and unbranded form to other manufacturers to be further processed. WCB also produces a range of other natural cheeses including low fat cheddar, gouda, romano and swiss style cheeses. WCB's cheese products are sold to wholesale customers in Australia and on the international market;

¹ Murray Goulburn recently announced the closure of its cheese factory in Leitchville, Victoria. The raw milk previously processed in that factory will be re-directed and transported to Murray Goulburn's other facilities in western Victoria.

- Whey protein concentrate, which is primarily exported but also used as an ingredient in WCB's Prime Nutrition food supplements;
 - Butter and cream, sold mainly in bulk to domestic and international food manufacturers and wholesalers – including fresh cream, pasteurised cream, concentrated cream, frozen cream, salted butter, unsalted butter, butter blends;
 - Milk powders – Sungold branded skim milk powder products;
 - Fresh white and flavoured milk;
 - Bulk raw milk – WCB sells raw milk to other dairy processors for input into their products.
17. WCB's main processing plant is located in Allansford, Victoria. It also has a small speciality cheese cutting and wrapping plant at Mil Lel in South Australia, and a nutritional ingredients manufacturing plant in Allansford.
18. WCB and Royal Friesland Campina have a 50/50 joint venture company – Great Ocean Ingredients Pty Ltd – which manufactures a pre-biotic nutritional ingredient Vivinal GOS (galacto-oligosaccharides) for worldwide food, infant nutrition and pharmaceutical industries. Great Ocean Ingredients plant is located alongside WCB's plant at Allansford and has the capacity to produce up to 15,000 metric tonnes of Vivinal GOS. The majority of products manufactured by Great Ocean Ingredients are exported.

Industry background

19. The major categories of dairy products include fresh milk, flavoured milk, long life milk, cheese, butter, powders (and other non-fresh dairy), yoghurt, dairy desserts, cream and custard.
20. Processors acquire raw milk supplied by dairy farmers, and transform it into various dairy products for sale to retailers or for export. Some processors also sell product in bulk to other food manufacturers to produce various food products. In some cases, processors may acquire raw milk and on sell it to other processors.

Other industry participants

Suppliers of raw milk – dairy farmers

21. Dairy products are manufactured from raw milk that is produced and supplied by dairy farmers (farmers).

Processors

22. The major processors in Australia include National Foods, Parmalat, Murray Goulburn, Fonterra, Bega and WCB. Each of these organisations is active in the acquisition of raw milk and, to varying degrees, in the production

of dairy products. Processors supply both branded and ‘private label’ products to retailers.

- **Parmalat Australia Ltd (Parmalat)** (formerly Pauls Limited) is a wholly owned subsidiary of the Italian based global dairy company, Parmalat SpA. Its key operations include the production and distribution of fresh milk, cream, and yoghurt. It produces other long life and fresh dairy products and beverages, primarily for sale in domestic markets and some export supply.
- **Fonterra** is a co-operative owned by New Zealand dairy farmers. In Australia, Fonterra operates primarily through Fonterra Brands (Australia) Pty Ltd and Fonterra Australia Pty Ltd. Fonterra primarily supplies a range of cheese and milk products.

Bonlac Supply Company (BSC) acts as an agent for Fonterra Australia Pty Ltd (‘Fonterra Australia’) for milk supply in Victoria and Tasmania.

Bonlac’s shareholders are suppliers to Fonterra and their equity is invested in Fonterra Australia in the form of Unsecured Capital Notes.

- **National Foods** is a wholly owned subsidiary of Kirin Holdings Company Limited. Its principal activities are the processing, manufacturing, packaging, distribution and marketing of fresh milk, fresh dairy foods, juice and cheese.
- **Bega** is a private Australian-owned company. Bega’s main activities are the manufacture of cheese and cheese products, which it does from its manufacturing facilities in Bega, NSW and North Coburg, Victoria. All Bega branded cheese products are marketed in Australia by Fonterra. In April 2007, Bega acquired a 70% shareholding in the Victorian-based dairy company, Tatura Milk Industries Limited, which manufactures cream cheese, powders, infant formula and nutraceuticals.²

Milk brokers

23. In addition to acquiring milk directly from farmers, to varying degrees, processors also acquire milk from milk brokers. An example of a milk broker is United Dairy Power, (**UDP**), who acquires raw milk from farmers and resells this milk to processors for processing and the manufacture of dairy products. In this way, UDP is both a competitor in the acquisition of raw milk from farmers and the supply of raw milk to food manufacturers.

Milk swaps

24. In addition to acquiring milk directly from farmers, processors also acquire milk through ‘milk swaps’. These are direct swaps of volumes of milk between processors that have farmers in regions that are not proximate to their own plants, but that are close to their competitors’ plants.

² Nutraceuticals are extracts of food with claimed medicinal effects.

25. For example:
- A processor whose plant is in northern Victoria could collect milk from farmers in Gippsland, and provide it to a competitor whose plant is in the Gippsland area.³
 - A ‘swap’ would be completed if the Gippsland processor provided equal volumes of milk collected from its own farmer-suppliers to the northern Victoria processor. The ACCC understands that under swap arrangements, farmers are paid under the payment structure of the processor with which they have a supply agreement.

Market inquiries

26. On 23 February 2010 the ACCC commenced market inquiries regarding the proposed acquisition. A range of interested parties provided responses, including farmers, other dairy processors, buyers of wholesale dairy products and dairy industry associations.

With/without test

27. In assessing a merger pursuant to section 50 of the Trade Practices Act 1974, the ACCC must consider the effects of the transaction by comparing the likely competitive environment if the transaction proceeds (the “with” position) to the likely competitive environment if the transaction does not proceed (the “without” or “counterfactual” position) to determine whether the acquisition is likely to substantially lessen competition in any relevant market.
28. Having regard to the history of commercial events regarding the potential sale of WCB as outlined above and on the basis of its inquiries to date, the ACCC’s preliminary view is that:
- in the event that Murray Goulburn does not acquire WCB, a likely counterfactual may be that a new entrant bidder could make an offer to acquire WCB that is acceptable to the Board of WCB; or
 - in the event that Murray Goulburn does not acquire WCB, a likely counterfactual may be that WCB is not acquired by another party.
29. The ACCC considers that irrespective of these potential alternatives, the future state of competition without the proposed acquisition is likely to be the same as it is today and WCB continues to operate as an independently owned processor.

Relevant markets

30. Murray Goulburn and WCB primarily overlap in the acquisition of raw milk from farmers, the wholesale supply of various dairy products to customers such as supermarkets and food service providers, and the wholesale supply of bulk raw milk and bulk cream which are used as inputs by downstream manufacturers of food products.

³ These regions are mentioned here for illustrative purposes only.

31. On the basis of its inquiries to date, the ACCC's preliminary view is that the relevant markets are likely to be:⁴
- The separate markets for the acquisition of raw milk in:
 - i. south west Victoria;
 - ii. south east South Australia; and
 - iii. the central region of South Australia.
 - The market for the manufacture and wholesale supply of fresh milk in Victoria.
 - The market for the manufacture and wholesale supply of flavoured milk in Victoria.
 - The national market for the manufacture and wholesale supply of powdered milk products.
 - The separate markets for the supply of bulk raw milk in:
 - i. south west Victoria;
 - ii. south east South Australia; and
 - iii. central South Australia.
 - The market for the manufacture and supply of bulk cream in Victoria and South Australia.
 - The national market for the manufacture and wholesale supply of packaged and bulk cheese.
 - The national market for the manufacture and wholesale supply of packaged and bulk butter.
 - The national markets for the manufacture and wholesale supply of whey products.
 - The national market for the manufacture and wholesale supply of packaged cream.

Markets for the acquisition of raw milk

32. Market inquiries to date indicate that there are separate regional markets for the acquisition of raw milk. In particular, information provided to the ACCC to date

⁴ WCB has one retail outlet in Warrnambool which sells its branded cheese products. Murray Goulburn currently does not have retail outlets, but it is certainly possible that it could commence retail operations in future. However, the ACCC considers that given the large number of other cheese retailers, including supermarkets, it is unlikely that the proposed acquisition would raise competition issues in a retail market. Therefore, this potential market is not considered further.

indicates that there are separate markets in each of the following regions – south west Victoria, south east South Australia and central South Australia.

33. These regional areas are generally defined by the distances between dairy processors' plants and the dairy farms that supply them, usually within a radius of less than 400 kilometres. Information obtained by the ACCC during market inquiries indicates that processors would incur substantially higher costs if they were to acquire and transport large quantities of raw milk from farms more than 400 kilometres from their processing plants.
34. The ACCC understands that to some extent, drought conditions have resulted in processors acquiring raw milk from farms that are located at greater distances from their processing plants than has traditionally been the case. However, despite this, the ACCC's preliminary view is that in response to a small but significant decrease in price, processors with plants that are located more than 400 kilometres from the dairy producing regions in central and south east South Australia, and south west Victoria, are unlikely to acquire raw milk in substantial volumes from these regions.
35. However, the ACCC is also considering whether milk swaps might broaden the geographic markets.

Markets for the wholesale supply of milk

36. As outlined above, the merger parties manufacture and supply various types of milk products, including fresh flavoured milk, UHT flavoured milk, fresh white milk and powdered milk.
37. In previous matters, the ACCC has defined markets for the supply of various milk products as follows:⁵
 - State-based markets for the manufacture and wholesale supply of fresh white milk;
 - State-based markets for the manufacture and wholesale supply of flavoured milk; and
 - A national market for the manufacture and wholesale supply of UHT white milk.
38. The ACCC has not received information during its market inquiries to suggest that the definition of these markets should be altered. However, market definition is unlikely to significantly affect the competition analysis for the current proposed acquisition as it involves minimal aggregation of the supply of these products.

⁵ ACCC, National Foods proposed acquisition of Australian Co-operative Foods Limited and associated joint venture with Warrnambool Cheese and Butter Factory Company Holdings Limited, *Public Competition Assessment*, 19 September 2008.

Powdered milk

39. Powdered milk is manufactured from raw milk using milk-drying equipment. It is used as an ingredient in the manufacture of various food products, including dairy desserts such as yoghurt and ice-cream. It can also be recombined into liquid milk when fresh milk supply is limited. The ACCC considers that substitution between fresh and powdered milk is limited on both the demand and supply side.
40. The ACCC considers there may be separate markets for the bulk supply of powdered milk as distinct from powdered milk that is packaged for wholesale supply. However, this distinction is unlikely to materially affect the competition analysis for this matter.
41. Powdered milk is a long-life product, and most Australian production of powdered milk is exported. Therefore, the relevant geographic market is likely to be national.

Markets for the supply of bulk raw milk

42. Murray Goulburn and WCB both supply raw milk in bulk quantities to domestic food manufacturers, including other food manufacturers.⁶
43. The ACCC understands that for food manufacturers, bulk raw milk is a significantly lower-cost ingredient than processed milk. Market inquiries suggest that there are no close substitutes for raw milk as an ingredient for many food manufacturers. However, in its next phase of market inquiries the ACCC will explore the substitutability of powdered milk in this context.
44. Market inquiries revealed that bulk milk is delivered to customers straight from the farm gate. It is then used as an ingredient in the manufacture of other foods. Therefore, the ACCC considers the geographic dimension of the relevant markets for the supply of raw milk is likely to mirror the geographic scope of the markets for the acquisition of raw milk. Accordingly, it is likely that there are separate regional markets for the supply of raw milk in each of south east South Australia, central South Australia and south west Victoria, where Murray Goulburn and WCB acquire raw milk which can then be delivered to food manufacturers.

Markets for the supply of 'non-fresh' dairy products – cheese, butter, cream, and whey products

45. Murray Goulburn and WCB both manufacture and supply cheese, butter, cream (bulk and packaged) and whey products for supply in domestic and export markets.
46. Consistent with its consideration of previous matters, the ACCC considers that there is little demand-side substitution between each of these products.

⁶ This is distinct from the separate markets for the wholesale supply of fresh and flavoured milks, where the products are packaged.

47. On the supply-side, the ACCC notes that many dairy processors manufacture multiple products with raw milk as the base input. However, market inquiries suggest that the manufacture of each of these product categories involves the use of specific rather than shared infrastructure. It appears that a supplier of one of these dairy products is unlikely to switch to supplying another of these products without undertaking significant investment in specific equipment. This may limit the degree to which it is profitable to redeploy production processes for one dairy product to another in response to a small but significant increase in prices. Therefore, the ACCC considers that the degree of supply-side substitution between butter, cheese, cream, and whey is likely to be limited.
48. Accordingly, the ACCC considers that there are separate product markets for cheese, butter, cream and whey products.⁷
49. However, it appears there are some differences in the supply of cheese, butter, cream and whey products to wholesale customers for the purposes of retail consumption, and customers who use these products in bulk form as ingredients for the manufacture of food. These matters are outlined below.

Markets for the supply of bulk cream

50. Murray Goulburn and WCB supply bulk cream to downstream manufacturers who use it as an ingredient in the manufacture of certain food products. Unlike other dairy products, the ACCC considers there may be a market for the bulk supply of cream that is separate from the supply of packaged cream for wholesale customers, primarily because it appears there is limited demand-side and supply-side substitution between the two categories of cream.
51. During the process of standardising milk for retail consumption, cream is separated from the milk and pasteurised. This cream can be used either as an input in the manufacture of thickened cream and other products such as butter, yoghurt and dairy desserts, or it can be sold in bulk to other manufacturers who use the cream as an ingredient for various food products.
52. The ACCC understands that bulk cream is delivered to customers in tankers and in an unpackaged form, directly after the initial pasteurisation process.
53. By contrast, other cream undergoes additional and more complex processing before it can be sold in wholesale markets for retail consumption. These include further pasteurisation, the addition of flavouring and other additives which prolong the shelf life of the product and make it acceptable for consumer tastes. The product is also packaged for sale in retail outlets.
54. Therefore, the ACCC considers there are likely to be separate markets for the supply of bulk cream and the wholesale supply of packaged cream products.
55. The ACCC understands that packaged cream typically has a shelf life of up to 35 days. The ACCC's market inquiries indicate that bulk cream becomes

⁷ That said, dairy processors are more likely than any new entrant to commence supply of a substitute product given they already have access to milk supply from farmers and the infrastructure to receive raw milk and distribute products to wholesale customers.

unusable after approximately five days. In addition, bulk cream is a low-value product and the transport costs relative to the value of the product mean that supply over long distances may be uneconomic. Therefore, the geographic markets for bulk cream are likely to be based on the proximity of the merger parties' processing facilities in Victoria and South Australia to the manufacturing facilities of bulk cream buyers.

56. That said, the ACCC is considering whether frozen cream is a potential demand-side substitute for the supply of bulk fresh cream. Market inquiries to date have been equivocal as to the extent to which this is the case and the ACCC is continuing to investigate this issue.
57. The ACCC requires further information to form a more concluded view on the geographic dimensions of competition for the supply of bulk cream and hence the likely competitive effects of the proposed acquisition in this context.

The market for the wholesale supply of packaged cream

58. For the reasons provided above, the ACCC considers there may be a separate market for the wholesale supply of packaged cream.
59. As noted above, the ACCC understands that packaged cream has a shelf life of up to 35 days. Accordingly, and consistent with the ACCC's reviews of previous matters, the ACCC considers the relevant geographic market is likely to be national.

The market for the supply of bulk and packaged cheese

60. Murray Goulburn and WCB manufacture and supply various types of cheese in bulk and packaged forms.
61. The ACCC understands that supply of bulk cheese differs from the supply of packaged cheese in that bulk cheese is delivered to customers in a state that undergoes further processing. Buyers of bulk cheese either use it as an ingredient in the manufacture of other food products, or 'cut and wrap' the cheese for subsequent sale under their own brands.
62. Cheese that is supplied to wholesale customers is cut, wrapped, packaged and branded by processors such as Murray Goulburn and WCB and distributed through retail outlets such as supermarkets.
63. The key difference between these forms of supply is the 'cut and wrap' stage of production, which is unlikely to involve significant additional investment to the manufacturing and supply process. Therefore, the ACCC's preliminary view is that bulk and packaged cheese may be substitutable on the supply-side and likely to fall within one product market.
64. The geographic dimension for the supply of both bulk and packaged cheese appears to be national as there is significant interstate and export trade, as well as significant volumes of imported cheese.

Market(s) for the supply of bulk and packaged butter

65. The ACCC presently does not have information to indicate the extent of substitution between the supply of butter in bulk form for use as an ingredient for manufacturing other food products, as opposed to a packaged form for sale to wholesale customers and eventual retail consumption. However, this distinction is unlikely to affect the competition analysis of the proposed acquisition.
66. The geographic dimension for the supply of butter is likely to be national. There is significant interstate trade, exports and imports of butter.

The market for the bulk supply of whey products.

67. Murray Goulburn and WCB both supply whey products. Whey is primarily a low-value by-product of the cheese manufacturing process and is primarily used as an ingredient for many different types of foods, sports drinks and health products. As such, the ACCC considers that the relevant functional level for the supply of whey products is in bulk form.
68. The ACCC understands that the majority of whey produced in Australia is exported. Market inquiries also indicate that whey can be readily imported. Therefore, the geographic dimension is likely to be national.

Statement of issues

69. For the purposes of this Statement of Issues, the issues in this matter are divided into three categories, 'issues of concern', 'issues that may raise concerns', and 'issues unlikely to pose concerns'.

Issues of concern

Markets for the acquisition of raw milk from farmers in the south west region of Victoria and central and south east regions of South Australia

70. The ACCC is of the preliminary view that the proposed acquisition will be likely to have the effect of substantially lessening competition in the markets for the acquisition of raw milk from farmers in the south west region of Victoria and the central and south east regions of South Australia.
71. The ACCC considers that in the south west Victoria market and the south east South Australia market, the proposed acquisition would result in the aggregation of two major competitors in markets that are already highly concentrated. In the central South Australia market, National Foods is and will remain the major acquirer of raw milk; however, the proposed acquisition would aggregate the only two other sizeable acquirers of raw milk.
72. Market inquiries have indicated there is strong rivalry between Murray Goulburn and WCB in these markets. Evidence of this includes:

- In the first half of 2009, a large number of farmers switched from WCB to Murray Goulburn in response to a reduction in the raw milk prices paid by WCB in the south west region of Victoria;
 - Information that suggests that Murray Goulburn actively competes to obtain and retain farmer-suppliers. Such competition occurs in a number of ways, including on the basis of opening prices and step-up payments for raw milk throughout the yearly milk production season;
 - Information that suggests that processors compete on the basis of non-price benefits offered to farmers. These include loans with favourable terms for farm projects, field advice, discounted hardware supplies and grain and fodder supplies.
73. The ACCC notes the presence of existing competitors in each of the relevant markets as follows:
- In south west Victoria the firms competing with Murray Goulburn and WCB to acquire raw milk are Fonterra, National Foods, UDP and Bega.
 - In south east South Australia, the competitors to the merger parties for the acquisition of raw milk are National Foods and Fonterra.
 - In central South Australia, the only sizeable competitor to the merger parties is National Foods.
74. However, market inquiries suggest that the competitors in each of the acquisition markets are unlikely to have the ability and incentive to exert a strong competitive constraint on the merged entity. From market inquiries conducted to date, it appears that the merged entity's competitors would either:
- have insufficient spare processing capacity to acquire additional milk from farmers in large volumes, following a decrease in raw milk prices; and/or
 - face insufficient incentives to invest in additional processing capacity, as
 - i. demand for downstream products in domestic markets is insufficient to provide necessary returns on investment in new capacity; and
 - ii. export markets also provide insufficient certainty of a return on investment.
75. The ACCC notes arguments to the effect that, given its status as a co-operative company, Murray Goulburn has no incentive to reduce prices paid for raw milk or otherwise act to the detriment of its farmer suppliers.
76. However, the ACCC's market inquiries suggest that many farmers benefit from the competition between WCB, Murray Goulburn and their competitors, including the receipt of tangible financial benefits from price competition and other non-price benefits.
77. The ACCC considers that despite Murray Goulburn's status as a farmers' co-operative, the removal of WCB would result in a permanent change to the structure of the relevant markets and competitive dynamics.

Coordinated effects

78. Market inquiries suggest that the proposed acquisition may increase the likelihood of coordinated effects in the acquisition of raw milk from farmers in the south west Victoria market. The ACCC notes the farm gate pricing arrangements between Fonterra and Bonlac Supply Company (BSC) in this regard. As noted above, BSC acts as an agent for Fonterra for the acquisition of raw milk.
79. In its submission to the Senate Committee Inquiry into competition and pricing in the dairy industry, BSC describes Fonterra's supply agreements, via BSC, for the acquisition of raw milk from farmers (suppliers), and indicates that:
- Central to the Supply Agreement is a commitment from Fonterra to pay its suppliers a guaranteed minimum return that is not less than that paid by the volume leading Victorian milk processor. In the year ending 30 June 2009, Fonterra's payments to farmers exceeded this minimum bundled return by \$28 million.⁸*
80. The 'volume-leading' Victorian milk processor is Murray Goulburn. The ACCC considers that in the present competitive environment, Fonterra is likely to face an incentive to maintain prices that are competitive with WCB as well as Murray Goulburn, in order to attract and retain milk supply.
81. The ACCC is concerned that in the absence of competition from WCB post-acquisition, Fonterra's only incentive would be to set prices at the minimum level necessary to fulfil its commitment to match Murray Goulburn's prices in Victoria. Further, the ACCC considers that because Murray Goulburn is aware that Fonterra is contractually obliged to match Murray Goulburn's price, Murray Goulburn may not have a strong incentive to compete by offering better prices to farmers for raw milk in the absence of competition from WCB.
82. The ACCC is seeking further information on whether the proposed acquisition is likely to give rise to, or increase the prospects of, coordinated effects in the south west Victorian market for the acquisition of raw milk.
83. It is not currently clear whether similar arrangements exist in the other markets for the acquisition of raw milk. Therefore, the ACCC seeks further information about the potential for increased coordinated conduct in each of the acquisition markets in South Australia as a result of the proposed acquisition.

Barriers to entry

84. Market inquiries have revealed the following requirements may be significant barriers to entry and expansion:
- The capital costs of milk processing infrastructure are high, and would mostly be sunk. The ACCC understands that establishing a new plant of a size that could constrain the merged entity would cost in excess of \$100 million. In addition, fluctuations in international commodity prices and

⁸ Bonlac Supply Company, *Submission to the Senate Inquiry into competition and pricing in the Australian dairy industry*, October 2009.

currency exchange create uncertainty about the level of returns on these investments.

- Murray Goulburn may have excess production capacity, as suggested by the recent closure of its Leitchville cheese processing plant.
- Some farmers are contracted to suppliers on a 1- 5 year basis and there could be other barriers to farmers switching readily. This may increase difficulties involved in quickly building a critical mass of milk suppliers to justify investment in new or additional processing.

Preliminary view on competition issues in acquisition markets

85. For the reasons outlined above, the ACCC considers that if the merged firm were to reduce the prices it offers for raw milk and/or other non-price benefits post-acquisition, it would be unlikely that competing processors in each of the respective relevant markets would have the ability and incentive to compete vigorously to acquire raw milk from farmers who may otherwise wish to switch away from supplying the merged entity. This compares to the present situation where it appears that WCB provides a strong competitive constraint.
86. Therefore, the ACCC is concerned that the proposed acquisition would substantially lessen competition for the acquisition of raw milk from farmers in the relevant markets within South Australia and Victoria. The potential effects in the relevant markets include:
- A significant reduction in farm gate prices paid to farmers for raw milk; and
 - Reduced competition in the offer of non-price terms such as finance, field advice services and discounted hardware and grain supplies.

Issues that may raise concerns

Bulk supply of raw milk to dairy product manufacturers

87. The ACCC considers that competition concerns may arise in relation to the bulk supply of raw milk to dairy product manufacturers in south east South Australia where the merger parties supply raw milk in bulk volumes.
88. The ACCC is continuing to gather information about buyers of bulk raw milk in central South Australia and south west Victoria. To the extent that there are other buyers of bulk raw milk in these markets, the proposed acquisition may raise concerns, as it would result in the aggregation of two of the largest suppliers of bulk raw milk.
89. In the south east region of South Australia there are four processors that acquire raw milk and are competitors or potential competitors in the supply of bulk raw milk to downstream food manufacturers.
90. However, market inquiries also suggest that only two of the four processors – the merger parties – are likely to be in a position to consistently supply bulk raw milk to these food manufacturers and that WCB is a strong competitor in the supply of bulk raw milk in this market. Market participants have raised concerns

that the competitors of the merger parties only occasionally have surplus raw milk available to sell to third parties. However, the ACCC requires further information about the relative abilities of the processors to supply consistent volumes of bulk milk.

91. Market inquiries to date suggest that countervailing power is limited, as dairy product manufacturers are unlikely to be in a position to readily arrange the necessary infrastructure to collect and store milk, particularly given the seasonal variations in milk production. The ACCC also recognises that many major food manufacturers are vertically integrated in the supply of bulk raw milk. Therefore, the ACCC continues to investigate the potential for customers in these markets to exercise countervailing power.
92. The ACCC also continues to investigate the extent to which bulk raw milk can economically be transported to customers beyond the geographic markets listed here.

Supply of bulk cream

93. As indicated above, the ACCC's market inquiries suggest that the relevant geographic dimension for the supply of bulk cream to food manufacturers may be a market comprising Victoria and South Australia.
94. Market inquiries suggest that there are a range of processors that produce bulk cream. However, a number of these use their bulk cream for their own downstream manufacturing of products which have cream as an input, such as butter, yoghurt, thickened cream and dairy desserts. The ACCC understands that these processors will only sell bulk cream to other food manufacturers when they have a surplus of cream. The extent to which there is a surplus of cream depends on the fat content of raw milk, which varies.
95. Market inquiries suggest that compared to the fresh milk processors, Murray Goulburn and WCB are in a better position to supply bulk cream to food manufacturers as they manufacture small quantities of cream products relative to their intake of raw milk and consequently have more surplus cream to sell in bulk to food manufacturers. On this basis, the proposed merger may result in a significant increase in concentration in the supply of bulk cream to food manufacturers. However, these are preliminary observations, and further information is needed to determine the extent of existing and future competition between the merger parties in this market.
96. WCB may be considered to be a strong competitor in this market. The ACCC understands that this is because WCB has large quantities of bulk cream to shift – WCB is a major manufacturer of skim milk powder, which produces bulk cream as a by-product and WCB has only a small downstream presence in the manufacture of products that use cream as an input.
97. Therefore, market inquiries have raised a concern that post-acquisition, Murray Goulburn will have the ability and incentive to increase the price of bulk cream supplied to customers in this market.

Issues unlikely to pose concerns

98. The ACCC considers that the proposed acquisition is unlikely to result in a substantial lessening of competition in the following markets:

The (separate) national markets for the supply of the following 'non-fresh' dairy products:

- the national market for the supply of bulk and packaged cheese;
 - the national market(s) for the supply of bulk and packaged butter;
 - the national market for the supply of packaged cream;
 - the national market for the bulk supply of whey products; and
 - the national market for the wholesale supply of powdered milk products.
99. In the national market for the manufacture and wholesale supply of bulk and packaged cheese, the ACCC notes that the proposed acquisition would result in the aggregation of 5 to 4 major producers of cheese that is manufactured in Australia. The ACCC understands that approximately 28 per cent of cheese sold in Australia is imported. On this basis, the ACCC's preliminary view is that the proposed acquisition is unlikely to substantially lessen competition in the national market for the manufacture and supply of bulk and packaged cheese. However, the ACCC invites further submissions and will further consider this product market if it considers that such an assessment is necessary.
100. In the other markets listed above, the ACCC considers that post-acquisition, the merged entity is likely to be constrained by existing domestic competitors, and competition from imports.

The markets for the wholesale supply of fresh milk in Victoria, and the wholesale supply of flavoured milk in Victoria

101. The ACCC considers that the proposed acquisition is unlikely to result in a substantial lessening of competition in the separate markets for the wholesale supply of fresh milk in Victoria, and the wholesale supply of flavoured milk in Victoria.
102. In these markets, the ACCC considers that the proposed acquisition would result in a small increase in market concentration and the merged entity is likely to be constrained by existing competitors.

Areas under further investigation

103. The ACCC is seeking information and evidence from market participants in relation to the preliminary competitive analysis outlined in this Statement of Issues, and in particular, whether there are further factors that should be taken into consideration by the ACCC in forming a concluded view, including:

- Whether milk swaps are likely to broaden the geographic scope of competition in markets for the acquisition of raw milk. For example, whether a milk processor located more than 400 kilometres from a dairy farming region could constrain the merged entity by acquiring milk in the region and re-selling it to a competitor with processing facilities that are proximate to the farms.
- The extent to which frozen cream is a substitute for fresh cream in the manufacture of downstream dairy products, such as processed cheese, cream cheese, and ice cream.
- The extent to which fresh bulk cream can be economically transported.
- The extent to which bulk raw milk can be economically transported across state borders or beyond localised markets, such as south west Victoria and the central and south east regions of South Australia where the merger parties overlap in the acquisition and resupply of raw milk for downstream processing.
- The likelihood that downstream dairy product manufacturers could bypass the merged entity through backward integration into raw milk acquisition and collection.

104. The ACCC also welcomes comments and information on other matters raised in this Statement of Issues.

ACCC's future steps

105. The ACCC will finalise its view on this matter after it considers market responses invited by this Statement of Issues.
106. The ACCC now seeks submissions from market participants on each of the issues identified in this Statement of Issues and on any other issue that may be relevant to the ACCC's assessment of this matter.
107. Submissions are to be received by the ACCC no later than 7 May 2010. The ACCC will consider the submissions received from the market and the merger parties in light of the issues identified above and will, in conjunction with information and submissions already provided by the parties, come to a final view in light of the issues raised above.
108. The ACCC intends to publicly announce its final view by 3 June 2010. However the anticipated timeline may change in line with the *Merger Review Process Guidelines*. A Public Competition Assessment for the purpose of explaining the ACCC's final view may be published following the ACCC's public announcement.