

**IN THE DISTRICT COURT**  
**HELD AT TAURANGA**

**CRN: 05079500275-82**

**BETWEEN**

**COMMERCE COMMISSION**

Informant

**AND**

**PROBITAS LIMITED and**  
**EWAN MALCOLM CAMPBELL**

Dates of Hearing            9-13 October 2006; 19,  
   22-24 January 2007

Appearances                A McClintock and E McGill for the Informant  
   EM Campbell in person (and for the Defendant  
   company) with him G Israel as McKenzie  
   friend

Judgment                    26 March 2007

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**JUDGMENT OF JUDGE JR CALLANDER**

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## **Preliminary Observations**

- [1] Our present standards of living, industry, and commerce have evolved and advanced through innovation, invention, improvisation and ingenuity. In recent centuries scientific advances and inventions have improved the human lot to an unprecedented and every increasing extent. New ideas — tested, proved and applied — add to the cornucopia of human knowledge. Some ideas work; others fail. Valuable inventions and ideas are the work of genius, imagination, chance, or sheer hard work. Most of us, the consumers of such new concepts and developments, are trustingly hungry for innovations that make for a healthier, happier, and easier life.
- [2] The dualism of good and bad applies to inventors. There are the honest, sincere and proper innovators, genuinely trying to advance humankind. Then there are the swindlers, snake-oil salesmen, religionists, and pseudo scientists who part the naive from their money by scams, confidence schemes, and frauds. As the statesman-philosopher Edmund Burke observed: "The credulity of dupes is as inexhaustible as the invention of knaves".
- [3] The duped, aghast and angry at being swindled,— their foolishness or greed exploited and exposed — seek retribution and redress.
- [4] The trick, it seems, is to sort the genuine from the bogus, the legitimate from the misleading and deceptive. One reason for the Fair Trading Act 1986 was to ban misleading conduct and deceptive practices used by predatory con artists. Investigators employed by the Commerce Commission are given wide powers of search, inspection and seizure. The Courts may fine convicted individuals up to \$60,000 and bodies corporate up to \$200,000 for each proved offence.
- [5] As with all human behaviour there are shades of grey. Not all those who misinform or mislead us do so in a blatant or outrageous way. Some are subtle and restrained with their spin. Some even believe their own misperceptions. Others are simply crackpots.

[6] The question in this case is whether Mr Campbell is as upright and honest as the name of his product "*Probitas*" suggests, or whether he is ripping off members of the farming community by extolling false virtues of his alleged soil enhancing system.

[7] It is hard for most of us, in an increasingly complex world, to distinguish science from "magic," and to know what is soundly based on scientific and logical principles, and what is not. "Magical thinking" for reasons that are too complex to explore in the context of a judicial decision, holds a strong attraction for humankind. It almost seems that some people are capable of believing anything at all.

[8] The physicist Professor Robert L Park in *Voodoo Science: The Road from Foolishness to Fraud*, Oxford University Press, 2000 says in his preface (p viii)

Of the major problems confronting society — problems involving the environment, national security, health, and the economy -there are few that can be sensibly addressed without input from science. As I sought to make the case for science, however, I kept bumping up against scientific ideas and claims that are totally, indisputably, extravagantly, wrong, but which nevertheless attract a large following of passionate, and sometimes powerful, proponents. I came to realize that many people choose scientific beliefs the same way they choose to be Methodists, or Democrats, or Chicago Cubs fans. They judge science by how well it agrees with the way they want the world to be.

[9] The ability to calmly and objectively analyse and assess the efficacy of a snake oil is very difficult for lay people like us. We are unfamiliar with the scientific method. We are also sometimes distrustful of scientific methods because we know scientists sometimes get things very wrong. How do we really know whether the oil will cure the illness? How can we tell the oddball or crook from the genius? Perhaps the sceptics and debunkers are wrong and the eccentric oddball is right? Galileo, Arrhenius, Darwin, and the Wright Brothers were once debunked. Debunking is a dangerous sport if it dismisses new and valuable ideas without a careful hearing and assessment of the evidence. It is a destructive sport if it discourages legitimate and inventive development of ideas and products of potential benefit to mankind.

[10] With 6.5 billion people to feed - twice the 1950 world population - soil fertility is a universal and crucial issue. Technological and scientific advances in understanding fertilisers and soil fertility are of immense significance. While fertilisers are not the sole factor affecting plant yields, they are still, especially in an agricultural economy like ours, of huge importance and expense. As I was told during

the hearing, the New Zealand fertiliser industry has a turnover of about approximately \$1 billion each year.

### **The Judge's Role**

[11] My role is neither to debunk nor approve. I have no qualifications or special understanding or soil fertility issues. My judicial function is much more refined and specific. The Law does not require me to apply scientific method but legal method. My function is to focus on the statutory prohibitions and to decide whether the defendants have been shown to have breached those provisions.

### **The Burden and Onus of proof**

[12] It is important for a defendant without legal counsel to understand how a case like this works. Mr Campbell should understand that the Commission, as the informant bringing the charges must satisfy me that the charges are properly made out.

[13] The Commission has the burden of satisfying me, from the evidence, beyond reasonable doubt, that one or more of the charges are proved. Subject to a point I will make later about Mr Campbell's decision not to testify, the Defendants need not prove anything. The onus is on the prosecution to do all the proving. The starting point is the presumption of innocence. The defendants are innocent until guilt is proved. The Crown must prove that guilt beyond reasonable doubt. Proof beyond reasonable doubt is a very high standard of proof which the Commission must establish before I may find guilt proved.

[14] A reasonable doubt is an honest and reasonable uncertainty left in my mind about the guilt of the defendants after I have given careful and impartial consideration to all of the evidence. Proof "beyond reasonable doubt" means that, after weighing all the evidence, I must be sure that the at least one of the defendants has breached at least one of the statutory provisions.

## **The Charges**

[15] The defendants are *Probitas* Limited ("the company") and Mr Ewan Campbell in person. He is the manager and principal director of the company. The company faces eleven pairs of alternative charges pursuant to the Fair Trading Act 1986 ("the Act"). The first of each pair of charges are pursuant to section 13(e) and section 40(1) of the Act. The second of each pair of charges allege breaches of sections 10 and 40(1) of the Act.

[16] Mr Campbell faces a total of eight charges. There are three pairs of alternative charges. As with the company, the first of each pair allege breaches of sections 13(e) and 40(1) of the Act. The second of each pair allege breaches of sections 10 and 40(1) of the Act. The remaining two charges stand alone; they also allege contravention of sections 13(e) and 40(1) of the Act.

[17] The company sells *Probitas* as a fertiliser and soil conditioner. The charges relate to representations made in three forms: a brochure, a compact disc, and things said by Mr Campbell to Mr Simpson the Commission investigator. Eleven charges against the company and five against Mr Campbell are under section 13(e) of the Act. They claim that the representations were false or misleading as they represent *Probitas* to have a certain performance characteristic and/or benefit that it does not have.

[18] The balance of the charges - eleven alternative charges against the company and three alternative charges against Mr Campbell allege breaches of section 10. They allege that the defendants engaged in conduct liable to mislead the public as to the characteristics and/or suitability for a purpose of the product *Probitas*.

## **The Fair Trading Act provisions:**

[19] S. 10 Misleading conduct in relation to goods

No person shall, in trade, engage in conduct that is liable to mislead the public as to the nature, manufacturing process, characteristics, suitability for a purpose, or quantity of goods.

### S 13 False [or misleading] representations

No person shall, in trade, in connection with the supply or possible supply of goods or services or with the promotion by any means of the supply or use of goods or services,—

(e)[make a false or misleading representation] that goods or services have any sponsorship, approval, endorsement, performance characteristics, accessories, uses, or benefits; or

### **The Facts:**

[20] *Probitas* consists of a mix of natural ingredients including sea clays, soft shell based lime, paramagnetic rock and iron sand, applied in the same way as a conventional dry fertiliser. The company advertises and sells it to sheep, dairy and beef farmers, and kiwifruit orchardists. The price of *Probitas* is between \$300-\$350 a tonne, depending upon whether it is supplied loose or bagged.

[21] At least five other persons or companies are licensed to sell *Probitas*. Mr Campbell is paid a commission on all sales by these other agents.

[22] The Intellectual Property Database of the New Zealand Companies Office lists Mr Campbell as the inventor of *Probitas*. An application was made for an international patent on *Probitas* in March 2002 but appears never to have been pursued. The database also indicates Mr Campbell as the proprietor of the trademark for the word "*Probitas*".

[23] As mentioned, fertilisers cost farmers about \$1 billion dollars annually and are the single most expensive item on a farmer's budget. The annual average cost of fertilisers is \$37,000 for dairy farmers, and \$26,000 for beef and sheep farmers.

[24] The fertiliser industry was deregulated in 1985. Since then, many new products have been advertised claiming to improve soil fertility. .

## The Complaint to the Commission

[25] In April 2003 Mr Campbell and another man approached an Otaika Valley, Whangarei, dairy farmer, Andrew Sime. They wanted to buy lime and papa rock clay from the agricultural lime works Mr Sime had operated for 25 years. They needed these products as constituents of *Probitas*. Mr Campbell explained the nature of *Probitas* to Mr Sime and gave him the brochure the subject of this case. Apart from farming and lime milling, Mr Sime also worked as a soil tester. He was experienced with conventional fertilisers. He thought he smelt a rat - particularly about the papa clay - and did not want involvement in any scam. By phone, he sought an opinion from his son Richard who has a PhD in physical chemistry. As a result he decided not to become involved. Later, he gave his son the brochure.

[26] Dr Richard Sime read the brochure. He believed the brochure was fraudulent and that the promoters of *Probitas* were lying to the public. He testified:

The science behind it, although I am no expert in soil science,... didn't seem to ring true. My background is chemistry and some of the claims they were making in terms of physical properties just were not possible.

[27] He complained to the Commission, enclosed Mr Campbell's business card and the *Probitas* brochure, and expressed his concerns about those claims. He believed the claims about silica, electrolysis and electromagnetic fields were untrue.

[28] The Commission sent to Mr Campbell a "Please Explain" letter. It outlined the complaint and set out the allegations made about *Probitas*. The company was asked to provide test results specific to *Probitas* and information regarding its source, promotion marketing and sales.

[29] Mr Campbell replied [Exhibit PRS/2]. He disputed the allegations made about *Probitas*. He advised he had not received any complaints and the complaint letter was unfounded. He declined to give any of the requested information. Subsequently In July 2003, Senior Commission Investigator Peter Simpson commenced a full investigation into *Probitas* pursuant to Dr.Simes' complaint.

[30] Posing as an interested kiwi-fruit grower, on 21 August 2003 Mr Simpson visited Mr Campbell at his home address at Woodlands Road, Waihi, to obtain a sample of *Probitas*. There was a 20 minute discussion between the two men, recorded on a digital voice recorder. Two of the charges relate to representations made by Mr Campbell to Mr Simpson during that conversation. Mr Simpson was given two identical compact discs (Exhibit DRS/11) bearing the name *Probitas* Limited. Mr Simpson played the disc and printed off all the pages recorded on it. Representations made on that compact disc form the basis of most of the charges against the company.

[31] Mr Simpson sought and obtained expert assessment and advice from Dr Douglas Edmeades of Hamilton. He is a soil scientist with over 30 years experience. Formerly a scientist then Group Leader of Soils & Fertiliser Group at MAF, Dr Edmeades went on to be National Science Leader, Soils and Fertilisers at AgResearch. In 1998 he formed his own independent consultancy (AgKnowledge Ltd).and advises clients on all types of fertiliser, soil conditioners and soil additives.

[32] Dr Edmeades was employed to assess the claims made about *Probitas*. His initial report was that certain scientific claims made in the promotion of *Probitas* were incorrect and/or misleading.

[33] Following receipt of Dr Edmeades' preliminary report, Mr Simpson asked to interview Mr Campbell. Mr Campbell sought an assurance that the complaint was not from a jealous competitor. Mr Simpson provided that assurance and gave Mr Campbell a list of questions he wished to ask at interview. By a letter received on 5 May 2004 Mr Campbell declining to be interviewed.

[34] This triggered the obvious. The investigation was cranked up. Mr Simpson provided a sample of *Probitas* to Dr Edmeades for analysis, and a full report was sought on representations contained within the compact disc, the brochure, a promotional video tape, and the transcription of the conversation with Mr Campbell in August 2003.

[35] Mr Simpson obtained a search warrant for Mr Campbell's premises at 697 Woodlands Road . Mr Campbell became distressed and unhelpful. He issued trespass

notices on all agents of the Commission. Documents were seized and provided to Dr Edmeades.

### **The Representations**

[36] The prosecution says that the representations made by the defendants about *Probitas* - express or implied - relate to:

- How it works: the mode of action
- What it does to the soil.
- Its benefits compared to other fertilisers.

[37] In short, the Commission says that the eight representations about the so called "*Probitas* system" were knowingly based on false science with a clear design to mislead gullible farmers.

### **What *Probitas* claims to do**

[38] The special form of silica (SiO<sub>2</sub>) in *Probitas* is claimed to activate the electrical and magnetic processes in the soil. This stimulates the biological and chemical processes in the soil and releases "locked up" nutrients that are otherwise unavailable to plants. The release of these nutrients replaces the need to apply traditional farm fertilisers.

[39] The high content of calcium (Ca) in *Probitas* is said to alter the ratio of calcium to other key nutrients (Magnesium (Mg), Potassium (K) and Sodium (Na)) to achieve an ideal ratio of these four nutrients and a soil pH of 6.4 or 6.5 (which *Probitas* markets as the ideal soil pH). It is claimed this optimises soil quality and increases productivity. This is called the "ratio theory".

### **The Chemical Analysis of *Probitas***

[40] A sample of *Probitas* was analysed by a reputable firm of analysts. The results are accepted by Mr Campbell as accurate.

The following table made by Dr Edmeade's shows only those chemical elements he believes had either nutrient or lime value. This he calls the agronomic value. He explains that *Probitas* has a lime equivalent of 38%. This means that a tonne (1000 kg) of *Probitas* will have the same effect on the soil pH as would the application of 380 kg of pure limestone. By pH is meant the level of alkalinity or acidity in the soil.

[41] The values in column 4 were calculated on the prices then current (7 May 2004) from Balance AgriNutrients Ltd ex-works.

[42] *Probitas* sells at between \$300 and \$350 per tonne, a figure acknowledged by Mr Campbell. The table shows that *Probitas* contains approximately \$35 worth of nutrients plus lime per tonne. Thus is economic value, says Dr Edmeades, is about 10 times lower than the price ex works from Balance AgriNutrients Ltd.

Nutrient	Concentration (%)	Amount in one tonne (kg)	Value (\$/tonne)
N	O.I	<1	<1.06
P	0.05	0.50	<b>0.80</b>
K	1.04	10.40	<b>8.56</b>
S	0.95	9.5	3.13
Mg	1.04	10.4	7.38
Ca	16.60	166	6.64
Lime Equivalent	38.0	380	6.69
<b>Total</b>			<b>34.26</b>

### The Scientific Evidence

[43] Dr Edmeades explained how the essential nutrients contained in traditional NPK fertilisers benefit soil fertility. In simple terms, traditional fertilisers contain

Nitrogen (N), Phosphorus(P), Potassium(K), Sulphur (S), Calcium (Ca), Magnesium (Mg), and other trace or minor elements. They are spread on the surface of the land and, with natural or artificial irrigation, are available to plant life as nutrients. His assessment of *Probitas* was that, apart from a very modest benefit from the lime content, the product has no beneficial effect.

[44] His expert evidence is that New Zealand soils already have adequate silica. Applying more would have no effect on pasture nutrition. There is no scientific basis for the claim that adding silica or any sort can capture the sun's rays and, by electrolysis, stimulate otherwise unavailable soil nutrients.

[45] He says the "ratio theory" once thought by some scientists to be valid, is no longer accepted by soil scientists. For the most part New Zealand soils are not calcium deficient, and even if they were, the application of lime would be a much cheaper method of correcting any imbalance. There is no ideal pH level. It depends on the nature of the crop and the nature of the soil. The ingredients of *Probitas* would do have no significant impact on soil alkalinity

[46] His testimony is that there is no scientific basis for the way *Probitas* is said to work.

[47] The Prosecutor provided me with a useful table. It tidily refers to the Information reference numbers, the alleged representations made by the defendants, the medium in which the representation appeared, and Dr Edmeades reason for rejecting the representations as false or misleading. I reproduce the table here:

CRN No.	Representation	Where representation made	Explanation as to why representation false or misleading/liable to mislead the public
0253 0254 0267 0268 0275 0276	That <i>"they</i> (calcium, magnesium, potassium and sodium) <i>are also in abundance in our soils and mostly in complex forms which usually cannot be accessed for plant growth. Add to the electrical system and it is amazing what can be achieved"</i>	<i>Probitas</i> brochure(0253 & 4, 0275 & 6). 2. <i>Probitas</i> CD (0267 & 8).	Because most of these minerals in New Zealand soils are already present in an exchangeable form (ie. readily available for plant uptake).
0255 0256 0261 0262 0277 0278 0281	That the main effect of the <i>p?-oduct/main</i> mode of action is via the silicon (as silica) in converting radiant energy from the sun into electricity, which stimulates the process of electrolysis in the soil and releases the nutrients calcium, magnesium, potassium and sodium.	<i>Probitas</i> brochure (0255 & 6, 0277 & 8). CD (0261 & 62). 3. Ewan Campbell to Peter Simpson (0281).	Because there is no scientific support for the idea that the addition of silica or other silicate minerals enhances electrolysis in the manner described.
0257 0258 0271 0272 0279 0280 0282	That the active ingredient in: the product is silicon in the form of silica (SiO <sup>2</sup> ).	<i>Probitas</i> brochure (0257 & 8, 0279 & 8). CD (0271 & 2). 3. Ewan Campbell to Peter Simpson (0282).	Because: silicon in the product may be present either as silicates and related minerals or as silica and related minerals; 2. minerals containing silicon are already abundant in soil. If the product were applied as recommended (150kg/ha for pasture or 500kg/ha for horticulture) the amount of silicon the product would add is trivial in comparison to that typically present in most soil.

<p>0259 0260</p>	<p>That calcium (which the product contains) stimulates soil bacteria and <i>"also of course your natural nitrogen production gets back underway. This supply of natural nitrogen is not only free, and doesn't leach out of your soil, but the quantities produced can be up to 400kgN per hectare in just three months"</i>.</p>	<p><i>Probitas</i> brochure.</p>	<p>Because: there are no free living nitrogen-fixing bacteria (ie bacteria which convert atmospheric nitrogen into protein nitrogen) in New Zealand soils; even if nitrogen-fixing bacteria were present, they would not be stimulated by additional calcium; 3. even if factors (1) and (2) did occur, the amount of nitrogen added to the soil could not be as suggested.</p>
<p>0263, 0264</p>	<p>That the product includes calcium derived from the sea in a form that is nine times as chemically active or has nine times the energy of normal calcium.</p>	<p><i>Probitas</i> CD.</p>	<p>Because the chemistry of calcium is such that the more active form is very unstable and would not exist in natural circumstances (ie marine sediments).</p>
<p>0265, 0266,</p>	<p>That the product has the effect of "unlocking" the phosphate in the soil.</p>	<p><i>Probitas</i> CD.</p>	<p>Because if the product were applied as recommended (150kg/ha) the lime equivalent it would add to the soil would have a negligible effect on soil pH and therefore soil phosphorus availability.</p>

0269 0270	That the product can assist soil in getting a pH level of "around 6.5", said to be the optimum pH for nutrient availability.	<i>Probitas CD.</i>	Optimal soil pH has been shown to be dependant on the particular soil and what is intended to be grown. For New Zealand pastoral soils (mineral soils) the ph level at which production is maximised is ph 5.8 - 6.0.
0273 0274	That the product will achieve a "pH of 6.5 or very close" by providing the ideal balance of calcium, magnesium, potassium and sodium said to be "calcium 68%, magnesium 12%, potassium 2.5%, and sodium 1% and the rest mainly hydrogen " ("the ratio theory).	<i>Probitas CD</i>	Because:  it is now scientifically proven that providing there is a sufficient quantity of each nutrient available to the plant, the ratio between the nutrients is inconsequential;  soil pH is primarily controlled by the amount of carbonate present in or added to soil, not the nutrients and their ratios;  3. used at its recommended rate (150kg/ha), the product would have a negligible effect on soil pH due to its lime content and would add insufficient amounts of calcium, magnesium, potassium and sodium in order to alter the existing soil ratios of those minerals.

### Elements requiring proof

[48] The **Section 13 charges** require proof of the following elements:

- (i) That the defendant is a person within the meaning of the Act. A body corporate is a "person" as defined under section 2 of the Act;

(ii) That the defendant was "in trade" as defined in section 2 of the Act which says

Trade means any trade, business, industry, profession, occupation, activity of commerce, or undertaking relating to the supply or acquisition of goods or services or to the disposition or acquisition of any interest in land.

(iii) That (in the context of being in trade) the defendant made a representation in connection with the supply of goods (the section embraces the possible supply of goods or the promotion by any means of the supply or use of goods). It is submitted that *Probitas* concerned in this case is indisputably a "good" as defined in section 2 of the Act, being personal property of a tangible kind.

(iv) That the representation was that the goods had a certain performance characteristic and/or benefit.

(v) That such representation was false or misleading.

[49] The word representation is not defined in the Act. Tipping J in **Marcol v Commerce Commission** [1991] 2 NZLR 502 said it should be given its ordinary meaning. It approved the definition of the term in Halsbury:

A representation is a statement made by a representor to a representee and relating by way of affirmation, denial, description or otherwise to a matter of fact. The statement may be oral or in writing or arise by implication from words or conduct.

[50] It is a question of law whether the statement relied on as an alleged representation is capable of amounting thereto. It is a question of fact whether or not if so capable the material in question does amount to the suggested representation. His Honour said at p506:

The essence of a representation for present purposes is that the representor must be saying something to the representee either by words (whether spoken or written) or other means. The representee may of course be a specific person or group of persons or indeed persons generally such as shoppers who may come into a particular shop. The representor must be communicating a statement of fact to the representee either directly or by clear and necessary implication. It will usually be convenient to consider whether a representation has been made alongside the question of the subject matter of the representation.

[51] The word "benefits" is undefined. I agree with the Prosecutor that in the context of this legislation it means 'benefits which appropriate or recommended use

of the goods would convey or confer upon the user' and 'expresses the concept of an advantage, profit or good outcome'.

[52] In **Commerce Commission v A&W Hamilton Ltd** (1989) 3 TCLR 398, 402 Judge Bisphan defined "False" as meaning " untrue, erroneous and incorrect, rather than importing any element of moral turpitude".hi **Megavitamin Laboratories (NZ) Ltd & Anor v Commerce Commission** (1995) 6 TCLR 231 Tipping J observed at p 242

The concept of falsity involved in the prohibition against false representations contained in section 13 does not, in my judgment, mean that questions of degree or materiality can be raised by way of a defence if the statement of fact inherent in the representation is shown to be wrong. The representation must of course be one of fact. If the facts are different to those represented the representation will be false.

[53] I must objectively decide whether the defendants made the alleged representations and whether it was false or misleading. The Prosecutor need not prove intent. If I find that a false or misleading representation has been made that is enough unless the defendants can establish a defence under section 44 of the Act.

[54] The **Marcol** decision also deals with the question of what is meant by the word "misleading". Tipping J said at p507:

This is consumer oriented legislation. The correct approach in my judgment is to ask (1) whether the material alleged to amount to a particular representation in a case such as this would be viewed as such by the average New Zealand shopper and (2) whether such shopper would derive from it a message which is in fact misleading. The mind of the representee is likely to work more by impression than analysis and be prone to some looseness of thought.

[55] His Honour observed that a representation will be misleading if it is "apt to mislead", if it would lead the mind of the representee into error. The question is not whether someone has actually been misled although proof of that may well be helpful for the informant. The question for the Court is whether the mind of the representee (in this case a potential user of a fertiliser or soil conditioning product) would be misled.

[56] The Prosecutor must satisfy me beyond reasonable doubt that the mind of the representee would be misled in the sense that the representation is apt to mislead. I

agree with Ms McLintock that, put in another way, this means that I must be sure that the representation "might well mislead".

[57] The Section 10 offences require proof of the following elements:

(i) That the defendant is a person, (ii)

That the defendant was in trade

(iii) That (in the context of being in trade) the defendant engaged in conduct as to the characteristics and/or suitability for a purpose of goods. As indicated there has been promotion of *Probitas* by the mediums referred to earlier, in the context of this case it is the dissemination of that material by the defendants that is alleged to be conduct in trade as to the characteristics and/or suitability for a purpose of *Probitas* promoted.

(iv) That the challenged conduct (which means here the content of the advertising or promotional material specified in a particular charge) was liable to mislead the public in the context of *Probitas's* characteristics or suitability for a purpose.

[58] "Liable" is not defined in the Act. Anderson J in **Sound Plus Limited v Commerce Commission** [1991] 3 NZLR 329, 332-3 held that "liable" in this context connotes a potential which is less restricted in scope than "likelihood" or "probability". He said:

Thus, in relation to ss 10 and 11 the question "is the conduct liable to mislead the public?" could equally be posited "looking at the issue sensibly could the conduct mislead the public?"

[59] The "public" means the part of the public the conduct is aimed at. That includes "those who are knowledgeable and also those who are not, the superficial reader or viewer or listener, as well as the profound, the gullible as well as the cautious" (**Scotch Whisky Association v Eade**, High Court, Christchurch, CP 204/90, Holland J, 4 July 1990). I make some further observations on the difference between "public" and "private" later in this decision.

## Expert Witness

[60] This prosecution case stands or falls on the evidence Dr Edmeades. One of the main planks of the defence case is that Dr Edmeades' testimony should be rejected as failing to meet the strict standards of the Code of Conduct for Expert Witnesses. The specific criticism of him is that he failed to be impartial. It was claimed that he is a direct competitor of *Probitas* and an advocate for the two large chemical fertilizer companies from whom he who receives significant income. He is attacked as being a "hired gun".

[61] He should not, it was said, have conferred with potential or actual competitors of *Probitas* about this prosecution. It is claimed that he has overstepped the boundary between impartial expert and partial advocate for the commission.

[62] A serious allegation is that Dr Edmeades has withheld evidence favourable to the defence and has acted as a zealous investigator and promoter of this prosecution case, actively soliciting product samples, promotional material and further information on behalf of the prosecution.

[63] Dr Edmeades acknowledges that he did not independently examine or test the *Probitas* system with field trials. He is criticized for not undertaking validating tests of the system or product. He believed that to be unnecessary because *Probitas* was palpably devoid of any scientific merit.

[64] Mr Campbell refers me to the observations of Lord Wilberforce **Whitehouse V Jordan** [1981] 1 WLR 246; 1 All ER 267 (HL) who said the following regarding expert evidence:

"While some degree of consultation between experts and legal advisers is entirely proper, it is necessary that expert evidence presented to the court should be, and should be seen to be, the independent product of the expert, uninfluenced as to form or content by the exigencies of litigation. To the extent that it is not, the evidence is likely to be not only incorrect but self defeating." ■

[65] Mr Campbell says there is a lack of independence and impartiality that should lead me to reject Dr Edmeades evidence. He says Dr Edmeades made this case his personal crusade.

[66] It is important to remember what an expert is, what is expected of such a witness, and the way in which the court should treat such evidence.

[67] An expert witness is anyone who can help the court with specialised knowledge and experience in a given field. In the context of this case, an expert is someone with specialized training and experience that can help me understand the relevant soil science issues. As I have already said, I am no expert on the science of soil fertility and pasture nutrition. In the context of this prosecution I obviously needed expert help to appreciate the relevant and material scientific factors.

[68] It is for me to make what I will of Dr. Edmeade's testimony and evidence, bearing in mind the criticism of him by Mr. Campbell. I have assessed all he has said and the context in which he said it. Over the years I have found it useful to see if an expert witness shows:

- Objectivity of judgment
- Thoroughness, precision and care in preparation and preliminary reports
- An analytical mind
- Experience, professional standing, and dedication in the area of expertise - a compelling curriculum vitae.
- Thorough scientific or technical understanding of the relevant issues
- Openness to concede alternative or oppositional propositions
- Credibility

[69] I have used these criteria to assess Dr Edmeades.

[70] As an expert witness he may give his opinion on whether *Probitas* does what is claimed. Other witnesses may not. Nonetheless I must treat him, just as I would any other witness. I can accept or reject his evidence just as I would the testimony or evidence of a non-expert.

[71] Expert evidence must be independent, unbiased, objective, and uninfluenced in any way by pressures from the party calling that evidence. I always look for solid reasons backing up the expert opinion. Reference to accepted highly regarded textbooks or the scientific research papers of others can be of supportive value.

[72] Experts come in many shapes and sizes, but there will always be the overriding consideration: Can I rely on the expertise of this person? How skilled and knowledgeable is this witness? How experienced and capable is Dr Edmeades in the world of soil science? I must consider **not** just the conclusions reached by him, but **how** they were reached. First-rate credentials, or many years work in a given field, are not enough. Outstanding qualifications will not make an expert's opinion admissible unless it is shown that there is a valid foundation for how the final opinion was reached.

#### **Assessment of Dr Edmeades as an Expert Witness.**

[73] I do not accept the criticisms of Dr Edmeades. It is true that he is passionate about his work as an expert **in soil** fertility, but passion is not in itself a ground for dismissing a witness as partisan and lacking objectivity. It is only when such zeal clouds judgment and becomes obsessive, single-minded, unrealistic or biased that the testimony should be rejected.

[74] I believe him to be of great experience and a leader in his field. His analysis of the *Probitas* product and its mode of use was careful, thorough, objective, and fair, in short, I found him to be a very credible witness. He is a man of great standing within the agricultural scientific community. Notably, his evidence has not been contested by any other expert and his expertise on any of the matters relevant to representations has not been successfully challenged. It is of significance that most of his learned research papers were published well before the present investigation commenced.

[75] It is true that he became more involved in the prosecution process than is usually the case. That is partly because of his passion for the need for honesty and scientific accuracy in the assessment of fertilisers. It is also because of the nature of prosecutions of this type. Mr Simpson had no expertise in this area. Neither, I assume, did anyone else on the staff of the Commission. Just as judges face factual or

theoretical circumstances of sweeping and sometimes daunting variety and levels of complexity, so too do those investigating alleged breaches of the criminal or other regulatory codes. They need the help of people with expertise such as Dr Edmeades, and to a sensible degree, delegate assessment powers to the expert. In a way, that is exactly what we judges must also do: we delegate some of our fact-finding task to someone who knows much more about the topic than we do.

[76] I do not believe he overstepped the mark by becoming an advocate. I take it that what Mr Campbell called a "hired gun" is an expert witness who, for money, will adapt his testimony to say whatever his employer wants him to say, and thus abandon and compromise any semblance of professional impartiality and probity.

[77] Dr Edmeades was not such a witness. He was asked to analyse and report on *Probitas* to the best of his expertise. I believe he did just that.

[78] There was no need for Dr Edmeades to conduct independent field trials or other tests. Neither did the defendants do so before marketing and selling *Probitas*. That criticism was not really the pot calling the kettle black, because, unlike Mr Campbell, there was no need for Dr Edmeades to conduct such tests. Dr Edmeades simply says that, on first scientific principles, the claims made for *Probitas* were false: *quod erat demonstrandum*. Field tests would have been a waste of time.

[79] Dr Edmeades was entitled to form his judgment on basic scientific principles, the prior research of himself and others, and other extrinsic factors.

[80] In **English Exporters (London) Ltd v Eldonwall Ltd** [1973] 1 Ch 915 Megarry J said:

The opinion of the expert witness is none the worse because it is in part derived from matters of which he could give no direct evidence.

[81] In **H v Schering Chemicals Ltd** 1983 1 WLR 143 Bingham J said:

If an expert refers to the results of research published by reputable authority in a reputable journal the court would, I think, ordinarily regard these supporting inferences fairly to be drawn from them unless or until a different approach was shown to be proper.

I respectfully adopt the views of both those eminent English judges.

[82] In summary, I accept Dr Edmeades as an unbiased expert witness. I accept what he told me.

***Probitas*: goods or System?**

[83] Mr Campbell submits that the prosecutor has either failed or deliberately ignored the difference between *Probitas* as a system and *Probitas* as "goods" or product. He says the product is not sold by itself. It is always sold together with other recommended soil additives, particularly lime. He says the promotional material makes that clear.

[84] I don't agree with that criticism. The evidence satisfies me that there was an appropriate focus by the prosecution on the mode of action, what *Probitas* allegedly did (or did not do) to the soil, and how it - whether as a system or a product - compared to other fertilisers. Obviously the two were interrelated, and I understand all that.

**Was the "Public" misled?**

[85] Mr Campbell argues that his system is not available to or promoted to the "public." He says *Probitas* is sold exclusively through a private process involving the testing of soil and the making of recommendations based upon those tests. *Probitas* representatives completely control this process and no one is able to buy the product to simply apply in their own manner without our oversight. He says the fact that promotional material is distributed to those who show interest, does not mean there is a relationship with the "public".

[86] The concept "the public" means the people as a whole - everyone - as distinct from purely private relationships. It includes any relevant individual member of the public, or more specific identifiable groups of individuals within society. It is an all-embracing term not designed to be dissected, dismembered or divided in some unrealistic way. The simple question is, within the context of this case, whether the evidence shows that the actions of the defendants' conduct involved members of the public in some relevant way.

[87] Promotional material such as the brochure and CD were created for marketing purposes. Why else? The whole essence of those media is to that effect. It was obviously meant to attract members of the public to assess and hopefully purchase *Probitas* and use the proffered system.

[88] The presumption will always be that general advertising material is designed for public consumption. A relationship can only be considered "private" if it is clearly identified as being restricted to the use of a particular person or group or class of persons and clearly not available to the public at large. Private contractual relationships are an obvious example. Usually the status of purely private relationships is easily recognisable by their very form, e.g.:

- "This offer of half price Titleist's Pro Vlx golf balls applies only to paid-up members of this golf club."
- "I wish to sell you my house for the price discussed"
- "Private Land. No Fishing without written approval."
- "These sports grounds are the property of the St Mellors Private School. No entry."
- "Only employees of Chichester Investment Co may use these car parks. Unauthorised vehicles will be towed."
- "As manager, we offer you ten thousand shares in the company. Such shares are "employee" only, and are not available for public trading, without the written consent of the directors."

[89] The promotional material was, in legal terms, a clear invitation to treat- to discuss and hopefully purchase *Probitas*. As such it did not differ from any other advertising material and was inviting interest from farmers who wished to enhance the fertility and productivity of their pastures. The two "Southland Times" newspaper items produced as Exhibits PRS/25.2 and PRS/25.3 refer to a field day in which *Probitas* was explained to the farming public in November 2004. About 200 people are reported to have attended.

[90] Mr Ingram's testimony, as a farmer and agent for *Probitas*, confirmed the calling of public meetings and how enquiries from interested farmers were dealt with. This is a clear example of a public presentation resulting from prior advertising. Once a pamphlet or CD is released there is no control over where it goes - from farmer to

farmer. Mr Campbell gave information to Alexander Sime. Dr Edmeades was sent the brochure produced as an exhibit (Exhibit ALS/2) from a member of the public seeking his advice on it and received numerous other queries about the product before the Commission engaged him to write a report on it. Mr Simpson was given the CD (two copies) by the defendant, who believed Mr Simpson at the time to be a potential customer the evidence establishes the CD and brochure were in the public domain. I reject the submission that the public were not involved.

### **Mr Campbell not Testifying**

[91] I was surprised that Mr Campbell did not testify before me. He was not bound to do so given the onus of proof on the informant and his legal right to remain silent. He did call the evidence of his witnesses Symond, Harrison, Rowley, Mathieson and Ingram, but only the latter provided defence evidence as to the *Probitas* system. The others were mainly directed to attacking the impartiality of Dr Edmeades.

[92] Mr Ingram, the *Probitas* Southland agent, while testifying to some excellent production figures on his own farm and how new customers were introduced to the product, was unable to testify as to the science behind the *Probitas* system. He says Mr Campbell was the technologist and was paid a "technology fee" on every contract. From this I deduce that Mr Campbell was the "expert" on the technology or science behind the *Probitas* system. I would have liked to have heard from him as to his system. The brochure, compact disc, and other material gave me the essence of his system but did not answer the criticisms levelled at it by Dr Edmeades.

[93] In **Police v Trompert** [1985] 1 NZLR the Court of Appeal held that where, as here, a prima facie case has been established a Judge, in deciding what weight should be given to the evidence, may take into account the failure of the defendant to give, by his own evidence or by that of others, the explanations which he might naturally be expected to give if he were innocent. In my clear view, the fact that Mr Campbell has chosen not to answer the criticisms of Dr Edmeades by explaining his system to me in person, adds considerable weight to the prosecution case. I draw the inference from his failure to explain the system that, faced with Dr Edmeades detailed and

compelling contradictory testimony, he was struggling to come up with a credible response.

[94] In this context it also means that Mr Campbell has not availed himself of any of the statutory defences provided by s44 of the Act. The required notice was not filed to rely on s44(1)(b) (reasonable reliance) or 44(1)(c)(i) (contravention due to act or default of another person, accident or some other cause beyond the defendant's control). This leaves only reasonable mistake (s44(1)(a)) or reasonable precautions and the exercise of due diligence (s44(1)(c)(ii)). There is no evidential foundation for either of those defences

### **Were the representations made?**

[95] I agree with Ms McLintock that the evidence shows that the defendants have accepted making at least six of the representations. The argument about the remaining two representations is that they have been misunderstood. I find the following representations clearly to have been made. Of the utmost importance in this case is that there has been no defence rebuttal of evidence relating to these representations. While I accept that the onus is on the prosecutor at all times, the fact remains that there is no scientific support for the product (or system). There is only Dr Edmeades expert rejection of the product as ineffective and misleading.

[96] **Representation 1** - CRN's 0253, 0254, 0267, 0268, 0275 & 0276

That "they (calcium magnesium, potassium and sodium) are also in abundance in our soils and mostly in complex forms which usually cannot be accessed for plant growth. Add the electrical system and it is amazing what can be achieved".

[97] The making of this representation is unchallenged and clearly shown beyond reasonable doubt in the promotional material.

[98] **Representation 2** - CRN's 0255, 0256, 0261, 0262, 0277, 0278 & 0281

That the main effect of the product/main mode of action is via the silicon (as silica) in converting radiant energy from the sun into electricity, which stimulates the process of electrolysis in the soil and releases the nutrients calcium, magnesium, potassium and sodium.

[99] Mr Campbells cross-examination of Dr Edmeades implies exactly this. Although questions asked in cross-examination are not evidence (only the answers are) they imply the attitude of the defence case and, in absence of contradictory evidence, assist the court in drawing inferences. In my view the representation is an accepted premise of the *Probitas* system, and clearly proved beyond reasonable doubt.

[100] Representation 4 - CRN's 0259 & 0260

That calcium (which the product contains) stimulates soil bacteria and "also of course your natural nitrogen production gets back underway. This supply of natural nitrogen is not only free and doesn't leach out of your soil, but the quantities produced can be up to 400KgN per hectare in just three months".

[101] Again, this is implicit in the compact disc and the questions asked by Mr Campbell in cross-examination of Dr Edmeades. I find it proved beyond reasonable doubt.

[102] Representation 6 - CRN's 0265 & 0266

That the product has the effect of "unlocking" the phosphate in the soil.

[103] This is also clearly established by the promotional material. This allegation revolves around the suggestion that the product unlocks or releases these nutrients via this "electrical system". It is a cornerstone of the *Probitas* system, accepted as such, and proved beyond reasonable doubt.

[104] Representation 7 - CRN's 0269 & 0270 and Representation 8 - CRN's 0273 & 0274

That the product can assist soil in getting a pH level of "around 6.5" said to be the optimum pH for nutrient availability;

and

That the product will achieve a "*pH of 6.5 or very close*" by providing the ideal balance of calcium, magnesium, potassium and sodium said to be "*calcium 68%, magnesium 12%, potassium 2.5% and sodium 1% and the rest mainly hydrogen*" ("the ratio theory").

[105] Again, both these representations are proved beyond reasonable doubt. The promotional material and cross-examination makes that clear.

[106] The remaining representations were either denied or are accepted as having been made but said to have been misunderstood.

**[107] Representation 3** - CRN's 0257, 0258, 0282, 0279, 0280, 0271 & 0272

That the active ingredient in the product is silicon in the form of silica (SiO<sub>2</sub>)

[108] The defendants appear to accept they made this representation but dispute they have intentionally represented silica is the active ingredient in their product. This is implied by Mr Campbell's cross-examination of both Mr Simpson and Dr Edmeades.

[109] I am, however, satisfied beyond reasonable doubt from what was said to Mr Simpson, and from the promotional material that the idea that silica was a crucial element in *Probitas*, that this representation was made.

**[110] Representation 5** - CRN's 0263 & 0264

That the product includes calcium derived from the sea in a form that is nine times as chemically active or has nine times the energy of normal calcium.

[111] Mr Campbell suggests in his cross-examination of Dr Edmeades that this representation has been misunderstood as meaning calcium available from within the product. Looking objectively at the compact disc I took it that that the "active calcium" in *Probitas* was an essential element in terms of the representation. I find the representation (in the compact disc) proved beyond reasonable doubt.

### **Are the representations and/or conduct false and/or misleading?**

[112] This is the final and most crucial question. It determines whether what was said by the defendants about *Probitas* was, when looked at objectively, designed to hoodwink unsuspecting farmers. Once I had resolved the issue of Dr Edmeades credibility as an expert witness, the position clarified. Dr Edmeades says that in each case the representations were not based on scientific principles. Put another way, he says implies it was all snake **oil**. In the absence of any other scientific evidence I accept what he says as valid. The only logical conclusion is that the representations were false. It follows, from any dispassionate analysis of the promotional material and the scientific principles of soil fertility advanced by Dr Edmeades, that the representations have each been proved beyond reasonable doubt to have been

misleading. While no farmer actually complained of deception, the representations and conduct were clearly deceptive and misleading. The real science shows that farmers were clearly taken in and misinformed by the representations and this, ultimately, would be to their detriment.

[113] Both defendants will be convicted. I will hear submissions on penalty.