



Case Report

1	Case Number	0139/15
2	Advertiser	MPM Marketing Services
3	Product	Other
4	Type of Advertisement / media	Poster
5	Date of Determination	29/04/2015
6	DETERMINATION	Dismissed
7	IR Recommendation	Reconfirm original decision

ISSUES RAISED

Green Code 2 - Genuine Environmental Benefit 2)ii - not overstate claims

Green Code 3 - Substantiation 3)i - claims able to be substantiated and verifiable

DESCRIPTION OF THE ADVERTISEMENT

Eco-Smart® hot cup lids - Truly biodegradable plastic "the smart choice for sustainability". The additive in Castaway® Eco-Smart® cups allows the plastic to biodegrade through a series of chemical and biological processes when disposed of in microbe-rich landfill environments. The additive does not change the physical properties of the plastic, and the cup will maintain regular shelf life and tensile strength.

How does biodegradation work?

Microorganisms such as bacteria or fungi absorb macromolecules as food, and utilise them to fuel their metabolic processes. The end products of this metabolism are then removed and incorporated into the natural product cycle. Biodegradation works in the same way, with microbes utilising the macromolecules in plastic, which in turn causes it to degrade. The biodegradable additive increases this microbial action.

THE COMPLAINT

A sample of comments which the complainant/s made regarding this advertisement included the following:

Information in their advertising constitutes unfair competition and misinformation to the consumer. They make the claim that their products are biodegradable and will biodegrade in a landfill.

This implies its beneficial to the environment.

There is no evidence to support their claims

There is no genuine benefit to products biodegradable in landfill. They will release methane gas which is in fact detrimental.

On their website they reference conformance to a test methodology which has no pass or fail criteria.

Biodegradable is also a vague claim as everything is ultimately biodegradable given sufficient time.

THE ADVERTISER'S RESPONSE

Comments which the advertiser made in response to the complainant/s regarding this advertisement include the following:

MPM Marketing Services has been marketing this range of biodegradable packaging for nearly four years. During this time we have manufactured and supplied without complaint over 200 million coffee cup lids with similar branding and labelling.

As the market leader in disposable packaging we take customer complaints regarding our products and services very seriously. We are a privately owned company which manufactures the majority of our products in Australia competing in a market of importers.

It seems coincidental that the very week a competitor ranges their products into the location of the incident we receive this complaint notification. However we are happy to provide the board with any information and material in which will assist the process.

Complaint Reference number: 0139/15

Complaint 1.

Green Code 2 – Section ii

'Not overstate the expressly or by implication'

'They make claims that their products are biodegradable and will biodegrade in landfill'.

The additive in which we have branded Eco-Smart® has undergone rigorous testing under the ASTM D5511 testing method, both in our material supplier's labs and independent tests conducted at 3rd party labs predominantly in the USA where the technology has been developed. We are replicating the tests locally with an ongoing study through Melbourne University. This test is ongoing with the initial findings attached.

The use of the tag lines "Truly biodegradable plastic" and the "Smart choice for sustainability" have been used on our marketing material

Plastic products are made to withstand the toughest conditions and are often the most cost-effective option for businesses. However, the durable nature of plastics causes them to take hundreds of years, if not indefinitely, to biodegrade into biomass. Eco-Smart® is a carbon-based additive that enhances the biodegradability of plastics products because of its ability to break down durable polymers into inert biomass effectively.

Sustainability refers to the ability of the environment to remain balanced, diverse and productive. Factors, such as pollution and waste, threaten the sustainability of our environment, thereby threatening the way we live our lives. To increase the sustainability of our environment, this organic plastic additive has been engineered to reduce the amount of waste in landfills while keeping the products ability to be recycled.

When in contact with microbes found biologically active environments, the Eco-Smart® additive begins to penetrate the polymers in the plastic product, weakening them and breaking them down into natural by products. Eco-Smart® effectively reduces the amount of time that plastics take to biodegrade, reducing the amount of plastic waste found in landfills.

Complaint 2.

Green Code 3 – Section i.

‘Environmental Claims must be able to be substantiated and verifiable. Supporting information must include sufficient detail to allow evaluation of a claim’

As documented on our website and marketing material the products have been tested to prove that this is the case using the ASTM D5511 standard. This standard, The American Society of Testing and Materials (ASTM) D5511 is a Standard Test Method for determination Anaerobic Biodegradation of plastic materials under High Solid Anaerobic digestion conditions.

Biodegradation is as the name implies; the process within which a material is degraded to the extent that it loses its original properties, strength, resiliency, etc. and eventually its original form as well — all through the action of attacking naturally-occurring microorganisms such as bacteria. Biodegradation occurs in the presence (aerobic) or absence (anaerobic) of air. The time it takes for the products to biodegrade depends on many variables, including but not limited to, the conditions of the landfill composition of the plastic and sterilization method; however the ASTM D5511 tests performed on representative sterilised products have shown up to 35% degradation in 21 months.

The additive which we have branded Eco-Smart® has undergone rigorous testing under the ASTM D5511 testing method, both in our material supplier’s labs and independent tests conducted at 3rd party labs predominantly in the USA where the technology has been developed. We are replicating the tests locally with an ongoing study through Melbourne University. This test is ongoing with the initial findings attached.

The plastic additive has a variety of other brand names such as Biorene and Eco-pure in which we also use however the technology is the same.

This is the information freely available for our customers:

International standard tests for biodegradability – what is ASTM D5511?

ASTM International is a globally recognised leader in the development and delivery of international voluntary consensus standards.

ASTM D5511 is a test method that determines the rates and degree of biodegradability of

plastic products when placed in a high solids anaerobic apparatus.

Measures the volume of CO₂ and CH₄ evolved over time from the test sample.

Resembles many conditions found in a biologically active (modern) landfill.

The measurement of the gases evolved over time is a measure of the % of biodegradation.

MPM's ongoing commitment to testing and development

As a key part of the group that has led this global innovation in sustainability, MPM continues to work with scientists, government and the waste stream industry to set standards in an area that is at the forefront of science.

AS4736-2006 and Eco-Smart®

AS4736-2006 is the Australian standard for biodegradation of plastics, although mainly in a compost environment. This standard does not adequately deal with the biodegradation requirements of managed landfill sites (i.e. anaerobic conditions), where most of these products end up. This standard is therefore not relevant for the testing of Eco-Smart® products.

Testing to international standards

Verifying biodegradability of Eco-Smart®

A sequence of testing has been commenced to verify the biodegradable properties of Eco-Smart® products at their current stage of development. Further tests will be commissioned as technological enhancements are developed.

Testing for biodegradability in anaerobic environments.

This testing has focused on biodegradation in anaerobic conditions as occurs in today's modern landfills, where the majority of single use packaging eventually ends up. The required biodegradability patterns in these circumstances differ substantially from biodegradability patterns in aerobic conditions required for composting.

USA testing of Eco-Smart®

Initial independent laboratory testing has been carried out by Zia Laboratory in New Mexico, (USA) according to the methodology specified in US standard ASTM D5511-02. Although this testing was of limited duration it showed biodegradation well beyond that available through other treatments.

These preliminary results lent weight to the view that biodegradation under managed landfill conditions will be successful.

Victoria University testing (attached)

To replicate the US test and to expand the tests to much longer time frames, testing

commenced last year at Victoria University's Institute of Sustainability and Innovation. This test conducted in partnership with our manufacturing associates Rema, follows the same testing methodology of ASTM D5511-02 & ASTM D5511-11

Preliminary results are very encouraging. These tests will be continued and further testing will be commenced in the near future.

Scientifically based test results will be progressively published and beyond in appropriate reputable scientific journals and scientific forums.

Conclusion

MPM believes that the biodegradable qualities of Eco-Smart® products at present far exceed the performance of other plastic biodegradation agents referred to in contemporary scientific literature.

MPM and its technology partners believe they have developed truly innovative technologies and that Eco-Smart® products will be found scientifically to be by far the most biodegradable in this product segment.

Given the other substantial environmental advantages of Eco-Smart® products over comparable alternative products, MPM is now distributing Eco-Smart® products and will progressively update its biodegradability research as results become available.

Frequently asked questions are also provided on all marketing material.

How does Eco-Smart™ work?

Eco-Smart® accelerates the biodegradation of treated plastics in microbe-rich environments, such as a biologically active landfill. Plastics treated with Eco-Smart® have unlimited shelf life and are completely non-toxic.*

Adding Eco-Smart® to a petroleum based resin attracts microbes – microscopic organisms vital to the earth's ecosystem. These microbes colonise on the surface of the plastic where they secrete acids that break down the polymer chain, allowing them to utilise the carbon backbone of the chain as an energy source.

The difference between Eco-Smart® treated plastic and traditional plastic is that Eco-Smart® creates an opportunity for microbes to use plastic as food.

What is the manufacturing process for using additives?

Using the additive in the manufacturing process is easy to do and usually does not require any equipment modification.

Eco-Smart® is added via a standard commercial gravimetric hopper, just as you would add a colorant into the extruder feed-throat. Eco-Smart® is usually loaded at 0.7–4% by weight.

Are products made with Eco-Smart™ certified recyclable?

Currently there are no recognised standard certifications for recyclability.

A number of independent laboratories have been provided with samples of plastic made with Eco-Smart®. The tests indicated that Eco-Smart® does not affect the recyclability of plastics.

What prevents plastics made with Eco-Smart™ from degrading in inventory or on the shelf?

Eco-Smart® treated products must be disposed of or kept in active microbial environments, such as a managed landfill, in order to biodegrade.*

Warehouse and retail environments do not contain the microbes needed for biodegradation, so plastics treated with Eco-Smart® have an unlimited shelf life.

Does Eco-Smart™ change the physical characteristics of plastic?

There are no noticeable changes to the physical characteristics of plastic such as tensile strength, glass temperature, melting temperature, transition rates, etc.

Does Eco-Smart™ affect the plastic's performance at elevated temperatures?

No. Tensile strength and physical properties are maintained even in elevated temperatures.

In temperatures exceeding the normal operating range for a specific resin, Eco-Smart® plastics would experience the same change in properties as the standard untreated plastic.

Does Eco-Smart™ contain any heavy metals?

Eco-Smart® does not contain any compounds that would be considered heavy metals, light metals or metal ions.

Eco-Smart® is a combination of true organic compounds from oil and other nutrients found in the environment.

Does Eco-Smart™ contain microbes?

No. Eco-Smart® is an additive composed of organic compounds that attract microbes when placed into microbe-rich environments, such as managed landfill. There are no enzymes or microbes within the Eco-Smart® additive.

THE DETERMINATION

The Advertising Standards Board (“Board”) considered whether this advertisement breaches the AANA Environmental Claims in Advertising and Marketing Code (the Environment Code).

The Board noted the complainant’s concerns that the advertisement is misleading in its claim that the product is biodegradable without evidence to support such a claim.

The Board viewed the advertisement and noted the advertiser’s response.

The Board noted that the Environment Code applies to 'environmental claims' which are defined as 'any representation that indicates or suggests an Environmental Aspect of a product or service, a component or packaging of, or a quality relating to, a product or service.'

An Environmental Aspect means ‘the element of a product, a component or packaging or service that interacts with or influences (or has the capacity to interact with or influence) the Environment.'

The Environment is given a broad definition in the Code but, according to the dictionary definition means ‘the broad natural surrounding conditions, such as the bush, the rivers, the air, the sea in which human beings live.’

The Board noted that the advertisement features images of the cups, carry trays and stirrers with a panel insert which contains information about the environmental benefit of a particular component of the product – the Ecosmart component.

The Board considered whether the advertisement contained any environmental claims. The Board considered that the panel as a whole amounted to a representation that indicates that a component of the advertised cups will have the environmental benefit of assisting ‘sustainability’.

The Board considered Section 1 (i) of the Environmental Code which provides that: ‘Environmental Claims in Advertising or Marketing Communications shall not be misleading or deceptive or be likely to mislead or deceive.’

The Board noted that the practice note to the Environment Code does not require the Board to apply legal tests in its determination of whether advertisements are, or are likely to, mislead or deceive, or otherwise contravene prevailing community standards in the areas of concern to the Code but rather to determine whether statements would be reasonably understood to be literally true and therefore not require substantiation.

The Board agreed that most members of the community would generally understand the use of the phrase “biodegradable” to mean that the product will break down over time.

The Board noted that, it is reasonable for the advertiser to provide information and methods that indicate how the process actually occurs. The Board considered that the use of the terminology and imagery in this advertisement was not presenting information in a manner which was designed to be misleading or deceptive but rather to inform consumers of new methods that are making plastics better for the environment.

The Board noted the advertiser’s response that the product has undergone testing under the ASTM D5511 testing method and noted that they have provided supporting documentation relating to studies at Victoria University. In particular the Board noted that the study documented that the advertised products did commence biodegrading – whereas unmodified plastic cups showed no significant extent of biodegrading.

The Board considered that, in the context of the testing report provided by the advertiser, the statements that the advertisement contained regarding the biodegradability of the products are not misleading or deceptive.

The Board noted the comment that the product is the ‘smart choice for sustainability.’ The Board considered that this claim is somewhat vague and noted that there is no measure about what effect on sustainability would be considered to be a ‘smart choice’. The Board noted the

dictionary definition of sustainability is ‘the avoidance of adverse effects on the natural environment and depletion of natural resources.’ The Board considered however that a reasonable consumer would consider that a reasonable claim regarding sustainability would incorporate the concept of reducing adverse effects rather than avoiding them completely. The Board considered that, for a plastic product that is demonstrated to biodegrade to a greater extent than other plastic cups which do not contain the EcoSmart component, most consumers would consider this advertisement to be not misleading.

The Board noted the complainant’s concerns about the production of methane gas. The Board noted that products that biodegrade in landfill will all produce methane. The Board noted that methane collection is an emerging priority of landfill sites and that biodegrading has the additional positive result of reducing the volume of landfill.

Based on the above the Board determined that the advertisement’s claims regarding biodegradability of the plastic cups were, on the basis of the information provided by the advertiser, not misleading and that the claim of being ‘the smart choice for sustainability’ was similarly not misleading. The Board determined that the advertisement did not breach Section 1 (i) of the Environment Code.

The Board then considered Section 1 (ii) of the Environmental Code which provides that: ‘Environmental Claims in Advertising or Marketing Communications must not be vague, ambiguous or unbalanced.’

The Board noted the complainant’s concerns that the advertisement was vague in its suggestion that the product is biodegradable because everything is biodegradable given sufficient time.

The Board noted the intention of the advertisement is to provide information regarding the biodegradable nature of the product in a simplistic manner that is accurate and understandable. The Board noted that the advertiser has taken measures to explain the process of biodegrading and that, while presented in a simplified manner that the average consumer might relate to, the information and substantiation does support the statement that the product will biodegrade and that usual plastic does not biodegrade as quickly, and that this statement is not vague or ambiguous.

The Board noted that the product is a cup for use with hot liquids and considered that the likely audience would be businesses looking a supplier for their café or restaurant. The Board noted the explanation on the display regarding “how eco-smart allows plastic to biodegrade through a series of chemical and biological processes when disposed on in a microbe-rich landfill environment.” The Board considered that in the context of a plastic cup designed for commercial purchase, the information available on the poster is not vague and does not breach section 1 (ii) of the Code.

The Board then considered Section 3 of the Environmental Code which provides that: ‘Environmental Claims in Advertising or Marketing Communications must be substantiated and verifiable. Supporting information must include sufficient details to allow evaluation of a claim.

The Board noted the provision of supporting testing information from Victoria University and considered that the claims made were substantiated based on that evidence. The Board noted that the advertiser is not required to show the complexities of this research as part of the promotion but to provide relevant substantiation upon request.

The Board noted the advertiser’s response which outlined the information and testing about the product which is available to consumers upon request. The Board considered that the above material provided sufficient substantiation to allow evaluation of a claim and that the advertisement did not breach section 3 of the Code.

Finding that the advertisement did not breach the Environment Code on other grounds, the

Board dismissed the complaints.

INDEPENDENT REVIEWER'S RECOMMENDATION

INDEPENDENT REVIEWER'S RECOMMENDATION

Case 0139/15 MPM MARKETING SERVICES

This is an application by the complainant for review of the decision of the Advertising Standards Board (the Board) dated 29/4/15, Case Number 0139/15, finding that a strip poster advertisement was not in breach of the AANA Environmental Claims in Advertising and Marketing Code (the Environment Code).

The advertisement is described in the Case Report as follows:

Eco-Smart® hot cup lids - Truly biodegradable plastic "the smart choice for sustainability". The additive in Castaway® Eco-Smart® cups allows the plastic to biodegrade through a series of chemical and biological processes when disposed of in microbe-rich landfill environments. The additive does not change the physical properties of the plastic, and the cup will maintain regular shelf life and tensile strength. How does biodegradation work? Microorganisms such as bacteria or fungi absorb macromolecules as food, and utilise them to fuel their metabolic processes. The end products of this metabolism are then removed and incorporated into the natural product cycle. Biodegradation works in the same way, with microbes utilising the macromolecules in plastic, which in turn causes it to degrade. The biodegradable additive increases this microbial action.

The grounds for seeking a review of the decision of the Board are as follows:

1. Where new or additional relevant evidence which could have a significant bearing on the determination becomes available. An explanation of why this information was not submitted previously must be provided.
2. Where there was a substantial flaw in the Board's determination (determination clearly in error having regard to the provisions of the Code, or clearly made against the weight of evidence)
3. Where there was a substantial flaw in the process by which the determination was made.

The original complaint is summarised in the Case Report as follows:

A sample of comments which the complainant/s made regarding this advertisement included the following:

Information in their advertising constitutes unfair competition and misinformation to the consumer. They make the claim that their products are biodegradable and will biodegrade in a landfill.

This implies its [sic] beneficial to the environment.

There is no genuine benefit to products biodegradable in landfill. They will release methane gas which is in fact detrimental.

On their website they reference conformance to a test methodology which has no pass or fail criteria. Biodegradable is also a vague claim as everything is ultimately biodegradable given sufficient time.

Advertiser's response

The very lengthy response of the Advertiser to the complaint as noted in the Case Report is as follows:

MPM Marketing Services has been marketing this range of biodegradable packaging for nearly four years. During this time we have manufactured and supplied without complaint over 200 million coffee cup lids with similar branding and labelling. As the market leader in disposable packaging we take customer complaints regarding our products and services very seriously. We are a privately owned company which manufactures the majority of our products in Australia competing in a market of importers. It seems coincidental that the very week a competitor ranges their products into the location of the incident we receive this complaint notification. However we are happy to provide the board with any information and material in which will assist the process.

Complaint Reference number: 0139/15 Complaint 1. Green Code 2 – Section ii ‘Not overstate the [sic] expressly or by implication’ ‘They make claims that their products are biodegradable and will biodegrade in landfill’. The additive in which we have branded Eco-Smart® has undergone rigorous testing under the ASTM D5511 testing method, both in our material supplier's labs and independent tests conducted at 3rd party labs predominantly in the USA where the technology has been developed. We are replicating the tests locally with an ongoing study through Melbourne University. This test is ongoing with the initial findings attached. The use of the tag lines “Truly biodegradable plastic” and the “Smart choice for sustainability” have been used on our marketing material. Plastic products are made to withstand the toughest conditions and are often the most cost-effective option for businesses. However, the durable nature of plastics causes them to take hundreds of years, if not indefinitely, to biodegrade into biomass. Eco-Smart® is a carbon-based additive that enhances the biodegradability of plastics products because of its ability to break down durable polymers into inert biomass effectively.

Sustainability refers to the ability of the environment to remain balanced, diverse and productive. Factors, such as pollution and waste, threaten the sustainability of our environment, thereby threatening the way we live our lives. To increase the sustainability of our environment, this organic plastic additive has been engineered to reduce the amount of waste in landfills while keeping the products ability to be recycled. When in contact with microbes found biologically active environments, the Eco-Smart® additive begins to penetrate the polymers in the plastic product, weakening them and breaking them down into natural by products. Eco-Smart® effectively reduces the amount of time that plastics take to biodegrade, reducing the amount of plastic waste found in landfills.

Complaint 2. Green Code 3 – Section i. ‘Environmental Claims must be able to be

substantiated and verifiable. Supporting information must include sufficient detail to allow evaluation of a claim' As documented on our website and marketing material the products have been tested to prove that this is the case using the ASTM D5511 standard. This standard, The American Society of Testing and Materials (ASTM) D5511 is a Standard Test Method for determination Anaerobic Biodegradation of plastic materials under High Solid Anaerobic digestion conditions. Biodegradation is as the name implies; the process within which a material is degraded to the extent that it loses its original properties, strength, resiliency, etc. and eventually its original form as well — all through the action of attacking naturally-occurring microorganisms such as bacteria. Biodegradation occurs in the presence (aerobic) or absence (anaerobic) of air. The time it takes for the products to biodegrade depends on many variables, including but not limited to, the conditions of the landfill composition of the plastic and sterilization method; however the ASTM D5511 tests performed on representative sterilised products have shown up to 35% degradation in 21 months. The additive which we have branded Eco-Smart® has undergone rigorous testing under the ASTM D5511 testing method, both in our material supplier's labs and independent tests conducted at 3rd party labs predominantly in the USA where the technology has been developed. We are replicating the tests locally with an ongoing study through Melbourne University. This test is ongoing with the initial findings attached. The plastic additive has a variety of other brand names such as Biorene and Eco-pure in which we also use however the technology is the same. This is the information freely available for our customers: International standard tests for biodegradability – what is ASTM D5511? ASTM International is a globally recognised leader in the development and delivery of international voluntary consensus standards. ASTM D5511 is a test method that determines the rates and degree of biodegradability of plastic products when placed in a high solids anaerobic apparatus. Measures the volume of CO₂ and CH₄ evolved over time from the test sample. Resembles many conditions found in a biologically active (modern) landfill. The measurement of the gases evolved over time is a measure of the % of biodegradation. MPM's ongoing commitment to testing and development As a key part of the group that has led this global innovation in sustainability, MPM continues to work with scientists, government and the waste stream industry to set standards in an area that is at the forefront of science. AS4736-2006 and Eco-Smart® AS4736-2006 is the Australian standard for biodegradation of plastics, although mainly in a compost environment. This standard does not adequately deal with the biodegradation requirements of managed landfill sites (i.e. anaerobic conditions), where most of these products end up. This standard is therefore not relevant for the testing of Eco-Smart® products.

Testing to international standards Verifying biodegradability of Eco-Smart® A sequence of testing has been commenced to verify the biodegradable properties of Eco-Smart® products at their current stage of development. Further tests will be commissioned as technological enhancements are developed.

Testing for biodegradability in anaerobic environments. This testing has focused on biodegradation in anaerobic conditions as occurs in today's modern landfills, where the majority of single use packaging eventually ends up. The required biodegradability patterns in these circumstances differ substantially from biodegradability patterns in aerobic conditions required for composting.

USA testing of Eco-Smart® Initial independent laboratory testing has been carried out by Zia Laboratory in New Mexico, (USA) according to the methodology specified in US standard ASTM D5511-02. Although this testing was of limited duration it showed biodegradation

well beyond that available through other treatments. These preliminary results lent weight to the view that biodegradation under managed landfill conditions will be successful.

Victoria University testing (attached). To replicate the US test and to expand the tests to much longer time frames, testing commenced last year at Victoria University's Institute of Sustainability and Innovation. This test conducted in partnership with our manufacturing associates Rema, follows the same testing methodology of ASTM D5511-02 & ASTM D5511-11 Preliminary results are very encouraging. These tests will be continued and further testing will be commenced in the near future. Scientifically based test results will be progressively published and beyond in appropriate reputable scientific journals and scientific forums.

Conclusion

MPM believes that the biodegradable qualities of Eco-Smart® products at present far exceed the performance of other plastic biodegradation agents referred to in contemporary scientific literature. MPM and its technology partners believe they have developed truly innovative technologies and that Eco-Smart® products will be found scientifically to be by far the most biodegradable in this product segment. Given the other substantial environmental advantages of Eco-Smart® products over comparable alternative products, MPM is now distributing Eco-Smart® products and will progressively update its biodegradability research as results become available.

Frequently asked questions are also provided on all marketing material.

How does Eco-Smart™ work? Eco-Smart® accelerates the biodegradation* of treated plastics in microbe-rich environments, such as a biologically active landfill. Plastics treated with Eco-Smart® have unlimited shelf life and are completely non-toxic. Adding Eco-Smart® to a petroleum based resin attracts microbes – microscopic organisms vital to the earth's ecosystem. These microbes colonise on the surface of the plastic where they secrete acids that break down the polymer chain, allowing them to utilise the carbon backbone of the chain as an energy source. The difference between Eco-Smart® treated plastic and traditional plastic is that Eco-Smart® creates an opportunity for microbes to use plastic as food. What is the manufacturing process for using additives? Using the additive in the manufacturing process is easy to do and usually does not require any equipment modification. Eco-Smart® is added via a standard commercial gravimetric hopper, just as you would add a colorant into the extruder feed-throat. Eco-Smart® is usually loaded at 0.7–4% by weight. Are products made with Eco-Smart™ certified recyclable?

Currently there are no recognised standard certifications for recyclability. A number of independent laboratories have been provided with samples of plastic made with Eco-Smart®. The tests indicated that Eco-Smart® does not affect the recyclability of plastics. What prevents plastics made with Eco-Smart™ from degrading in inventory or on the shelf? Eco-Smart® treated products must be disposed of or kept in active microbial environments, such as a managed landfill, in order to biodegrade*. Warehouse and retail environments do not contain the microbes needed for biodegradation, so plastics treated with Eco-Smart® have an unlimited shelf life. Does Eco-Smart™ change the physical characteristics of plastic? There are no noticeable changes to the physical characteristics of plastic such as tensile strength, glass temperature, melting temperature, transition rates, etc. Does Eco-Smart™ affect the plastic's performance at elevated temperatures? No. Tensile strength and physical properties

are maintained even in elevated temperatures. In temperatures exceeding the normal operating range for a specific resin, Eco-Smart® plastics would experience the same change in properties as the standard untreated plastic. Does Eco-Smart™ contain any heavy metals? Eco-Smart® does not contain any compounds that would be considered heavy metals, light metals or metal ions. Eco-Smart® is a combination of true organic compounds from oil and other nutrients found in the environment. Does Eco-Smart™ contain microbes? No. Eco-Smart® is an additive composed of organic compounds that attract microbes when placed into microbe-rich environments, such as managed landfill. There are no enzymes or microbes within the Eco-Smart® additive.

The Determination.

The Board considered whether the advertisement breached the Environment Code and noted the complainant's concerns that the advertisement is misleading in its claim that the product is biodegradable without evidence to support such a claim.

The Board noted that the Environment Code (the Code hereafter) applies to 'environmental claims' which are defined as 'any representation that indicates or suggests an Environmental Aspect of a product or service, a component or packaging of, or a quality relating to, a product or service'.

In considering whether the advertisement contained any environmental claims, it was noted that the advertisement featured images of cups, carry trays and stirrers with a panel insert which contained information about the environmental benefit of a particular component of the product – the Ecosmart component. The Board considered that the panel insert as a whole "amounted to a representation that indicates what a component of the advertised cups will have the environmental benefit of assisting sustainability".

Section 1 (i)

Having concluded that the advertisement did contain environmental claims, the Board went on to consider Section 1 (i) of the Code which provides that:

"Environmental Claims in Advertising or Marketing Communications shall not be misleading or deceptive or be likely to mislead or deceive."

In considering Section 1 (i) the Board noted that the Practice Note to the Code does not require that the Board apply legal tests in its determination of whether advertisements breach Section 1 (i) or otherwise contravene prevailing community standards in the areas of concern to the Code but rather, requires that the Board determine whether statements would be reasonably understood to be literally true and therefore not require substantiation. The Board took the view that most community members "would generally understand the use of the phrase 'biodegradable' to mean that the product will break down over time". It was reasonable that the advertiser would provide information and methods that indicated how that breakdown process would occur. In the Board's view, the advertisement's use of terminology and imagery did not amount to 'presenting information in a manner which was designed to be misleading or deceptive but rather to inform consumers of new methods that are making plastics better for the environment'. The Board noted the advertiser's advice that the product had been tested using the ASTM D5511 testing method and noted the advertiser had provided supporting documentation of a study of the product conducted by Victoria University (VU).

The Board noted particularly that the VU study documented that ‘the advertised products did commence biodegrading – whereas unmodified plastic cups showed no significant extent of biodegrading’. The Board concluded that:

‘in the context of the testing report provided by the advertiser, the statements that the advertisement contained regarding the biodegradability of the products are not misleading or deceptive’.

In its consideration of the advertisement under Section 1 (i) of the Code the Board also examined the claim that the product is the ‘smart choice for sustainability’. This claim was considered to be ‘somewhat vague’ and the Board noted that there existed no measure of what effect on sustainability would be considered a ‘smart choice’. The Board noted that the dictionary defined sustainability as ‘the avoidance of adverse effects on the natural environment and depletion of natural resources’. However, the Board took the view that ‘a reasonable consumer would consider that a reasonable claim regarding sustainability would incorporate the concept of reducing adverse effects rather than avoiding them completely’. The Board concluded that:

‘for a plastic product that is demonstrated to biodegrade to a greater extent than other plastic cups which do not contain the EcoSmart component, most consumers would consider this advertisement to be not misleading’.

The Board also noted in respect of the complainant’s concerns about methane gas, that products that biodegrade in landfill will all produce methane. The Board also noted that methane collection is an emerging priority of landfill sites and that biodegrading additionally reduces the volume of landfill.

Having concluded that the advertisement’s claims regarding biodegradability of the plastic cups were, on the basis of information provided by the advertiser, not misleading and that further, the claim of the product being ‘the smart choice for sustainability’ was similarly not misleading, the Board determined that the advertisement did not breach Section 1 (i) of the Environment Code.

Section 1 (ii)

The Board then went on to consider Section 1 (ii) of the Code which provides that:

“Environmental Claims in Advertising or Marketing Communications must not be vague, ambiguous or unbalanced.”

The Board noted the complainant’s view that the advertisement was vague in suggesting that the product is biodegradable because everything is biodegradable given sufficient time. In considering this issue the Board noted that the intention of the advertisement ‘is to provide information regarding the biodegradable nature of the product in a simplistic manner that is accurate and understandable’. The Board concluded that while the advertiser had taken measures to explain the process of biodegradability in a simplified manner which an average consumer might relate to, ‘the information and substantiation does support the statement that the product will biodegrade and that usual plastic does not biodegrade as quickly and that this statement is not vague or ambiguous’.

The Board considered the likely audience for the advertisement would be restaurant or cafe businesses looking for a supplier and noted the display explanation regarding “how eco-smart allows plastic to biodegrade through a series of chemical and biological processes when disposed on [sic] in a microbe-rich landfill environment”. The Board concluded that:

‘in the context of a plastic cup designed for commercial purchase, the information available on the poster is not vague and does not breach Section 1 (ii) of the Code’.

Section 3

Section 3 of the Environment Code provides that:

“Environmental Claims in Advertising or Marketing Communications must be substantiated and verifiable. Supporting Information must include sufficient details to allow evaluation of a claim.”

In considering this section, the Board noted that the Advertiser had provided supporting testing information from Victoria University and concluded that the claims made by the Advertiser were substantiated based on that evidence. The Board pointed out that the Advertiser is not required to show the complexities of this research as part of the promotion but to provide relevant substantiation upon request. The Board further noted the Advertiser’s response to the complaint, which outlined the information and testing regarding the product which is available to consumers upon request. The Board concluded that the above material provided sufficient substantiation to allow evaluation of a claim and determined that the advertisement did not breach Section 3 of the Code.

Accordingly, finding that the advertisement did not breach the Environment Code on other grounds, the Board dismissed the complaints.

REVIEW APPLICATION

The complainant has requested a review of the Board’s decision, citing as the ground for the review request that “there was a substantial flaw in the Board’s decision” (ground 2 above).

In the review application the complainant has firstly quoted various conclusions of the Board contained in its decision and then asked two questions and made comments which are related to those conclusions.

Question 1.

The first of these questions relates to the Board’s finding that the advertisement did contain an environmental claim because the panel “amounted to a representation that a component of the advertised cups will have the environmental benefit of assisting ‘sustainability’”. The review application asks: “How does the fact that the plastic cup lid made from a non renewable fossil resource biodegrading in landfill and emitting methane gas provide an environmental benefit of assisting sustainability?”

In addition the complainant has proffered a definition of environmental sustainability as ‘the rates of renewable resource harvest, pollution creation, and non-renewable resource depletion that can be continued indefinitely’. It is not clear what the source of this definition is.

Question 2

The complainant quoted the Board's decision regarding Section 1 (i) of the Code that the use of terminology and imagery in the advertisement did not present information in a manner which was designed to be misleading or deceptive but rather to inform consumers of new methods that are making plastics better for the environment. The second question posed by the Review Application is: "How are these 'new methods' whereby a plastic biodegrading and releasing methane gas into the atmosphere considered better for the environment?"

Testing conditions comment

The Review Application then quotes the Board's decision that in the context of the testing report provided by the advertiser, the statements that the advertisement contained regarding the biodegradability of the products is not misleading or deceptive. The Review Application comments: 'The tests are carried out in an "ideal" condition not found in the majority of landfill sites where the product will ultimately end up. This seems deceptive and misleading'.

The Review Application then quotes an extract from the ASTM D5511 test methodology which describes the parameters of the procedure of that particular testing method for biodegradability under high-solids digestion conditions.

Comment regarding sustainability

The Review Application then goes on to quote at length comments from the decision of the Board which relate to the advertisement's claim that the product is the 'smart choice for sustainability'. The Board's comments were made in relation to its consideration of whether this claim was misleading or deceptive. The Review Application then states: "merely making a product biodegradable in no way contributes to the product being sustainable. It continues to have adverse effects on the environment by releasing methane gas and depletes natural non-renewable resources".

Comments regarding methane gas

The final quote from the Board's decision included in the Review Application refers to the Board's comments regarding methane gas. The Board observed that products that biodegrade in landfill will all produce methane and further noted that methane collection is an emerging priority of landfill sites and that biodegrading has the additional positive result of reducing the volume of landfill. The Review Application comments:

"There is no positive result of reducing landfill volume as the biodegradation process takes many years. Not all products will biodegrade and release methane gas, however, in this case the products are designed to do exactly that and therefore contribute to global warming. In addition of the 458 landfill sites in Australia only 55 collect methane gas".

Reviewer's Recommendation

Ground 2

Question 1

For a substantial flaw in the Board's determination to be established, there must be evidence that the determination was clearly in error having regard to the provisions of the Code, or clearly made against the weight of evidence. Merely posing a question in relation to one of the Board's findings does not amount to providing evidence that the determination of the Board was clearly in error in terms of the Code provisions or clearly against the weight of evidence.

Moreover, the actual question posed appears to misunderstand the task of the Board in making the initial decision as to whether the advertisement complained of was in fact an 'environmental claim'. This initial task was necessary in order for the Board to establish whether the advertisement in question was subject to the Environment Code, before it could go on to apply the provisions of the Code to the advertisement which was the subject of complaint. At this stage of the Board's process it was required only to ascertain whether the advertisement amounted to an 'environmental claim'. The Board is not required at this stage to assess whether any claims (if they are found to be environmental claims) breach the Environment Code. There was therefore no substantial flaw in the Board's decision on this point.

Question 2.

Again, as above, posing a question relating to one of the Board's findings does not amount to providing evidence that the determination of the Board was clearly in error in terms of the provisions of the Code or clearly made against the weight of evidence.

The Board had noted that it was not required by the Practice Note to apply a legal test when considering this section of the Code, taking the view that rather, it was required to determine whether statements would be reasonably understood to be literally true and therefore not require substantiation. The Board took the view that most community members would generally understand the use of the word 'biodegradable' to mean that the product will break down over time and further concluded that it was reasonable for the Advertiser to provide information and methods that indicate how that process occurs. The Review Application provides no evidence that the Board erred in coming to this conclusion, especially as it was not required to apply any legal test to the statements but rather a common sense interpretation of what community members would generally understand the statements to mean. It was not for the Board to make a scientific case for the relative benefit to the environment of the biodegradability process in question when taking a view of the purpose of the Advertiser's use of terminology and imagery in the advertisement. (The issue of the release of methane gases is addressed specifically by the Board at a later point of the Determination where the Board observes that products biodegrading in landfill will all produce methane.) There is no evidence that the Board's determination on this point was either in error having regard to the Code provisions or made against the weight of evidence. The Board was entitled to conclude that the terminology and imagery in the advertisement did not present information that was misleading or deceptive or likely to mislead or deceive. There is no substantial flaw in the Determination of the Board on this point.

Testing conditions comment.

The complainant claims in the Review Application that the tests referred to by the Board in its determination were 'carried out in an "ideal" condition not found in the majority of

landfill sites where the product will ultimately end up'. This claim appears to be made in an effort to cast doubt on the validity of the test information provided by the Advertiser to the Board. The complainant provides no evidence of this claim and the extract from the ASTM D5511 quoted in the Review Application does not invalidate the material on which the Board relied in making its decision. It is clear from the details of the Report of the Board's decision, that although the Advertiser had informed the Board that the product had undergone ASTM D5511 testing (in both the material supplier's labs and independently at 3rd party labs predominantly in USA) and provided brief results data from that testing, it was actually the more detailed report of the ongoing Victoria University study which the Board relied upon in coming to its conclusions regarding the biodegradability of the products in question. This Victoria University Institute of Sustainability and Innovation study follows the same testing methodology as ASTM D5511-02 and -11. The Board was satisfied that the Victoria University study "documented that the advertised products did commence biodegrading – whereas unmodified plastic cups showed no significant extent of biodegrading". In concluding that in the context of this report the statements contained in the advertisement regarding the biodegradability of the products were not misleading or deceptive, the Board's determination was neither clearly in error having regard to the provisions of the Code nor clearly made against the weight of evidence before the Board. Accordingly, there was no substantial flaw in the Board's determination on this point.

Comment regarding sustainability

The Review Application makes a general comment regarding biodegradability and sustainability but offers no evidence or detail to support a contention that there was a substantial flaw in the Board's determination arising from its consideration of the phrase 'smart choice for sustainability' under Section 1 (i). The Board, in its decision, noted the dictionary definition of sustainability as 'the avoidance of adverse effects on the natural environment and depletion of natural resources'. However, the Board took the view that a reasonable consumer would consider that a reasonable claim regarding sustainability would incorporate the concept of reducing adverse effects rather than avoiding them completely. The Board had clearly addressed its mind to the issue that adverse effects on the natural environment would not be totally avoided but would be to some degree reduced and was satisfied, on the basis of the evidence of relative biodegradability before it for this product, that the phrase 'smart choice for sustainability' was not misleading. The Board was entitled to arrive at that conclusion and there is no evidence that in doing so the Board was clearly in error in relation to the provisions of the Code or that the decision was clearly made against the weight of evidence. There was therefore no substantial flaw in the Board's determination on this point.

Comments regarding methane gas

Comments by the Board in its determination regarding the concerns of the complainant about methane gas production were ancillary to its consideration of the advertisement's claims under Section 1 (i) and not central to that consideration. The fact that the Review Application takes a different view of the reduction of landfill and the release of methane gas to that adopted by the Board, does not constitute evidence that there was a substantial flaw in the Board's determination and no further evidence of such a flaw was offered in relation to these comments. Accordingly, no substantial flaw in the determination of the Board arose from its comments relating to this issue.

There being no evidence that there was a substantial flaw in the Board's determination, ground 2 is not satisfied. Moreover there is no evidence which would suggest that either grounds 1 or 3 could be satisfied.

As the grounds for Review have not been satisfied, I recommend that the determination of the Board in case 0139/15 be confirmed.