REPORT TO ACCOMPANY AN AMENDMENT TO THE CODE OF WELFARE FOR DAIRY CATTLE

Explanatory Note **3 October 2019**

NAWAC's recommendations to the Minister as outlined in this report include two minimum standards setting out requirements for outdoor access for dairy cattle held in off-paddock facilities for more than 150 days in a 365-day-period. NAWAC had recommended a delayed commencement date for the provision of outdoor access in the minimum standards to allow for the time necessary for dairy farmers to change current practices and facilities. Due to this delayed commencement it is intended to bring these two minimum standards into effect by way of regulations under s 183A.

As a result, the amended code of welfare for dairy cattle, re-issued 3 October 2019, does not contain the minimum standards relating to outdoor access as recommended by NAWAC. The Ministry for Primary Industries will work with NAWAC to progress these minimum standards with a delayed commencement date for the provision of outdoor access.

Introduction

1. This report accompanies a 2019 amendment to the Code of Welfare: Dairy Cattle.

2. The report notes NAWAC's reasons for the recommendations for amendment, and outlines its views on good practice, scientific knowledge and available technology. It also notes:

- the nature of any significant differences of opinion about the Code amendment, or any provision of it, that have been shown by the submissions; and
- the nature of any significant differences of opinion about the Code amendment, or any provision of it, that have occurred within NAWAC.
- if applicable, those matters contained in, or related to, the Code amendment that the Committee considers should be dealt with by regulations under the Act.

3. In providing this report, NAWAC notes that it fully considered all submissions it received, reviewed relevant scientific literature, and that there was discussion among NAWAC members on many points. In addition, there was lengthy discussion with the dairy sector about keeping dairy cattle in off-paddock facilities, in particular their longer term uses such as where cows are housed in barns to facilitate robotic milking systems.

4. This report is not required to, and does not attempt to, show every detail of the analysis and discussions that took place.

5. NAWAC has decided that it will not provide comment on those minimum standards where it is clear that they are the minimum necessary to ensure the purposes of the Act will be met. It will provide explanation on minimum standards which it believes are complex or controversial or on which it received submissions with significant differences of opinion.

6. It should be noted that the Act does not define "significant differences". While there were a variety of opinions expressed in the submissions, NAWAC did not consider that all differences necessarily represented significant differences in opinion. NAWAC has taken the view that significant differences are either where there are large numbers of submissions which are contrary to a minimum standard in the Code, or where a submission puts forward a justification based on scientific evidence or good practice for a different or alternative minimum standard. NAWAC notes that some individuals or organisations may interpret "significant differences" in a way that varies from the NAWAC view. There were no significant differences of opinion about the Code, or any of its provision, among NAWAC members.

7. The amendments relating to behavioural needs cover all dairy cattle the code applies to. The amendments relating to off-paddock facilities specifically cover all facilities for managing dairy cattle on a constructed surface which may be indoors or outdoors, and where they are fully dependent on humans to provide for basic needs such as food, shelter and water while held in the facility. Other minimum standards throughout the code of welfare are also relevant for dairy cattle in off-paddock facilities.

8. It is essential that owners and persons in charge know what the needs of dairy cattle are, and how these needs can be met, in order that they can act lawfully and so that the welfare needs of the animals are met. This amendment expands on the basic obligations of the Act by setting minimum standards and recommending best practice for meeting the behavioural needs of dairy cattle and for the care and management of dairy cattle in off-paddock facilities. It is expected that those required to ensure compliance with the Act will use it to assist in identifying unacceptable practices.

Amendment preparation and public submissions

9. NAWAC initially drafted the proposed amendment in response to a request for advice from the Minister for Primary Industries on long-term housing of dairy cattle. NAWAC considered this request and has drafted amendments to the minimum standards in the Code in consultation with representatives of the New Zealand Veterinary Association, DairyNZ, Dairy Companies Association of New Zealand, Federated Farmers and the Dairy Barn Farming Association of New Zealand, to ensure that the welfare of dairy cattle complies with the requirements of the Animal Welfare Act 1999 (the Act). Representatives of the dairy sector were consulted on the draft amendments prior to public consultation and on subsequent drafts post consultation.

10. NAWAC considers that this amendment complies with the purposes of the Act, that it is written clearly so as to be readily understood, that the minimum standards recommended are the minimum necessary to meet the purposes of the Act and that recommendations for best practice are appropriate.

11. Section 78 of the Act sets out the process for reviewing codes of welfare, and requires that NAWAC must consult the public on every draft code. The consultation document was notified for public consultation from 18 October to 3 December 2013 in the major newspapers in Auckland, Wellington, Dunedin and Christchurch.

12. A total of 2,997 submissions were received during public consultation. This included 2,453 Green Party standard letters, 100 submissions of a circulated petition and 444 individual submissions. The submissions were considered by a subcommittee appointed by NAWAC to review the amendment in detail and all submissions received on it.

Throughout the period the Code amendment was under development the subcommittee members worked in collaboration by email, and in consultation with MPI staff. A copy of the summary of submissions (anonymised) and NAWAC's responses is attached to this report in Appendix 1.

13. The Code amendment and accompanying report were peer reviewed by dairy cattle expert Associate Professor Jean Margerison, University of Nottingham, UK.

Key issues

14. NAWAC considered that the following features should be addressed in an amended code:

- Requirements relating to the provision of opportunities to display normal patterns of behaviour for animals held in off-paddock facilities long-term, e.g. grooming, exploration, moving freely, socialising, lying in all positions, foraging and access to the outdoors.
- management and stockmanship practices specific to animals housed for longer periods of time, including stocking density, hygiene and health, bedding and lying times; and
- whether features of the design of the off-paddock facilities should be prescriptive to ensure that, for example, stall sizes and designs are consistent with the needs of cattle of different dimensions.

15. NAWAC carefully considered the scope. It concluded that the central requirements for housing or holding dairy cattle were the same regardless of age and sex of dairy cattle, and were the same across all types of management system. Where there are particular requirements for some cattle or some systems, these are laid out in the code. NAWAC initially excluded bulls at breeding centres from the requirements relating to off-paddock facilities, as, at the time, bulls at breeding centres were not kept in off-paddock facilities. However, more recent information has shown that some bulls may be kept off-paddock at some breeding centres. The amendments thus apply to all dairy animals as per application of the code of welfare for dairy cattle.

16. Calf housing

Newborn and young calves are particularly vulnerable to adverse environmental conditions and poor management, so require special attention. Satisfactory protection from adverse weather conditions can usually be achieved by housing groups of calves in a well-ventilated building, away from drafts, and with dry, insulating bedding. The amendment applies to all calves, whether reared or sent to slaughter.

Bedding substrates for calf housing, such as sawdust and wood shavings, can be difficult and expensive for farmers to obtain (Sutherland et al., 2014a). As a result, the use of stones (and sand) as an alternative bedding substrate for calves has been observed on some farms in New Zealand (Sutherland et al., 2014a). There is also a belief that, being biologically inert, stones (and sand) may assist with disease control.

Rearing on river/quarry stones (river stone diameter ~30mm, quarry stones ~40-60mm) led to calves spending less time playing and showing a smaller repertoire of play behaviour compared with calves reared on sawdust (Sutherland et al., 2013, 2014b). They also spent less time lying and had lower skin temperature than calves reared on sawdust. In contrast, weight gain, incidence of clinical diseases, leg health and cleanliness were

not affected by rearing substrate. Studies assessing calves' preference for four different bedding substrates, including sawdust, rubber chips, sand and stones (20-40mm diameter) (Sutherland et al., 2014c; Worth et al., 2015), showed that calves spent most of their time lying on sawdust, preferring it over the other substrates. They also spent less time running on stones than they did on the other substrates, and they showed the least preference for being on the stones. In a more recent study, Sutherland et al. (2017) compared health, physiology and behaviour of dairy calves reared on rubber chip, sand, wood shavings or pea gravel (3-5mm). While calves reared on pea gravel and sand had lower skin temperatures, other measures of physiology and behaviour of calves were similar to those of calves reared on wood shavings (preferred substrate).

NAWAC's recommendation

NAWAC considers that there are alternative rearing substrates with better welfare outcomes than stones. Where stones are used nonetheless they should be smooth and rounded, and no larger than 20-40mm in diameter and calves should be closely monitored for evidence of thermal stress (e.g. shivering or panting) and opportunities offered for them to express play behaviour. However, NAWAC does not want to encourage the use of stones as a bedding material and a recommended best practice has been included in the code that calves should be kept on compressible soft bedding that is dry and clean, prevents thermal stress and provides opportunity for calves to engage in play behaviour.

17. Use of off-paddock facilities

Off-paddock facilities enable farmers to provide shelter during cold and rainy weather and to provide shade from the sun. Across New Zealand, off-paddock facilities are used during periods of heavy rain to protect pasture and soil from damage from treading, and to reduce nitrogen leaching from animal urine. Their use patterns vary geographically, e.g. in Waikato stand-off pads are more often integrated into systems with cows grazing pasture or crop daily and their use more associated with rainfall, while in the South Island dairy cattle may be confined continuously for several months in their dry period.

Management systems that continuously house lactating cows for extended periods, such as free-stall robotic barns, have certain welfare benefits including reliable and regular provision for the nutritional needs of both transitional and lactating cattle, protection against inclement and hot weather, free choice to attend milking without human interaction, and automated monitoring of cow health and behaviour using smart technologies. While currently few in New Zealand, they are widely used internationally and may gain popularity in the future as a means to reduce environmental emissions.

However, all off-paddock facilities that impose confinement restrictions on dairy cattle pose risks to their welfare. Confinement increases the risk of greater exposure to social stress, increased risk of diseases such as lameness and mastitis and restriction of cows' behavioural repertoire if the system is not designed appropriately. Inadequate space for cows to access feed and water may reduce feed intake of subordinate animals. Effective management of urine and dung in walkways, feed and watering areas is needed to reduce cattle slipping. Risks may be greater in some facilities, e.g. free-stalls that are poorly designed and with insufficient bedding, facilities with hard surfaces such as concrete flooring versus those with rubber matting, or providing fewer than one stall per cow, will reduce the time that cows spend lying.

Cattle observed on pasture are generally perceived to live more naturally, and hence pasture is seen to provide better for their welfare. However, the reality is that pasture systems offer both positive and negative welfare attributes. Periods of compromise can occur if shade and shelter are inadequate, and nutritional deficits associated with the fluctuations of seasonal pasture production are not uncommon. Cattle on pasture may need to walk long distances to milking sheds, and high stocking densities may aggravate social interactions and result in reduced feed intake in subordinate animals, while poor track and race management can lead to higher incidences of lameness in a herd or severe lameness in individual animals.

Off-paddock systems and their associated management practices are rapidly evolving in New Zealand and future systems will likely reflect local adaptations to problems that arise during the broader diffusion of these technologies. It is likely that most dairying systems will continue to rely on grazed pasture for feed, but as systems are evolving there are increasing numbers of farmers adopting hybrid management systems, e.g. using a free-stall barn to house lactating cows in winter and as a feed-pad to provide supplement for cows grazing pasture or crop in other seasons.

NAWAC believes that while overseas information about management of cows in off-paddock systems should be considered, especially where cows are housed for prolonged periods, it has limited relevance in the New Zealand context. This is because dairy cattle in New Zealand are mainly held in off-paddock facilities during winter, and most management systems include grazed pasture in the diet. Further, the genetic development of KiwiCross cattle has produced a smaller, lighter animal which is well adapted to a pasture-based diet and seasonal calving (Macdonald et al., 2008; Knaus 2016).

The provisions contained in the Code recognise that dairying systems are continually evolving, hence minimum standards are outcome-based to ensure flexibility for their delivery and continuing relevancy during the life of the code.

18. **NAWAC's key questions and considerations in addressing the concerns raised by public submissions were**:

- What are the benefits of keeping cattle in off-paddock facilities?
- What is happening internationally?
- Meeting behavioural needs in off-paddock facilities
    - Lying, standing and walking
    - Do dairy cattle need access to the outdoors?
    - Stocking density
    - Calving cows in off-paddock facilities
    - Grooming
- Disease management
    - How to manage the greater risk of rapid disease spread
    - Lameness and mastitis
    - Other health problems associated with off-paddock facilities
- Detail on management and facility requirements
- Stockmanship
    - Skill level
    - Monitoring requirements
    - Feed and bedding supply

19. What are the benefits of keeping cattle in off-paddock facilities?

Keeping cattle in off-paddock facilities has several benefits. They may protect animals from inclement and hot weather by providing shade and shelter, and allow farmers to protect pasture during wet conditions thus safeguarding future feed supply. They are frequently used as a place to provide supplementary feed to balance deficits that can arise with seasonal pasture production and assist the maintenance of good body condition.

It is increasingly recognised that off-paddock facilities can reduce the environmental impacts of pasture-based dairy farming. Allowing the recycling of nutrients in urine and faeces can reduce environmental impacts, particularly leaching of nitrogen. Bringing cattle off-paddock in rainy conditions also reduces pugging and sediment production, so reduces overland flows to waterways.

Flexibility and ease of operation, a sense of greater management control and a reduced requirement for staff due to reduced labour demands are among the social drivers of using off-paddock facilities (Verkerk, 2011). A New Zealand survey in 2008 indicated that protecting stock from inclement weather, protecting pasture from damage during wet conditions and the ability to secure a good supply of feed were important factors for producers when deciding whether to house their cows (Arnold et al., 2008). Better body condition, longer lying times, reduced thermal challenge, and, in some cases, improved calving outcomes were perceived as the main advantages of well-managed off-paddock systems.

20. What is happening internationally?

In North America, many dairy cows no longer have access to pasture (Chapinal et al., 2010). With 8 out of 10 dairy operations housing cows in tie-stalls and free-stall barns, pasture was the predominant management surface for only 5.1% of cows (Anonymous, 2010). In Europe, cows often have access to pasture in summer and are kept indoors over winter, however the amount of access to pasture varies within countries and between regions (Anonymous, 2013). In some European countries, such as Norway, Sweden and Finland, daily pasture access for a continuous period during the summer is required under animal welfare legislation.

The number of grazing hours provided for cattle has generally been decreasing, and the increasing number of larger herds was predicted to lead to a further reduction in the time that cattle spend outdoors (van den Pol-van Dasselaar et al., 2015). The highest approximate rates of continuous (zero-grazing) housing have been reported for Italy (90%), Greece (85%), Spain (80%), Czech Republic (80%), Denmark (75%), Slovenia (60%) and Germany (58%) (Anonymous, 2013). However, recently there has been a rising demand for dairy products from grass-fed animals in some countries (metz

et al., 2018) which may reverse this trend to increase the number of grazing hours for cattle.

There is public concern for the welfare of permanently housed dairy cattle. For instance, in a UK survey of 363 people, 95% of participants believed that keeping cows housed permanently was not acceptable and respondents associated plenty of space, freedom to roam, fresh air and access to the outside with good animal welfare (Ellis et al., 2009). In a more recent online engagement of 414 participants, the majority viewed access to pasture as important. Proponents of pasture access believed that it was more natural for cows and better for their welfare, with their reasoning moving beyond the benefits of eating grass,

to include fresh air, the ability to move freely, live in social groups, and experience improved health and produce healthier milk products (Schuppli et al., 2014).

Provision of outdoor management also needs to be considered in light of public demands for sustainable management of nutrient discharges from pasture systems, for provision of shade and shelter for grazing cows and for cows to be adequately fed.

21. Meeting behavioural needs in off-paddock facilities

Lying, standing and walking

Lying down is a very important behaviour for cows (Jensen et al., 2005; Munksgaard et al., 2005). While minimum lying times of 8 hours are suggested by New Zealand industry, research shows that cows prefer to lie for at least 10-12 hours per day depending on the management system (reviewed by Charlton and Rutter, 2017).

Reduced lying times are associated with behavioural and physiological indicators of stress (Munksgaard et al., 1999; Fisher et al., 2002; Cooper et al.; 2008, Webster et al., 2015) and an increased risk of lameness (Chapinal et al., 2009; Cook and Nordlund, 2009). Research has shown that the welfare of cows is compromised when lying is restricted to 4 hours per day for 7 continuous days (Fisher et al., 2002). When cows are managed temporarily on concrete or muddy surfaces they reduce their lying times dramatically (Fisher et al., 2003; Chen et al., 2017), and will try and compensate for the reduced lying times when moved to pasture, likely at the expense of feeding (Metz 1985; Fisher et al., 2003; Schütz and Cox 2014). This suggests that cows value resting very highly (Jensen et al., 2005).

Cows also spend less time lying as stocking density increases (Fregonesi et al., 2007a; Dalley et al., 2012; Krawczel et al., 2012) and when the temperature-humidity index is high (THI ~68) (Cook et al., 2007), and inclement weather conditions also have an impact on lying times in outdoor systems (Dalley et al., 2012). Lame cows may show changes in the length and number of individual lying bouts (Gomez and Cook, 2010).

The design of housing systems will also have an effect, with some housing systems limiting the ability of cows to lie down and restricting the format of lying (e.g. lying on the side versus lying upright on the brisket), and discouraging long periods of lying due to discomfort (Tucker and Weary, 2001; Tucker et al., 2004; EFSA, 2009). There is evidence that lactating cows housed in free-stalls with access to an outdoor area, choose the outdoor area for lying on their side (Langford et al., 2013). Cattle on pasture were observed lying in a lateral position with their heads supported more than cows in deep bedded loose house system (Krohn and Munksgaard, 1993). Cows prefer dry and comfortable soft surfaces for resting which should provide grip to support standing and lying movements, but not be abrasive (EFSA, 2009). Bedding quality is influenced by the nature of the base substrate (e.g. concrete, concrete slats, limestone, gravel, deep litter, sand and soil) and the type and quantity of the bedding material provided (e.g. straw, sand, sawdust, bark chip or mats). Both aspects will influence lying times, as well as the management efforts to maintain and refresh bedding material (Verkerk, 2011) as cows prefer to stand rather than lie down on wet bedding (Fregonesi et al., 2007b). Cows spend more time lying on dry surfaces, both in a pasture based dairy system (Fisher et al., 2003; Schütz et al., 2019) and in free-stall systems (Fregonesi et al., 2007b; Reich et al., 2010) and when given a free choice, cows prefer dry bedding over wet bedding (free-stalls: Fregonesi et al., 2007b; Reich et al., 2010, pasture based system: Schütz et al., 2019).

Cows on pasture lie down less than those in free-stall systems (Phillips and Rind, 2001; Cook et al., 2004; Munksgaard et al., 2005; Tucker et al., 2007), possibly due to a combination of longer feeding times needed for pasture-fed cattle to obtain their energy requirements, and the need of cows in free-stalls to avoid standing on hard concrete surfaces.

In New Zealand, it is common practice during winter to use stand-off areas, or feed pads, to protect pasture from pugging and damage from cows. Weather and soil type affect how often and for how long such facilities are used. Cows in a study of New Zealand wintering systems spent less time lying per day when housed in barn systems than on crops, pasture and a wintering pad (Dalley et al., 2012). The length and frequency of lying bouts was affected by the nature of the wintering system. While overall averages in all systems achieved industry-recommended lying times of 8 hours per day, systems varied in the proportion of animals not achieving the minimum lying times, with cows wintered on grass achieving the highest average lying times. Cows housed in the barns were kept at a higher stocking density and both stocking density and lying surface/provision of bedding were considered to influence lying times. In contrast, weather had the most impact on lying times of cows kept on pasture (Dalley et al., 2012).

Surfaces for walking and standing are also important contributors to cow health and welfare. Poor drainage and effluent accumulation can lead to reduced claw horn strength (Borderas et al., 2004; Gregory et al., 2006), which increases the risk of secondary infections and infectious forms of foot disease such as dermatitis (Winkler and Margerison, 2012). In addition, floors need to provide adequate friction without being abrasive to prevent injury from slipping. Concrete floors provide insufficient traction for good mobility and their hardness puts greater pressure on the cows' hooves. Pasture has been suggested as a superior walking surface to rubber and mastic asphalt (Alsaaod et al., 2017). Alsaaod et al. (2017) investigated locomotion characteristics of tie-housed cows when walking on pasture and artificial surfaces. While all gait variables tested were significantly different between pasture and mastic asphalt, solid rubber flooring did not significantly improve the locomotion comfort variables compared with mastic asphalt. The authors suggest that frequent pasturing may be an important management tool for improving locomotion comfort of dairy cows. However, when cows kept on pasture are required to walk long distances and walk on poorly maintained tracks, negative effects on hoof health can result (Stafford and Gregory, 2008).

Exercise promotes good health by improving blood circulation and developing the muscular system (Davidson and Beede, 2009). A reduction in non-esterified fatty acid blood levels of exercised cows has been suggested to reduce the risk of metabolic and digestive disorders (Adewuyi et al., 2006). Differences have been found between studies in the distances walked by cattle daily where they have been housed in loose housing systems (2-4km daily compared to 600-700metres daily) (EFSA, 2009). Exercise may be difficult on hard and/or slippery floors when lighting levels are low or where there is insufficient space, and these factors could explain the differences in daily walking times observed.

NAWAC's recommendation

NAWAC has included a minimum standard stating that cattle must be able to lie and rest comfortably for sufficient periods each day to meet their behavioural needs, and another minimum standard to ensure cattle are able to walk, turn around, lie in a natural position

and lie down and rise freely. In addition, a recommended best practice that lying times should be 10-12 hours daily has been included. The minimum standard to provide daily or frequent access to a suitable outdoor area with a compressible surface and sufficient space relating to the long-term management of dairy cattle in off-paddock facilities also promotes exercise on a suitable walking surface, potentially compensating for adverse effects that the walking and standing surfaces of the off-paddock facility may have on health and welfare. Also of relevance for promoting adequate lying times are the requirements relating to free-stalls, including minimum standards stating that stocking density must allow a minimum of one free-stall per animal housed and that the design and size of the free-stalls must allow all dairy cattle in the facility to lie without the body extending outside of or overhanging the end of the free-stalls. A recommended best practice for free-stall barns to provide 10% more free-stalls than animals present has also been included. While not all natural lying positions are achievable in free-stalls (e.g. extended lying positions), they do allow well for cows' natural sitting and some sleeping postures as long as the sizing of free-stalls is appropriate. The provisions for access to pasture or a suitable outdoor area will provide opportunity for dairy cattle to lie in extended positions.

NAWAC acknowledges the impact on animal welfare when dairy cattle are deprived of lying for several days. To ensure that dairy cattle obtain sufficient rest, NAWAC has, in addition to the provision for cattle being able to lie and rest comfortably for sufficient periods each day to meet their behavioural needs, included a minimum standard that well drained and maintained lying areas, with compressible bedding, are provided where dairy cattle are managed off-paddock for more than 16 hours a day for more than three consecutive days. There may be emergency situations when farmers keep cattle off-paddock for more than 16 hours a day for a number of days to minimise damage to soil and protect cows (e.g. during extreme wet weather). NAWAC considers that cattle can only be managed off-paddock in these situations without the provision of drained lying areas for up to 3 days. Undesirable welfare outcomes are experienced if dairy cattle are kept on hard surfaces without the provision of comfortable lying areas for longer than 3 days (see Fisher et al 2003; Schütz and Cox 2014).

Signs of physiological stress and behavioural frustration can be observed where lying time is less than 8 hours (Munksgaard and Simonson, 1996; Fisher et al 2002). NAWAC considers that where dairy cattle are kept off paddock for up to 16 hours per day they would have a minimum of 8 hours available on soft surfaces, such as pasture, to make up for any lying deficits they may experience during stand-off. Where cattle are routinely kept off-paddock for close to 16 hours per day, NAWAC encourages persons in charge of dairy cattle to provide them with a well-drained and maintained lying area with compressible bedding to allow for lying times of 10-12 hours as per recommended best practice.

While much of the above discussion has considered physical and management factors that support lying behaviour, the critical role that people play cannot be over-emphasised. At farm investment and management level it is important that advice is taken at the design stage to ensure that the facility built will meet the needs of all players including the animals. It is equally important that those that care for the immediate daily needs of cows held in off-paddock facilities are trained to identify animals that fail to adapt to the management system, and are familiar with the behavioural indicators of failure to achieve sufficient rest.

Do dairy cattle need access to the outdoors?

The lack of access to pasture, grazing and the outdoors was a key concern raised in public submissions. The majority of submissions have expressed concern that cows kept in indoor systems without access to pasture cannot express their normal patterns of behaviour and are not provided with the necessary means to live a natural life. While some submissions agreed that shelter from extreme weather was necessary, they argued that cows should also be free to leave the shelter should they wish to do so. In contrast, other submissions argued that the welfare of cattle does not rely on grazing and that their welfare needs can be met adequately indoors.

Motivation to access pasture

The preference of cows to access pasture is affected by various factors including environmental conditions, previous experience of pasture, availability of sufficient food to satisfy nutritional needs, pasture quality, distance to pasture, and the time of day (Legrand et al., 2009; Charlton et al., 2011a; Motupalli et al., 2013, 2014). Cows choose to use housing more in poor weather and when food is provided in the housing (Laven and Holmes, 2008; Charlton et al., 2011a). They also choose to access housing when temperature and humidity increased outdoors (Legrand et al., 2009), reflecting their use of housing to provide shade at high air temperatures (Schütz et al., 2008). Cows do choose to access outdoors for short periods even in unfavourable conditions (winter temperatures, rain and wind) (Krohn et al., 1992; Vasseur et al., 2013; Shepley et al., 2017a).

Choosing to access housing does not preclude a preference for access to pasture (Charlton et al., 2011a). Where provided with a choice between access to feed indoors and access to pasture with no supplementary feed, high-producing cows may prefer to access feed at certain times (Falk et al., 2012) to satisfy their nutritional needs. However, this does not mean they do not need access to pasture to satisfy other needs. It may highlight that energy demands are so high that their motivation to eat is greater than their motivation to access pasture. Studies have shown that animals will attempt to remove the source of any negative experiences, in this case hunger, before striving for positive experiences (Špinka, 2006). Indeed, cows expressed a partial preference for pasture when total mixed ration (TMR) was provided indoors as well as on pasture (Charlton et al., 2011b), although the close proximity to pasture (40m in this study) may have influenced their choice. The majority of cows offered free choice access to pasture after being fed in the morning and having access to haylage indoors and outdoors, chose to remain on pasture as a group for the majority of the test period (Shepley et al., 2017b). When cows were forced outdoors, the main behaviour observed during the first hour was grazing, with lying being the most predominant behaviour after the first hour (Shepley et al., 2017b).

Preferring indoor housing over access to pasture does not mean that either environment has a greater effect on the animal's welfare (Fraser, 2008). It is assumed that giving any animal its preferred option will only be important to its welfare if the preference is strong (Fraser, 2008). This can be assessed by measuring how hard an animal is willing to 'work' for access to a particular environment (Fraser, 2008). In a recent study, cows worked at least as hard for access to pasture as they did for access to fresh feed, particularly in the evening (von Keyserlingk et al., 2017). The latter supports other studies showing that cows appear highly motivated to access pasture at night (Legrand et

al., 2009; Falk et al., 2012; Charlton et al., 2013; Lee et al., 2013; Motupalli et al., 2014; Smid et al., 2018).

Cows usually spend more time resting and ruminating at night (Kilgour, 2012; Lee et al., 2013), although this is influenced by weather conditions (Falk et al., 2012), and the motivation to access pasture at night may be associated with a preference for soft lying surfaces (Krohn et al., 1992; Motupalli et al., 2014) and more available space to find a comfortable lying space. The additional amount of space commonly available to cows on pasture (when compared to that available in confined housing) may also reduce aggressive behaviours. Previous studies looking at housed cows compared to those on pasture have reported higher levels of avoidance behaviour (Miller and Wood-Gush, 1991) and greater levels of aggression around feeding times (Black and Krawczel, 2016) in the former housing situation.

Other factors, such as the freedom for cattle to choose where to lie down, the ability to lie down fully in extended positions, the provision of an alternative space for social interactions, and for opportunities to explore, may also be important. Cows lying in the lateral position with the head supported, which is important for the occurrence of REM sleep (Ternman et al., 2014), was observed more often on pasture than in deep bedded housing systems (Krohn and Munksgaard, 1993).

Public submissions were concerned that grazing was a behavioural need and that permanently housing dairy cattle without access to pasture would therefore compromise their welfare. Unfortunately, little is currently known regarding the motivation of cows to graze (Charlton and Rutter, 2017). Lindström and Redbo (2000) demonstrated that lactating dairy cows are motivated to orally manipulate (consume) feed even when their rumens are filled artificially, suggesting that cattle may have a behavioral need to perform foraging behavior even when metabolically satiated. The motivation to graze and forage has also been demonstrated in beef cattle. Tuomisto et al. (2008) kept Hereford bulls either in a barn or in forested paddocks, and offered them all TMR *ad libitum*. They found that the paddock bulls grazed and browsed in addition to eating the TMR. While the TMR diet was designed to meet the bull's nutritional requirements and they consumed the same amount as bulls housed in a barn environment, the authors suggested that by grazing and moving in the paddock, the bulls could utilize the opportunities for more diverse behavior and this may have had a positive effect on their welfare (Tuomisto et al., 2008).

While cows have been shown to work for pasture access, it is difficult to determine what it is about pasture that is attractive to cattle - the opportunity to exercise on soft non-slip surfaces, the freedom to choose where to lie down, the ability to graze, the space and soft surfaces for lying in a range of normal lying positions (particularly extended positions), the opportunity and space for grooming, or the ability to avoid agonistic interactions due to greater spacing between animals.

Pasture access and implications for dairy cattle health

Pasture access is beneficial for cows' health. A review of the literature highlights that there are considerable health and animal welfare benefits when cows have access to pasture, and challenges the increasing use of continuous housing systems (Arnott et al., 2017). Access to pasture appears to reduce mortality rates compared to cows housed indoors all year round (Burow et al., 2011) and dairy herds with longer periods at pasture

(3 to 4 months) had lower mortality rates than those at pasture for 2 months (Alvasen et al., 2012). In addition, access to properly managed pasture can confer other health benefits, such as reducing lameness and mastitis in affected cows (von Keyserlingk et al., 2009; Wagner et al., 2018).

However, pasture access may also result in high levels of lameness, especially when management factors such as poorly maintained tracks, also influence hoof health. In addition, the improvements in hoof health observed in response to pasture access did not persist into the housing period (Holzhauer et al., 2012). While several studies support the beneficial effect of pasture access on health (Hernandez-Mendo et al., 2007; Olmos et al., 2009; Corazzin et al., 2010), these effects may be dependent on the amount of time spent on pasture and the quality of the pasture. For example, access to pasture after winter housing had a positive effect on hock joint skin alterations (Burow et al., 2013a,b), which was more pronounced when cows spent more time at pasture (9 to 21 hours a day). Access to pasture was ineffective in reducing the presence of hoof lesions of winter-housed cows when grazing less than 8 hours a day during the summer grazing period (Haufe et al., 2012).

Could a requirement for dairy cattle to have access to pasture present a risk to animal welfare?

Requiring that cows be put out to pasture, in particular during inclement or hot weather, may inadvertently lead to worse welfare outcomes than when cows are kept within off-paddock facilities. For example, muddy conditions might impose constraints on animals' ability to move and find a comfortable place to lie down and thus reduce lying times. Several studies of dairy cows have reported severely reduced lying times on muddy surfaces by 50 to 75% compared to dry surfaces (Muller et al., 1996; Fisher et al., 2003; Chen et al., 2017). Dairy cattle are able to distinguish between dirt that varies in dry matter content and avoid lying in mud (Chen et al., 2017). Social mixing and the need to adapt to new lying/sleeping arrangements may also be stressful for cows.

Another important problem identified with providing seasonal/intermittent access to pasture is the negative effect of a change of diet on cow health. Pasture-based diets favour ruminal fermentation by cellulolytic and hemicellulolytic bacteria (Westwood et al., 2003). An abrupt change from a pasture-based to a high-starch diet favours ruminal fermentation by lactic-acid producing bacteria, which will reduce ruminal pH and lead to acute ruminal acidosis (Westwood et al., 2003; Nagaraja and Lechtenberg, 2007). Acute rumen acidosis is associated with anorexia, abdominal pain, tachycardia, abnormally fast breathing, diarrhoea, lethargy, staggering, recumbency and can result in death (Krause and Oetzel, 2006) and has also been implicated as a potential risk factor for lameness (Westwood et al., 2003). In addition, starch not fermented in the rumen will pass to the colon supporting increased bacterial multiplication and may thus increase the risk of mastitis by increasing the bacterial load in the environment (Verkerk, 2011). It is suggested that when moving cows from a pasture-fed diet to a high-starch diet or *vice versa* (Schären et al., 2016a,b), that this should be done gradually over a period of several weeks to allow a controlled adjustment of fermentation rates, rumen turnover and microbial populations (Westwood et al., 2003). Thus, periodic access to pasture can compromise welfare if dairy cattle are not transitioned adequately. In addition, high-producing cows may need more than grazed pasture to meet the high energy needs of milk production (Kolver, 2003).

Does 'outdoors' need to be pasture?

The limited studies that have investigated the use of loafing areas on the welfare of cows have assessed cows kept in tie-stall systems (Loberg et al., 2004; Veissier et al., 2008; Popescu et al., 2013). Whether access to an exercise yard/loafing pad has beneficial health and behavioural effects comparative to those experienced when accessing pasture, and how often and how long such access should be provided in order to obtain similar benefits to those associated with pasture access, has yet to be investigated for cows kept in free-stall barns.

Loose-housed cows offered access to a covered concrete loafing area only used the area for a small proportion of time (~15%) and the authors' noted that provision of a view over the surrounding area was not a strong motivational factor for its use (Haskell et al., 2013). Instead, cows appeared to use the area to avoid dominant animals during times when aggression in the house was highest (i.e. feeding time), as well as for thermoregulatory purposes.

Smid et al. (2018) observed that cows housed in a free-stall barn that were provided with simultaneous access to pasture or a small sand pack at night, spent more time on pasture than on the sand pack when outside (90% of time on pasture versus 1% of time on sand). However, the short habituation period (~ 24 hours total) for the sand pack may have affected the results. When cows only had access to the sand pack they spent 44% of their night outdoors (compared to 91% when offered access to pasture). Lying times (~ 50% of time spent outdoors) were not different between pasture and the sand pack. The authors suggest that cows found the two surfaces equally comfortable for lying down. Importantly, access to either outdoor area led to a decline of perching (with the front legs on the bedded surface) in free-stalls during the day, which the authors suggest may be beneficial for leg/hoof health.

NAWAC's recommendation

NAWAC considers that off-paddock facilities used for wintering dairy cattle provide many welfare benefits such as a greater provision of shelter and adequate nutrition. At the same time, confinement imposes greater welfare risks, such as social stress, disease transmission and behavioural restriction. Hence, in situations where cattle are subjected to longer periods of time off-paddock good management is essential.

NAWAC agreed that dairy cattle should not be kept in an off-paddock facility permanently without access to the outdoors. NAWAC initially considered a maximum time period that dairy cattle may be kept in an off-paddock facility based on lactation length as per a seasonal calving system (i.e. up to 300 days). However, modern dairy cows have the capacity for lactation lengths of over 300 days (Turner et al., 2008) and increasingly cows may have extended lactations as they fail to get back in calf within the seasonal pattern. Lactation length was therefore not considered a suitable time period to be included in a minimum standard.

New Zealand's temperate climate provides suitable environmental conditions for dairy cattle to be outdoors for a large proportion of each year. NAWAC therefore recommended that the duration of continuous housing of dairy cattle in an off-paddock facility without outdoor access be limited to 150 consecutive days. This time period allows cattle to be kept off paddock during the main wet season (~ 5 months including

late autumn, winter and early spring), while ensuring that they are not kept in an off-paddock facility long-term without access to outdoors.

NAWAC debated whether there is an imperative for dairy cattle to be given access to pasture. While it understands that cattle prefer pasture access under certain conditions and are motivated to access pasture, it acknowledges that the scientific understanding of what aspects of pasture motivate dairy cattle to access it is currently limited. It also acknowledges that providing dairy cattle with pasture access when they are kept in off-paddock facilities can have potential negative welfare impacts due to dietary changes, distances walked, social mixing and exposure to inclement weather conditions and muddy paddocks. NAWAC therefore determined that there should be no compulsion to provide pasture for grazing, and recommended an exceptional provision for dairy cattle that are being kept in off-paddock facilities for more than 150 days in any 365-day period (e.g. in a robotic milking system in a free-stall barn). While cattle in these circumstances do not have to be provided with pasture access, they must be given daily or frequent access to pasture or a suitable outdoor area for the balance of that 365-day-period (e.g. pasture access while cows are not lactating/are in their dry period). The outdoor area must have a soft compressible surface and sufficient space that allows the animals to express a wide range of normal patterns of behaviour including the ability to exercise on soft non-slip surfaces, freedom to choose where to lie down, space and soft surfaces for lying in a range of normal lying positions, and space for grooming and for avoiding aggressive interactions. Where the off-paddock facility already complies with the requirements for a suitable outdoor area (i.e. outdoor facilities that provide shelter as well as soft non-slip surfaces and sufficient space to exercise, groom, lie in a range of normal positions and avoid aggressive interactions), NAWAC considers that the minimum standard for outdoor access has been complied with.

It is the committee's view that this approach provides a reasonable balance between providing for the animals' welfare needs, whilst allowing for farm management and environmental considerations. As off-paddock systems evolve, they should be scrutinised to ensure that dairy cattle are not compromised in their behavioural freedom and NAWAC encourages designs that incorporate pasture access for dairy cattle for much of the year. In order to signal its preferred outcome, the committee has included a recommended best practice that, weather and ground conditions permitting, all mature dairy cattle in off-paddock facilities be given daily voluntary access to pasture or a suitable outdoor area. NAWAC acknowledges that the welfare implications of implementing this recommended best practice, including the impact of dietary changes, social mixing, availability of shelter and walking distances, will need to be carefully assessed. NAWAC is encouraged by the innovative development of new hybrid systems that utilise the benefits of off-paddock facilities within a more traditional grazed pasture approach.

There are a small number of dairy farms in New Zealand that currently house their cattle permanently indoors and which may have to make changes to their operations in order to deal with the provisions for outdoor access. NAWAC initially agreed to recommend an arrangement for these farms to be exempt from this requirement. However, as existing barns may have an economic lifetime of another 20-30 years or beyond, given the capital investment required for their construction, NAWAC then thought it necessary to re-consider this. A phase-out date was discussed by the subcommittee, however the process involved in enacting this would have meant further delays for the amendment coming

into effect. In addition, a transition period which does not exceed 10 years (the maximum permissible timeframe for a transition under the Animal Welfare Act 1999) would have meant that cows on these farms could be permanently kept in off-paddock facilities without outdoor access for up to 10 years, which may be the entire lifetime of a cow. This was not considered by the committee to be appropriate. NAWAC therefore recommended the minimum standard relating to outdoor access to come into effect 12 months after issue of the amendment to allow these farms time to put measures in place to provide outdoor access for their cattle in order to meet the minimum standards in the code.

NAWAC understands that for the majority of dairy farmers the requirement for outdoor access will not impose economic consequences, as pasture access is already incorporated to varying degrees in current dairying systems. NAWAC recognises that there is a small number of dairy farms (NAWAC is aware of fewer than 10 as per information received from DairyNZ, site visits and from Regional Councils) that do not have existing facilities or management systems to deal with the provisions for outdoor access. NAWAC acknowledges that these farms will be economically impacted by the minimum standard to some extent depending on their current system (i.e. having to build a suitable outdoor area, ensuring suitable fencing and infrastructure for pasture access, or changes to their current management system to allow access to pasture within the required period).

Stocking density

Some submissions were concerned that the proposed minimum standards were lacking detail on stocking densities. Adequate space allowance is important for dairy cattle as the reduced space availability at high stocking densities can lead to increased levels of aggression (Miller and Wood-Gush, 1991; Menke et al., 1999) and reduced lying times (Charlton et al., 2014; Winckler et al., 2015). NAWAC prefers that the minimum standards in the codes of welfare are outcome based wherever possible and setting stocking densities for animals that can vary in size according to breed, age and productive stage (e.g. cows in calf may require more space than cows which are not gestating) has the potential for worse welfare outcomes for the cattle. Therefore NAWAC decided not to set prescriptive requirements for the stocking densities of dairy cattle with the exception that a minimum of one free-stall per animal housed in a free-stall barn must be provided and a recommended best practice that at least 10% more stalls than animals should be provided. The minimum standard relating to the provisions for behavioural needs describes the outcomes required (i.e. that dairy cattle are able to walk, turn around, lie in a natural position, lie down and rise freely, express normal feeding behaviour and appropriate social interactions).

Calving cows in off-paddock facilities

While calving indoors protects cows and calves from bad weather, it can introduce difficulties. Disturbance by other cows, for example, can lead to calving difficulties and cows may become cast.

Indoor calving introduces new requirements for facilities that allow the cow to be separated from the herd for calving (Arnold et al., 2008), sufficient space (e.g. to lie in full lateral recumbency while in labour), as well as clean dry bedding and appropriate flooring surfaces to prevent injuries to cow and calf.

Free-ranging domesticated cows often leave the herd to calve (Lidfors et al., 1994). Housed cows provided with a secluded area and an open area, with visual access and

head-to-head contact with other cows, showed a preference to calve in the secluded area and remained in the secluded area with their calf for the first hour after calving (Proudfoot et al., 2014a,b). Cows were shown to prefer shelter to calve when housed alone, and, where pair-housed, the distance between calving cows and other cows increased towards calving (Proudfoot et al., 2014a,c). The authors suggest that individual pens could easily be retrofitted to provide some seclusion for calving cows and that in group pens the provision of visual barriers such straw bales could give cows the opportunity to isolate themselves from others (Proudfoot et al., 2014a).

Preventing calving cows from isolating themselves may not only interfere with the birth process, but also with licking of the calf after birth, which is necessary for stimulating calf activity and physiological events such as breathing, circulation, urination and defecation (von Keyserlingk and Weary 2007) and the consumption of colostrum. Maternal behaviours are therefore essential for the survival and wellbeing of the newborn calf (Arnold et al., 2008). Postpartum cows are at a higher risk of metabolic and infectious diseases (Mulligan and Doherty 2008). Isolating calving cows provides stockpersons with the ability to assess their health status immediately prior and during calving and provide assistance where necessary.

NAWAC has included a minimum standard that states that calving cows must be able to separate themselves for calving or to be separated. In addition, calving areas must be clean, well-drained with an anti-slip surface; calving cows must be provided with clean and dry bedding, including, but not limited to, rubber mats or deep straw, when calving on hard surfaces or on slats; and cows must not calve in individual free-stalls/ free-stall cubicles. While rubber mats are an acceptable form of bedding, additional bedding has to be provided when mats get wet and become slippery to provide an anti-slip surface for calving.

Grooming

Some submissions were concerned that indoor housing would reduce cows' ability to groom and avoid contact with faeces. Grooming is a normal pattern of behaviour of cattle and, as with other animals, is thought to help animals to rid themselves of mud, faeces, urine, insects and parasites, thereby reducing the risk of disease (DeVries et al., 2007). Self-grooming in cattle involves licking, scratching with hind feet or horns, swatting with the tail as well as scratching on objects to reach inaccessible body parts (DeVries et al., 2007). Grooming may be affected in housing systems where floors do not support postures for grooming, for example when floors are slippery and where high stocking densities may also affect the space available for grooming.

Restraining cattle for 4 consecutive days led to an increase in grooming directly after being released and was one of the first behaviours performed after release (Bolinger et al., 1997). Also, group-housed dairy cattle that had access to a mechanical cow brush were grooming (scratching), on average, 9.7 times per day compared to 3.0 events by cows without the brush; 80% of those events were visits to the mechanical brush, particularly grooming body parts that were hard to reach by the cow (DeVries et al., 2007). This suggests that grooming is important to cows (DeVries et al., 2007). A recent study by McConnachie et al. (2018) assessed cows' motivation to access a grooming substrate. They found that cow's motivation to access a mechanical brush was similar to their motivation to access fresh feed, suggesting that the brush was a valued resource.

The provision of automatic brushes for grooming in free-stall housing is becoming more common (Mandel et al., 2013). Such brushes may not only make it easier for cows to groom themselves in hard to reach places, thereby improving cleanliness, but reduce frustration and stress due to boredom (DeVries et al., 2007). Brush usage may also serve as a tool to identify stress and disease (Mandel et al., 2013).

NAWAC has included a minimum standard for cows to have enough room to move around and perform the full range of normal patterns of behaviour, which includes sufficient space for grooming. NAWAC has also included a recommended best practice that the provision of devices that promote grooming should be considered where dairy cattle are kept in off-paddock facilities.

22. Disease management

How to manage the greater risk of rapid disease spread?

Disease can spread very quickly in cows confined at close quarters. Where herds are large, the scale of the problem may be increased, making stockmanship, health monitoring and management particularly important. The prevention of certain diseases, such as mastitis and lameness (see below) are known to be particularly important in housed cows. Animal pests may introduce diseases such as leptospirosis or salmonellosis into a housed herd and pest control programmes are therefore important (Verkerk, 2011). Human visitors and imported feed and bedding material may also carry a biosecurity risk (Verkerk, 2011).

NAWAC recognises the greater risk of rapid disease spread and has included a minimum standard requiring that a management plan, including contingency and pest and disease management plans, must be in place. In addition, attention must be given to adequate ventilation, as this plays a role in disease prevention when animals are kept at close quarters.

Lameness and mastitis

Submissions expressed concern that housed cows have more health problems than cows kept on pasture. Prevention, rapid identification and treatment of lameness and mastitis are particularly important in housed cows (Laven and Holmes, 2008). A move towards housing systems in New Zealand could therefore lead to a potential increase in the incidence of lameness and mastitis and other problems, such as hock lesions. There is a risk that this could be accompanied by changes in the aetiology of these diseases, and would be associated with the need to develop new preventative regimes, such as foot-bathing for New Zealand dairy cattle (Laven and Holmes, 2008).

The incidence of lameness in countries where housing cows is common is reportedly higher than in New Zealand's pasture-based systems (Chesterton et al., 2008). Management practices, including the increased time cows spend standing and the nature of the surfaces they stand on, are seen as the central origin of lameness in housing systems (Cook and Nordlund, 2009). Housing cows for longer periods of the year increases the prevalence of lameness. Rutherford et al. (2009) reported that cows grazed for 9 months each year had a 6% prevalence of lameness, while those grazed for only 5 months each year had a prevalence of 29%.

Risk factors for lameness in housing systems include the nature of the hard surfaces cows must stand and walk upon, a concentrated diet, bacterial accumulation in bedding and wet

surfaces due to effluent accumulation or poor ventilation. The presence of excessive slopes and steps, restricted access to pasture or soft areas to stand, duration of housing and design and management of the feeding area are other factors to be considered (EFSA, 2009).

As with lameness, the incidence of mastitis has been reported to be much lower in cows at pasture compared with housed cows (Washburn et al., 2002; Laven and Holmes et al., 2008). Facility design and management, in particular of lying surfaces, and the standard of cow hygiene contribute to levels of exposure to mastitis-causing bacteria (Verkerk, 2011). Regular maintenance including cleaning and disinfection, ensuring adequate ventilation, and providing clean and dry bedding, are critical to reduce the incidence of mastitis in housing systems. The impact of genetic selection for increased milk yield of high-producing cows on the incidence of lameness and mastitis must also be acknowledged (Oltenacu and Broom, 2010).

However, animals kept on pasture are not free from lameness and mastitis. In fact, the incidence of lameness can be high in pasture-based systems (Chesterton et al., 2008). Risk factors include long distances walked to milking, high waiting times at the shed, poor track maintenance and poor stockmanship. In addition, bovine digital dermatitis (BDD), a highly infectious bacterial skin disease commonly found in housed cows, has markedly increased in New Zealand dairy herds on pasture since 2011 (Laven, 2016). Slurry is a significant risk factor for BDD (Palmer and O'Connell 2015) and this has implications for feed pads and standoff pads, where slurry control is often poor and BDD can therefore be easily spread from infected to uninfected animals (Laven, 2016).

NAWAC recognises that lameness and mastitis are problems that are not only observed in housed cattle, but can be a serious health issue in pastured dairy cattle. Nevertheless, access to pasture has been shown to have beneficial effects on dairy cattle leg and hoof health after long-term housing.

The minimum standard relating to management of dairy cattle in off-paddock facilities requires that dairy cattle are provided with a well-drained lying area with a comfortable surface or bedding that is maintained to avoid manure accumulation. NAWAC has also included a recommended best practice that bedding should be checked daily and topped up as required, in order to assist in keeping lying areas clean, reduce the number of bacteria and pathogens and hence the incidence of mastitis and bacteria-induced lameness.

Other health problems associated with off-paddock facilities

Skin lesions and swelling of the hocks and knees, and swollen pasterns are more common in cows housed for long periods than those kept on pasture (Haskell et al., 2006; Rutherford et al., 2008). Skin abrasions and infections on the wither and along the back can be common in free-stalls where space allowance is inadequate. Abrasions and wounds on the neck can be seen when cows push against feed barriers where these are located in an inappropriate position (Zaffino Heyerhoff et al., 2014), when cows are given poor quality and/or limited feed supply or where food is not pushed up close (Verkerk, 2011).

Personnel should be trained to recognise health problems and provide solutions in a timely fashion to ensure that the welfare of the animals is safeguarded.

23. Detail on management and facility requirements

An animal welfare risk assessment of off-pasture systems commissioned by NAWAC (Verkerk 2011) found that the following specific animal welfare problems that can occur in off-pasture facilities were not already addressed in the dairy cattle code of welfare:

- Unsuitable surface for calving cows,
- Inability to separate calving cows,
- Inability to separate cows needing attention,
- Inability to quarantine sick animals,
- Social stress from mixing groups, and
- Inadequate visitor biosecurity.

These issues have been addressed in the recommended amendments.

Design, construction and maintenance of off-paddock facilities are all important for animal welfare. Problems may occur where sharp edges, uneven flooring and inappropriate dimensions in alleyways and free-stalls are present. Free-stalls need to be built to appropriate dimensions in order to avoid faecal contamination while allowing cows to maintain a normal posture when standing and lying, and to lie down and stand up without injury. A restrictive free-stall design discourages lying, with consequent effects on health, productivity and welfare. Care also needs to be taken regarding building materials, especially for free-stall construction. Expert advice should be sought in each case, as there is not one dimension that is suitable for every situation.

Some cows do not adapt to being kept off-paddock. Dalley et al. (2012) note that these cows do not lie down for long enough, may not eat well and often become lame. Staff need to be trained to work with housed cows and housing systems to prevent problems. They must be able to identify cattle that are not adapting effectively. The minimum standard relating to management of dairy cattle in off-paddock facilities requires that animals that do not adapt must be provided with alternative management or must not be kept in the off-paddock facility.

24. Stockmanship

Skill level

A high level of skill is necessary to prevent and deal with animal health and welfare problems arising in off-paddock systems. The knowledge of such systems is limited in New Zealand and dairy producers have voiced concerns that there is a lack of knowledgeable staff in our expanding dairy industry (Arnold et al., 2008). Future training of personnel will need to reflect a move towards greater use of off-paddock systems in order to adequately safeguard animal health and welfare on dairy farms.

More training may be required in order for personnel to obtain the different knowledge and skills needed to manage cows in off-paddock facilities long-term. For instance, stock handlers need to be able to recognise cows that are not adapting to the off-paddock facility and need to be skilled in implementing strategies to prevent disease spread, mitigate welfare concerns in individual animals and make changes to facilities and management practices to address any problems early on. Cow cleanliness scoring is also of importance. Clean cows are associated with a lower risk for lameness (Sadiq et al., 2017) and mastitis (Schreiner and Ruegg, 2003), and increased dirtiness scores can be a sign that there are problems within the facility, such as inadequate ventilation, poor

scraper timing or inadequate free-stall design (Ruud et al., 2011). Staff may also need to be trained to assess feed quality and hoof health.

Monitoring requirements

Handling and monitoring needs to account for cows becoming quieter over time in the presence of farm staff. For instance, cows may need to be moved out of the facility periodically in order to check for lameness if they do not move when the farmer approaches them indoors (Arnold et al., 2008).

Feed and bedding supply

There are potential risks to animal welfare where the long-term housing of dairy cattle in off-paddock facilities relies on the purchase and provision of feed and bedding material. Producers need to ensure that good quality products are purchased to ensure the welfare of their cattle.

Other issues considered by NAWAC

25. NAWAC has considered how the Code aligns with other relevant codes and regulations both in New Zealand and internationally. NAWAC is not aware of any examples where the Code deviates significantly from these documents.

26. Matters in the Code that should be dealt with by regulations

NAWAC does not believe that there are any matters in the Code amendment that should be dealt with by regulations under the Act. However, if scientific knowledge or good practice should change then NAWAC may reconsider recommendations for regulations before the Code is reviewed where this is deemed necessary to safeguard animal welfare.

27. The nature of any significant differences

All significant differences of opinion about the amendment, or any of its provisions, have been set out above or in NAWAC's response to submissions.

Dr Gwyneth Verkerk

Chair, National Animal Welfare Advisory Committee
17 June 2019

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Appendix 1: Summary of Submissions

Animal Welfare (Dairy Cattle) Code of Welfare Amendment
Summary of Submissions from Public Consultation

Please note that all numbered references for the minimum standards in this report are specific to the draft code as circulated for public consultation in October 2013. Due to additions and deletions, numbering in the final code as issued by the Minister will vary from the draft amendment circulated for public consultation.

Submission numbers

Green Party standard letter	2,453
Petition circulated by [member of the public]	100
Individual submissions	444
Total	2,997

No. of submissions	Comment	NAWAC Response
2,453 Green Party standard letter	To members of the National Animal Welfare Advisory Committee, I am writing to express my concern that the proposed changes to the code of welfare for dairy cows will allow unnecessary suffering to dairy cattle and will pave the way for factory farming within the dairy industry in New Zealand. The Animal Welfare Act requires that animals must be able to display normal behaviours. Grazing and exercising in pasture are normal behaviours for cows and this should be prescribed in the minimum standard, not just as a best practice, as the discussion document on the Code of Welfare proposes. It is particularly concerning that the draft code does not contain any limits on the length of time that cows may be housed indoors meaning that cows could be confined year round. In New Zealand's temperate climate, while shelter can give animals protection in the winter months, there is no justification for keeping cows confined indoors year round. Cows should be able to access shelter, but they must be allowed to leave this shelter. Both international and New Zealand-based studies have shown that factory farmed cows suffer from increased occurrences of mastitis and lameness compared to cows which have access to the outdoors. Allowing factory farming of dairy cows will also threaten our dairy export markets. A key marketing strength of New Zealand's dairy industry is that it is predominantly pasture-based farming; images of suffering cows in factory farms will seriously damage that reputation. Please amend the code of welfare to include a maximum limit to the amount of time that cows will be kept indoors. Thank you. [*Additional personal messages could also be added, for example:*] • ARE YOU SERIOUSLY GOING TO LET THE CATTLE INDUSTRY FOLLOW IN THE STEPS OF THE CHICKEN INDUSTRY AND THE PORK INDUSTRY AND LOCK COWS INTO CAGES!!! WHY MAKE OUR COUNTRY LOOK WORSE? • Cows are individuals and not yours to torture as you see fit. • All good salt of the earth farmers know that all cows and farm creatures need protection from sun and extenuating circumstances and they also know it comes from trees. • It seems like we are going backwards by proposing to house dairy cows indoors all through the year. Not even in Europe, where, due to the climate, it is a necessity to have cows indoors during the winter months, do they keep cows inside all the time. • Their natural requirement is to eat pasture with only supplements over the winter rather than to be fed totally on supplemental feed. • New Zealand should not be looking at further factory farming practises - We do not like these practises (Pork, Battery hens etc) and I am certain that if the price of free range was the same as factory farmed then people would show their support more readily for free range. PLEASE HEAR OUR VOICES AND DO NOT LET THIS HAPPEN!! • Tourists see pictures of our Cows in New Zealand in pastures eating grass freely. Are our Children and Grandchildren now going to see Farm Animals shut away from the pastures they would normally roam? I hope you take into account the repercussions doing such a thing will bring down on us all; individually and as a Country.	**All points noted. Code amended to require access to outdoor area. Confinement in an off-paddock facility now restricted to 150 days per 365-day-period unless daily or frequent access to an outdoor area is provided. Outdoor area does not have to be pasture, as transition between feeds can compromise dairy cattle welfare and as pasture access during adverse weather conditions can have a negative effect on animal welfare (muddy surfaces, no shade, etc).**

	• These images have put me off milk and I recommend to anybody that weaning is the way to go for humans. DON'T MAKE DAIRY ANY MORE CRUEL THAN IT ALREADY IS... THE WORLD IS WATCHING. • Please amend the code of welfare to include a maximum limit to the amount of time that cows will be kept indoors, both in any two-month period and as a yearly total. • I am very concerned that New Zealand could potentially adopt the practice of factory farming. While your changes to the code of welfare don't specifically say this the end reality is that this practice would be legal. I cannot see any reason that New Zealand would need to bring these terrible practices into play. We have plenty of land, the climate is perfect for raising cows in a more natural environment. • National Party attitude to animals sucks quite frankly! Even my hubby who is National voter is not voting National again unless attitude changes. National attutide to environment also dismays us both. • This is not who we are, do not let this become an acceptable practice here, we should be better than that. • Stop being morons, use your brain • A DAIRY COW IS TREATED BAD ENOUGH NOT TO MENTION THE DAMAGE IT IS DOING TO THE LAND BUT ONCE AGAIN IT JUST COMES DOWN TO MONEY AND WHO US FRIENDS WITH WHO.THE GENERAL PUBLIC IS FED ABSOLUTE LIES ABOUT A HUMAN BEING NEEDING MILK FROM AN ANIMAL AND IS NOT TOLD ABOUT THE SUFFERING THE ANIMALS HAVE TO ENDURE AND NOW THEY WANT TO INFLICT MORE?? I • I am currently a student studying a BAppSci in Animal Welfare and Management. Looking at the studies and campaigns from overseas relating to the welfare issues associated with indoor intensive dairy farming (not to mention the backlash from the general public - especially in the UK), I cannot believe that NZ is considering going down this path. • As a Whole Foods Nutritionist I am horrified. I have a wide range of online nutrition students around the globe and am well schooled in the demand and desire for people in the USA seeking a diet of grass fed free ranging diary and beef. • I am a NZ based naturopath and have long felt extremely grateful that New Zealanders do not suffer the health issues associated with CAFO farming in the US (or anything that remotely trends in that direction). There is significant data to suggest that not only does this inhumane practice negatively affect the quality of life for the cow but that the greater need for medications to keep cows well in these circumstances are passed on to the consumers. • Read fast food nation by Eric Schlosser . its bad enough having cows the new flavour of the month, but they are designed to walk around and eat grass. if this doesnt fit with your agenda, then you should get a different job. • Only bad news regarding animals as this is the National Animal Oppression Advisory Committee. We are thinking all the time how to increase their productivity and how to cut their rights. • I am a farmer from Raglan and I am writing to express my concern regarding the proposed changes to the code of welfare for dairy cows which, I believe will lead to and legitimize unnecessary suffering to dairy cattle. It appears to pave the way for factory farming within the dairy industry in New Zealand.	
100 Petition circulated by	**Submission on the code of welfare for dairy cattle**	**Code amended to require access to outdoor area. Confinement in an off-paddock**

member of the public	I oppose the proposal to amend the Dairy Cattle Code of Welfare 2010 to specifically allow the indoor confinement of dairy cattle for extended periods. This breaches the Animal Welfare Act 1999 which requires animals to be allowed to express normal behaviour. Normal behaviour for cattle includes outside grazing and roaming in herds. All cattle should have free access to sunshine, grass, water, shelter and exercise. Longterm indoor confinement is a backward step in welfare and not only harmful to animals' wellbeing and health but also to New Zealand's reputation. [Signature and date] [*Additional personal messages could also be added, for example:*] • PLEASE STOP AND THINK THIS ALL THROUGH! • I am a dairy farmer / farm worker and I am really against this • This is bad / cruel / wrong / evil / inhumane / despicable • NZ prides itself in being clean, green and environmentally friendly, this doesn't fit with any of that. • All factory farming is DISGUSTING! • Why change what's not broken • It's surely not needed in our comparatively mild winters. • How would YOU like it • Going backwards. Is this really 2013? • New Zealand animals need a healthy kiwi lifestyle like we do! • All animals should have their freedom!	**facility now restricted to 150 days per 365-day period unless daily or frequent access to an outdoor area is provided. Outdoor area does not have to be pasture (see above).**

	General Comments	
Submission	**Comments**	**NAWAC Response**
1, 4, 8, 13, 14, 15, 16, 18, 20, 21, 22, 24, 25, 27, 28, 31, 33, 35, 37, 38, 39, 42, 45, 46, 47, 48, 49, 52, 53, 58, 59, 62, 63, 66, 82, 86, 91, 96, 97, 107, 108, 109, 112, 113, 114, 115, 117, 119, 124, 134, 135, 136, 138, 140, 142, 144, 148, 149, 152, 153, 158, 163, 168, 170, 172, 173, 174, 178, 180, 183, 184, 191, 194, 205, 207, 211, 213, 217, 229, 232, 237, 248, 252, 253, 259, 263, 264, 266, 269, 274, 275, 278, 279, 280, 285, 286, 290, 298, 299, 301,	**SAFE Points** Grazing in a paddock is normal behaviour, and cows should be allowed to do it. Cows should not be confined for extended periods of time. Cows should be given shelter, as long as they are allowed to leave.	**Noted** **Maximum time limit set (see comments above). Also see code report.** **The code of welfare already places requirements for shelter that must be met.**

304, 305, 308, 316, 337, 345, 346, 347, 350, 352, 355, 373, 376, 382, 384, 387, 388, 390, 395, 400, 404, 410, 420, 421, 423, 426, 427, 428, 432, 440		
4, 8, 9, 10, 11, 12, 13, 15, 21, 22, 25, 28, 30, 35, 48, 51, 52, 95, 106, 109, 111, 114, 115, 116, 119, 120, 124, 126, 129, 130, 139, 141, 144, 145, 146, 147, 148, 149, 150, 152, 153, 158, 162, 164, 167, 183, 189, 191, 192, 193, 197, 198, 199, 200, 201, 202, 203, 207, 210, 213, 214, 216, 220, 223, 224, 231, 236, 238, 246, 248, 256, 257, 259, 260,	**Opposition statement** - I do not support the current draft of the Code. - I find this absolutely horrendous and in no uncertain terms should this be allowed. - Growing up on a New Zealand Dairy farm I'm disgusted at the proposed changes to the code of welfare for cows. - I am strongly against your proposed changes to the code of welfare for dairy cows. - What you people are trying to make happen is totally unacceptable. - I believe your proposed changes to be unjust and people the public should have a right to decide and discus how animals are treated. - I would like to register my strong abhorrence of the use of confined barns for the intensified farming of dairy cows. - I am completely opposed to the changes cannot morally support your recommendations. - I am very alarmed and horrified to hear of your amendments to the recommendations for welfare and housing of dairy cows. The changes do not appear to have the welfare of cows in mind. - I am a professional worker, Speech Language Therapist and I will have to abandon my country if people make laws that encourage cruelty to animals. - The proposed changes to the code of welfare for dairy cows will result in increased mental and physical suffering. They must be rejected out of hand. - NAWAC's recommendations will condemn thousands of dairy cows to crowded sheds on concrete floors. Basically factory farming, which the majority of the public are against. I strongly object to the recommendation of housing cows in concrete floor sheds. - I urge no change to the Dairy Code of Welfare 2010 that promotes confinement farming. - For every reason possible (except the convenience and money making potential of the farmer) there is no good reason to contain cows indoors – I am against the indoor housing of dairy cows.	**All points noted**

265, 271, 274, 277, 280, 281, 282, 292, 293. 302, 304, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 336, 337, 339, 341, 342, 349, 353, 355, 356, 357, 365, 366, 370, 371, 372, 373, 377, 381, 391, 394, 398, 404, 407, 411, 413, 415, 417, 418, 421, 423, 429, 430, 431, 432, 434, 435, 436, 439, 440, 443	- I want my name on record, that this is abhorrent to me. - I would like to have my objection to "indoor farming" of cattle in New Zealand. - I would like to go on record for saying no to caged farming. - I am appalled by the notion of putting cows in sheds. I find the fact that business people are even allowed to think about exploiting animals who cannot speak for themselves totally corrupt. - I am aware that long-term housing is already happening in some parts of NZ and the amendments to the codes are an attempt to have some type of specific regulations in regards to this. However I do not consider the proposed minimum standards to be sufficient for off pasture management or the inside housing of cattle. - In summary, I strongly condemn the practice of intensive indoor dairy cow farming and intensive calf raising and ask for these practices to be prohibited. I ask that you take a moment to review the decision and think about it in an ethical matter. It is not ok. - **443 SAFE** SAFE has significant concerns about the proposed changes to the Animal Welfare (Dairy Cattle) Code of Welfare 2010. There will be nothing to prevent the year round indoor confinement of dairy cattle.	
121, 128, 244, 250, 307, 444	**Support statement** - **121** On the whole WSPA is supportive of the proposed amendments to the Code. However, WSPA wishes to make the following comments, which it believes will strengthen the Code and better safeguard dairy cow welfare. [see 'specific comments' section] - **128** LIC generally supports the motivation behind the changes to the Dairy Cattle Code of Welfare because, overall, they define minimal welfare standards for dairy cattle kept in long-term confinement housing. - **244** - 4. The SPCA generally *supports* the proposal to: (a) Insert a new minimum standard "x" that relates to behavioural needs for all dairy cattle — but that support is qualified by the comments in paragraphs 19 and 20 [see 'specific comments' section]	**All points noted**

	(b) A replacement for clauses 4.2 to 4.3 which includes a new Minimum Standard No. 9 — again that support is qualified by comments in paragraphs 16 to 18. [see 'specific comments' section] - **250** - 1.1. Federated Farmers submits that: 1.1.1. This Code of Welfare be amended to include a section on meeting the behavioural needs of all dairy cattle and a section on managing dairy cattle in off-pasture management systems; - **307** - 1. DairyNZ supports the initiative to update the Code to better reflect the range of off-pasture systems that exist across the industry. It is important that those using off-pasture systems know what is expected of them in delivering good animal welfare outcomes. - 2. We agree with the most of the proposed changes to the Code. NAWAC has generally taken an outcome-focussed and evidence-based approach, and we consider the balance to be about right in terms of the mix of minimum standards (MS), recommended best practices (RBP) and supporting information. - We support the outcome of the NAWAC review that found that the remainder of the Code was adequate and did not require change (except the removal of obsolete section 3.4 'growing dairy cattle' – we support this being deleted). The outcomes focus of the Code provides a sound and consistent basis for standards of welfare of animals regardless of farm system. The current Code has a good degree of backing within industry. We also do not see a need for further changes to the Code outside those being proposed here. [see 'specific comments'] - **444** Thank you for the opportunity to comment on the above. This is to confirm that NZVA is happy with the proposed standards. We understand that all of the information that we have provided previously has been considered by the working group. We also understand that some of this information will be used to develop guidelines which an industry group is currently drafting.	
7, 9, 10, 11, 12, 13, 14, 17, 22, 24, 25, 26, 30, 32, 33, 34, 41, 42, 47, 55, 56, 57, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 76, 77, 78, 79, 86, 94, 95, 97, 98, 102, 106, 107, 108, 115, 116, 117, 118, 122, 124, 127, 129, 130, 132, 135,	**Grazing is a natural behaviour / this is a breach of the Animal Welfare Act** - The Animal Welfare Act requires that animals be able to display their normal behaviour. Research shows that dairy cows graze between five and ten hours per day yet bizarrely NAWAC appears not to recognize grazing as an essential behavioural need. This is utterly ridiculous and brings into question the competence of this committee. - I would like to see scientific evidence that grazing is not normal behaviour for dairy cows. I would like to see proof that if cows were left alone then there normal behaviour would dictate that they remain in a confined space for their entire lives. - This, despite the fact that section 4c of the AWA clearly states any animal must have 'the opportunity to display normal patterns of behaviour.' I'm going to be blunt, because quite frankly, this makes me angry. What the hell are you thinking with this!?! 'Normal patterns of behaviour' for cattle, includes grazing in a paddock. If I need to explain that in further detail, then I am obviously corresponding with idiots, and clearly wasting my time. Cows will graze from 5 to 7 hours under normal conditions. I.e. It is a 'normal pattern of behaviour'. Perhaps you are proposing to use the pathetic 'escape clause', section 73 to somehow make this new absurdity 'legal'? - Is this some sort of joke? Cows are grazers. - I have not written a submission of this type before, I actually do not agree some of the practices of the diary industry but I find that that NAWAC does not recognize grazing as a natural practice for cows just mind blowing	**NAWAC has added requirement for access to outdoor area, but not necessarily pasture, due to potential welfare risks associated with a change in diet and pasture access during weather extremes. While grazing is a natural behaviour it has not been established whether preference for pasture access is due to the ability to graze or other factors associated with pasture.**

137, 139, 141, 146, 148, 149, 150, 151, 156, 159, 165, 166, 167, 169, 171, 175, 176, 179, 185, 186, 187, 188, 189, 190, 193, 195, 196, 200, 206, 208, 209, 210, 212, 213, 214, 220, 223. 225, 226, 227, 228, 229, 231, 236, 238, 239, 240, 241, 244, 245, 247, 248, 249, 258, 259, 260, 262, 265, 267, 268, 270, 272, 273, 278, 279, 281, 282, 283, 286, 288, 291, 292, 293, 294, 29, 296, 297, 300, 304, 306, 309, 310, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 325, 326, 327, 328, 329, 331, 332, 334, 336, 339,	- I strongly believe that allowing Cows to be farmed in such a manner as that, outdoors are inaccessible or not provided as an option means that the NAWAC recommendations are not meeting the requirements of the Animal Welfare ACT. - The animal welfare act requires that animals display their normal behaviour, I have not noticed many free ranging cows that have access to shelter choosing to spend 24 hours a day in that shelter. - Firstly it seems to me that this proposal flies directly in the face of our animal cruelty laws (Animal Welfare Act 1999). The law precludes against reckless and wilful ill treatment of animals. Taking into consideration the natural behaviour of these animals, allowing them to be left in cages from birth to death is akin to wilful maltreatment of the species and is therefore not lawful. - I don't quite understand why you have decided that it is okay to confine cows inside all year round without opportunity of grazing. Shouldn't the minimum standards of care for cows be more in consideration of the cows requirements? - If an Act which is government made legislation states that animals need to be able to display their normal behaviour then who are you I ask again to take that right away???? - I do not know how anyone is stupid enough to think that animals actually like being in cages, on concrete floors, with no room to move around. Nothing living in the universe would find that likeable. - For cows, it is both normal and necessary to graze on grass for up to ten hours a day. mAny shelter would need to provide free access to pasture. - Since the beginning of cow time, cows have eaten grass and been outside while doing it. So don't be dicks. Let the cows chill outside. - Even without looking at how a cow behaves if left to their own devices, their physiological makeup - their teeth, their stomachs, their bone structure - clearly indicate that they are a grazing animal. - Grazing in paddocks is natural behaviour for cows and there is no legitimate reason that this shouldn't happen in New Zealand. - In my view the "Animal Welfare (Dairy Cattle) Code of Welfare 2010" as it stands is inadequate in addressing the behavioural needs of these animals and to further reduce their ability to behave in a way that is natural to them is cruel and unusual treatment. - Cattle grazing is the best, most natural way for cows to live, eat, and produce milk. There may be times of year when it is necessary to bring cattle in, to protect them from harsh weather and feed them efficiently. The idea that it is better for cattle to live indoors permanently is as ridiculous as the idea that human beings could and should live indoors their entire lives. - Unbelievable! By no means is this normal behaviour for a cow or any other animal for that matter. - I do not think it is natural for a cow to live, or spend the majority of its time in a shed eating feed. I am against anything that allows farmers to prevent cows from natural grazing practices. Access to shelter is fine, but forced confinement is not something I support. - The dairy farming sector has rapidly become one where greed has completely overshadowed the values of animal husbandry and compassionate behaviour towards our fellow creatures. Grazing is the NATURAL behaviour of all browsing animals.	

341, 342, 346, 348, 349, 351, 356, 357, 358, 359, 360, 361, 363, 364, 365, 367, 371, 372, 375, 377, 378, 379, 380, 381, 387, 388, 389, 392, 393, 396, 397, 399, 403, 406, 407, 411, 412, 414, 416, 417, 422, 425, 429, 430, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 443	- The recommendation cannot be taken as an informed and researched recommendation. Every kiwi (except for the NAWAC board obviously) knows that cows normal behaviour is to graze and therefore should be allowed to do this. - Cows have a natural instinct to graze as this is their normal behaviour. If they are confined into factory farms, they will not get a change to graze. Instead, they will be living in crowded and unhygienic shelters without enough space. They will never feel the sun on their backs, the wind against their faces, or the grass beneath their hooves. They will be confined to the same place, for twenty-four hours a day, year after year. - Condemning thousands of dairy cows to spend their lives in crowded sheds on concrete floors is disgusting and inhumane. The Animal Welfare Act specifically requires that animals be able to display their normal behaviour, which in the case of cattle means the freedom to graze. - The AWA states that basic needs should be met, e.g. physical, health and behavioural needs. Cubicle farming (which I have personally observed) does not meet these requirements. How can they behave naturally? I have seen a cow in distress as the milking facility broke down due to a computer fault, while other bored cows jostled and waited for their "reward" in this so called modern cubicle farm. All animals need to have the **important 5 freedoms.** - I believe that the Consultation on Changes to the Dairy Cattle Code of Welfare 2010 fails to uphold the principles of New Zealand's animal welfare legislation and will legalise factory farming. The Animal Welfare Act requires that animals be able to display their normal behaviour. Research shows that dairy cows graze between five and ten hours per day. NAWAC have failed to recognize grazing as an essential behavioural need. - As an ex herd manager and farm manager, and coming from generations of families who have made their living and raised their families on the land, I am well aware that good husbandry and animal welfare are paramount when it comes to production and 'the bottom line'. Our Animal Welfare legislation requires that animals must be allowed to display their normal behaviour, and I fail to see how barn raised, supplementary grain-fed animals can be considered to be exhibiting normal behaviours. - The hazards (dealt with at length in Animal Welfare Risk Assessment: Off-pasture management systems in the New Zealand dairy industry 2010 (AWRA) of keeping cattle off-pasture for any length of time are so great as to ensure harm to the animals. Good husbandry cannot be guaranteed at all times and in all circumstances. This is not in keeping with the purposes of the Animal Welfare Act. - To be honest I cannot believe that I even have to send this email because of the ludicrous contradictory nature of this recommendation when compared with the Animal Welfare Act and of course general common sense. Grazing in a paddock is normal behaviour for dairy cows and they should be allowed to do it. - **244 SPCA** The SPCA is opposed to the establishment of zero-grazing management systems for the following reasons. • It is a form of intensive farming which will lead to animal welfare being compromised and as such cannot be supported • Overseas markets will see it for what it is and that will put dairy product markets at risk	

	• It will created credibility problems with the European Union. So that a dairy cow can express a full range of normal behaviour the animal needs access to grazing. The more restricted the conditions under which the cow is kept the less opportunity there is for the animal to express its normal patterns of behaviour. At the point where there is zero or close to zero access to grazing, the cow is no longer able to express its normal patterns of behaviour and that, in the view of the SPCA, is unacceptable. - I'm writing to you about the proposed indoor housing off dairy cows. Whenever I am on holiday I always walk past cows outside on a grass field and I can sense that there happy ☺ I think it looks really natural when there outside on fields and I can tell that's where they want to be, not put in a tiny concrete building. (you'd better do what I say because I'm gonna be prime minister one day) - It is far from clear how the 'normal pattern of behavior' by which a cow obtains food (grazing) can be met in a long term housing scenario. NAWAC needs to explain this fully, honestly and adequately – if it cannot do so then the industry will become yet another major class of 'exceptional circumstance' or 'exemption' (depending on the progress of the Animal Welfare Amendment Bill currently before the Primary Industry Select Committee) from the obligations of the Act, and New Zealand's credibility and reputation as an ethical producer will be further compromised. - The feed is concentrated so cows don't get to graze and move around to select grazing spots as they do in paddocks. This denies their normal behaviour as grazing normally takes a large part of their day, and choice of independent movement and interactions with other cows while doing so satisfies basic psychological needs of the cow. - I am making this submission after reading on the SAFE website about your changing of legislation confining dairy cows indoors. As a student studying Vet Nursing I am very concerned that you believe that paddock grazing is not a critical part of their natural behaviour. This totally ignores everything that the animal welfare act stands for and must not be allowed to pass through legislation. - All animals should have the right to perform behaviours considered natural to them; wandering around outside and grazing are natural behaviours for cows, these behaviours are learned from other cows. It is our duty as human carers animals to provide the animals with an environment where they are safe, able to act out their natural behaviours, and exploited as little as possible. - **443 SAFE** SAFE's submissions are, in summary, that the proposed changes (a) will fail to ensure that the welfare purposes and obligations the Animal Welfare Act 1999 are met, contrary to NAWAC's clear statutory and public law responsibilities. Further, no "exemption" under s 73(3) of the Act could possibly be justified, and nor has the provision been invoked by NAWAC.	
1, 2, 7, 8, 14, 19, 40, 47, 54, 66, 69, 72, 97, 110, 111, 134, 135, 136, 139,	**A step backwards** - It is horrifying to see New Zealand go backwards when it comes to animal rights issues. - We have moved away from unnatural confinement of animals in zoos and circuses, surely it is a retrograde step to do a complete turn around and consider this as acceptable for another species just because it suits farmers.	**Noted**

147, 154, 157, 159, 168, 174, 184, 190, 195, 202, 204, 212, 213, 220, 226, 227, 240, 244, 248, 249, 251, 253, 255, 256, 262, 264, 271, 280, 283, 284, 285, 298, 322, 325, 338, 351, 353, 362, 367, 368, 377, 378, 401, 422, 426, 427, 431, 435, 437, 443	- In this day and age, the government should be working to lessen the suffering of animals, not thinking up new ways to make our own lives easier at the expense of the animals' rights. - New Zealand must strive to improve its farming methods and its worldwide reputation, not take retrograde steps in cruelty and health issues. - After reading your proposal, I understand that you want the best for our dairy cows, but what I don't understand is why you want to take a step backwards. There have been many campaigns, many held by SAFE, that have been working towards more freedom for animals on our farms, moving away from caged hens and battery farms. Your ideas to put cows into the same situation undermines this battle for animal welfare and takes drastic steps backwards in a country where space is not a problem. - Feed lots are a step backwards for our NZ clean and green image. Please take heed from Gareth Morgan - i read in todays Herald paper - he has significant shares in a Brazilian dairy farm (solely outdoor grazing) and doing very well out of it. - NZ is working towards improving animal standards with battery chickens and pig creates. WHY are you now interested in going backwards in the dairy industry?? - As the dairy industry is an abomination, with its ethical and ecological disregard, it should be discontinued altogether. Any plan to Americanise the industry is -- obviously -- a step in the wrong direction, and this Government would be senseless to make conditions worse for sentient animals than they already are. - Crates for pigs are finally being phased out, Kiwi's want animals out of cages & confinement and yet these "Govt advisors" want to lock away more animals into a life of boredom & suffering. Are sheep next? - This is taking us one step closer to ending up like America with thousands of heads of animals kept in pens all their life. - We are eliminating battery hens, why start creating battery cows?? - The indoor housing of dairy cows is a serious backward step and cannot be dressed up and presented as being somehow 'better for the animals', or better for our waterways and wetlands. - **244 SPCA** The SPCA applauds the action taken by NAWAC in introducing codes that will phase out existing intensive farming practices such as sow stalls, farrowing crates and caged layer hens, and in establishing minimum standards that will restrict off-pasture grazing systems. However, in the view of the SPCA, the proposals do not go far enough. - I now understand intensive indoor dairying to be all about large mechanised factory farming with profits for a few, the same as factory farming of pigs and hens. And as with confinement of pigs and hens, intensive farming of dairy cows is shameful in terms of animal welfare and is unacceptable, particularly as science now tells us what common sense has always told us – that animals suffer. - Cows deserve to be kept in their natural environment where trees can provide shelter from both wind, rain and also shade on hot days. We should be moving away from all of this with all animals, chickens pigs etc, it is disturbing to see us heading in the wrong direction with cows. Animals are more like us than any of us care to admit.	

	- So many animals are already intensively farmed in cruel practises. From caged chickens to sows chained in crates...This completely inhuman practise will condemn gentle and docile creatures to a terribly cruel life. Please have compassion on all factory and intensively farmed animals and outlaw the practises now so that animals that must be bred for meat at least have some comfort and freedom in their lives before seeing the slaughterhouse. - Whilst the rest of the world is making changes to the animal welfare code for the better (Australia outlawing caged eggs for example) New Zealand is going backwards as usual and becoming an embarrassment. What a contradiction to our Clean Green image!! - With the introduction of long-term offpasture housing, New Zealand's dairy farming is clearly heading backwards into intensification. This does not seem to be about the welfare of cows and/or calves. Who instigated the idea of "long-term offpasture" dairy farming, i.e. keeping the cows inside long-term? This will tell us what its aim really is. - I thought that New Zealand tried to be the best country in the world, but with this step (and many others i disagree with) this country is moving backwards to the dark ages...If you want to be on top of the world ladder you need to change your animal welfare practices in favour of the animals! - Everyone is buying free range eggs, chicken and now ham, bacon and salami. I always buy NZ beef as I know it is not factory farmed. Now I will have to look for the free range stamp. A huge BACKWARDS step! This should be banned immediately. - **443 SAFE** The spread of intensive indoor farming of dairy cattle must be stopped before it becomes irreversible. This current review of the Code may well be NAWAC's last opportunity to stop the uncontrolled intensification of New Zealand's dairy industry. SAFE calls attention to the words of John Hellstrom, the chair of NAWAC on a previous failure to deal with an important factory farming issue: "A further 10 years of suffering in battery cages that will affect millions of birds sits heavily with Nawac, and the committee bears some direct responsibility for this by failing to ban cages in 2005 when the last code was written." If NAWAC fails to act now, it will be no different from the committee of 2005 that failed to act for battery hens.	
2, 10, 12, 13, 21, 23, 29, 37, 38, 41, 45, 50, 54, 56. 59, 61, 69, 72, 100, 106, 116, 130, 131, 135, 139, 143, 146, 147, 149, 150, 151, 155, 156, 158, 159, 162, 165, 166, 167, 171,	**This proposal is inhumane / cruel** - I believe that it would be a cruel and unnecessary move to have dairy cows permanently confined indoors. - I cannot even begin to understand how anyone could believe keeping cows indoors is humane. They may be SURVIVING. But that does not mean LIVING A FULL HEALTHY LIFE. We use these animals for our own gain, the only right thing to do is give them a life they can somewhat enjoy. - Being confined for life, or for large periods of time is cruel and unnecessary. Please do not do this; our country should be looking after our animals. - Enough of the unnecessary cruelty, and enough of making animals suffer for human profit gain. - Please do not consign these beautiful animals to a life of confinement. While they live to support our industries, the least we can do is treat them humanely. Even maximum security inmates in our prisons get to go outside.	**Noted**

173, 175, 176, 181, 183, 184, 188, 191, 197, 198, 199, 200, 202, 203, 206, 208, 209, 211, 212, 214, 215, 216, 218, 219, 222, 224, 228, 232, 234, 242, 246, 257, 260, 261, 266, 286, 294, 297, 300, 302, 304, 308, 309, 311, 312, 319, 326, 327, 329, 330, 331, 333, 334, 336, 339, 340, 341, 342, 344, 346, 349, 353, 357, 359, 361, 363, 365, 366, 369, 370, 372, 380, 381, 383, 385, 386, 387, 389, 392, 398, 407, 409, 411, 413, 415, 419, 422, 429, 430, 432, 433, 437, 438, 439, 440, 441	- As a society we have become so greedy for things that we don't even need and those who get hurt are the animals, the earth and the environment. As a nation we need to move forward to a new way of living. Please take a second and think do we really need to do this to the innocent animals. - I like you not to house cows, I think it is cruel. - The recommendation to keep thousands of dairy cows in sheds with concrete floors is cruel and inhumane treatment. - Denying animals the right to dispaly their natural behaviour is cruel and an unsustainable farming practice. - Cattle should not be confined for certain amounts of time as they need continous movement provided by paddocks allowing free locomotion to keep the constant flow of blood within their limbs. Space may be provided but it is restricted to small amounts which is less than half the amount of space they have access to in paddocks. Such restrictions can lead to joint pain and there is even the possiblity of deformity due to the fact that they have been confined to a small amount of space. These reasons may seem minor but they inflict pain, which we are suppose to prevent all animals from experiencing as one of the welfare freedom states 'Freedom from distress and pain'. - PLEASE do not do this, this is misery for the cows. - I am concerned that the proposed changes to the code of welfare for dairy cows will lead to a rapid intensification of the dairy industry and will result in increased suffering for the cows. - It is cruel to keep cows indoors for extended periods of time - they are meant to be outdoors and eating grass. - The National Animal Welfare Advisory Committee's recommendations concerning the welfare and housing of dairy cows, which allow for the year round indoor confinement of dairy cows, are as outrageous as they are cruel and inept. - I cannot think of anything worse than keeping cows indoors. I first saw this horrible practise in the USA, and was really horrified - the poor animals were kept standing on concrete in small pens and fed hay, instead of being allowed to roam freely over grass paddocks. This is so unnecessary in New Zealand. It is simply not ethical, and we already get enough production from our cows. This is just about pure greed. Please don't do it. It's simply awful. - Boxing them up inside is torture and mean and unnecessary. - Now animal, big or small, should be confined to the indoors. Even if they are given enough space to move freely and sit or stand as they please, the thing that cows can be seen doing for the bulk of their existence is grazing on pasture. To take this away from them is so inhumane. - We need to protect these laws and look after the creautres that give us so much. Money is not everything in life and it is dictating far too much at the moment which has caused so much pain and suffering already. As people we have a responsibilty to this planet and the fellow creatures that inhabit it and give us so much. - Indoor factory farms are the highest form of cruelty imaginable. In a perfect world we would not eat meat or have dairy but we do not live in a perfect world. What we can do though as basic human decency is to give our animals the rights they deserve. They deserve the right to feel the sunshine on their faces and bodies and they deserve the right to graze freely. This is animal slavery and this is not the way forward for New Zealand. - I believe the proposal to alter dairy farm cow housing is cruel and unjustifiable! To remove an animals access to outdoors and grass areas for grazing is inhumane and I do not understand how 24/7 indoor shelters could be seen as superior - No one would reccommend that for children! Why would we force this on animals? - It's wrong and in humane and with all the land we have in NZ there is no excuse for this greedy and barbaric practice - New Zealand is obviously a dairy-farming nation, but I believe it is cruel and unfair to exploit animals in the dairy industry by denying them their natural behaviours.	

		- What a disgrace that we as New Zealander's are going to allow for this cruel practice of confining cows to concrete and no open air or paddocks to graze?! - I believe this proposal is completely inhumane and should not even be considered - I understand that all do not wish to take a stand as 'drastic' as mine and become vegan, but surely you realise that such a change to the way cows live is completely cruel and unnecessary. - This is NOT a 'life' for these animals, this is cruel, no matter how clean the environment etc. - Our dairy herds have thrived on the land not in sheds - it is a cruel and unnatural way of farming. Whilst it may be used in other countries with severe weather issues I would not think it necessary in New Zealand. - To deny a cow the right to graze freely is inhuman, unreasonable and unnecessary. I fail to see that any benefit to the dairy industry from making these changes outweighs the disadvantages for these animals. This level of cruelty and confinement is something thousands of New Zealanders are fighting against with pig and poultry farming practices, please do not force us to fight the same injustices against cattle. - Cows are grazing herd animals that already have so many of their natural life processes curtailed so that people can eat and drink milk and meat. To further confine them in what are essentially factory farms is cruel and inhumane. Who profits most from this? Mostly some greedy farmers. Who pays for it? The cows who suffer horribly and the environment which is already polluted with the mess that unethical dairy farmers have made and are still making. - i honestly cannot believe you are even considering it please don't pass this cruel law against animals its basically sticking them in jail for having done nothing but provide us with fresh milk - Deprived of the right to graze, given instead a life sentence of cold concrete and steel; this is hardly the way we, in these times, should see as an acceptable and proper way to treat a living creature who has done no harm to anyone. - The aspects of welfare covered in research about off pasture systems include mastitis, lameness, shelter, injury, hazards, diet, grazing and exercise. Accident Compensation Commission used to have two categories when a person was claiming for an injury; one was called loss of enjoyment of life. It included loss of freedom and not being able to do or go where one used to. Cows are used to roaming free here in New Zealand. To be stuck in a dimly lit house on concrete with a bit of sawdust in a cubicle for hours, days, months, with nowhere to go but down a strip of wet concrete to get some water or food, then nowhere else to go but back to the stall again. No sun to enjoy in many cases as there are no stipulations in the codes for skylights or for the provision of sun. Cattle do get depressed and they do enjoy such things as sun, free roaming and eating. I see them in a herd at my fence, then they are gone and I might not see them again for several hours as they wander in the wide open spaces or sit under the shade of a tree. It is not a small thing for them to lose their freedom to cubicles or longterm houses. This is New Zealand. - This is inhumane and totally outrageous. Cows give humans so much in terms of important dairy produce and this is how they are repaid for that? Where is the respect for all living creatures? Has it been lost through greed? - They are not unfeeling machines. I think they should, at the very least, be allowed to graze. They should not be confined for extended periods of time; this is unnatural, cruel, and exceedingly selfish. - How cruel can you get? Locking up an outside animal and not allowing it to graze when naturally it will for 5-10 hours a day. This is cruel and uncalled for. Why is there a need to be so greedy? Its disgusting all in the name of making more money! I am disgusted to be considered a Kiwi with the way this government is acting!!! How would you like to be locked up in a small cell with nothing to do bar sit, eat food that you haven't chosen but its been pushed at you and NEVER seeing sunlight or touching grass again!!!	

	- EVERY animal deserves the right to live free and happy in a natural and safe environment. It will be a disgrace if the government enforces a law to allow a Cow to be locked up. IT IS NOT NATURAL and it is ANIMAL ABUSE! Is it ok to lock up a dog, or cat for all of their life? NO, so no other animal should be subject to this either. THEY ARE LIVING BEINGS WITH FEELINGS. - I am absolutely against the proposal that cows be kept in 24/hour cubicles in the dairy industry. This is horrendously cruel and unnecessary and robs the animals of a chance at a normal life. They already work and live hard enough lives and we should not be taking away from the little they have. - I find it to be very distressing that we would inflict more suffering on innocent sentient animals seemingly because we are trying to find ways to commercially expand our dairy and cattle production. This is morally reprehensible.	
14, 25,41, 47, 61, 74, 75, 82, 95, 98, 101, 108, 124, 125, 127, 169, 179, 184, 207, 231, 238, 244, 246, 247, 248, 259, 269, 281, 284, 293, 299, 310, 313, 315, 320, 323, 335, 340, 348, 365, 374, 381, 391, 392, 414, 424, 425, 436, 441, 443	**Cows kept indoors have more health problems** - In general, cows farmed indoors suffer from higher levels of mastitis and lameness than cows that have access to pasture. - Both international and New Zealand-based studies have shown that factory farmed cows suffer from increased occurrences of mastitis and lameness compared to cows which have access to the outdoors. - Indoor farming leads to health problems and discomfort for cows wherever such practices happen elsewhere in the world - You're also limiting the animals ability to absorb all natural nutrients they have access to in pasture and replacing this natural source with commercial grazing feed which will always be inadequate to the natural food source regardless of how you try to justify this. Another note is that commercial food will have a huge toll on the anatomy of the cattle which can lead to pain and eventual chronic illness and deformity. - More intensive farming also means higher chances of spread of disease due to close confinement. Health problems are likely to be more of a problem for cows housed this way. - My experience with milking dairy cows in the 1950's through until 1980,s including seeing animals housed on feeding lots in France and Italy, makes me very concerned when I see the huge size of dairy herds being jammed in together in too large numbers for the social group. I believe the welfare of cows is optimal in groups that do not exceed 300 cows; where they have room to move and settle with knowledge of each other. They are creatures of habit and essentially gentle and quiet when they can operate according in familiar patterns and groups. There seems to be more fighting and stress in larger groups. Without stress, production and health are optimised. I also believe animals need to graze outside whenever possible on varied herbal pasture for their health and well-being. Hybrid grasses, without clover and herbs are not dairy cows preferred fodder; animals will seek out herbs given the chance and it improves their resistance to disease. - According to Laven (pers. comm.), the risk of an increased prevalence of mastitis, lameness and infectious diseases is associated with a housed system compared to the New Zealand pasture-based norm. In particular, lame cows recover significantly faster on pasture. Thus from a welfare standpoint, extended periods of housing are undesirable. - I wish to oppose the practice of keeping livestock indoors in confined conditions. It is not good for their hooves. - Confining cows in high numbers indoors will limit their ability to express normal behaviour, and will cause psychological stress and abnormal behaviour - just like the chickens and pigs NZ people are currently working on freeing from cages. They will also be at increased risk of disease due to this stress, lack of fresh air, sunshine and exercise, and the high stocking levels. This will increase the use of prophylactic medicines and treatments that we are trying to keep out of the food chain to improve human health. - If cattle are kept inside and not allowed a natural grass diet, they are more likely to become ill and require antibiotics, which will lead to poor health for both the cattle and the humans they eat them. . In addition, cattle kept permanently indoors are force to stand on concrete	**Noted. NAWAC has recognised this risk. It has therefore added a requirement for outdoor access, with the outdoor area having to have a soft surface and sufficient space to satisfy MS 6.**

	or hard packed earth, which will cause foot problems and also lead to increased antibiotic use, leading to additional cases of antibiotic resistance bacteria. - **244** The European Food Safety *Authority* in its 2009 report EFSA dairy report – a summary of key findings and recommendations made the following findings as summarized by Compassion in World Farming. • The report argues that welfare of cows is better on pasture than for cows kept indoors. Lameness and other health and welfare problems are greater for animals which are zero-grazed throughout the year.[1] • Zero-grazing increases the risk of a range of conditions including lameness, mastitis and metabolic disorders[2] • If dairy cows are not kept on pasture for parts of the year, i.e. they are permanently on a zero-grazing system; there is an increased risk of lameness, hoof problems, teat tramp, mastitis, metritis, dystocia, ketosis, retained placenta; and some bacterial infections.[3] • A high level of animal welfare cannot be achieved in zero-grazing systems[4] - Lameness and particularly mastitis increase with the use of off pasture management systems. Data collected from housing systems in New Zealand and overseas show this (NZ, UK, Germany, Austria, America, see references). The level of lameness in some reports showed double the amount in Zero Grazing systems compared with Grazing, with free stalls particularly contributing to this. There is variance depending on what type of system is used - the codes do not address types of housing. The NZ MAF report showed that all indoor systems had increased incidence of mastitis accept for the deep litter roofed systems. - [RE: trip to see housing system] The farmer said that lameness due to standing on concrete is common and they send lame cows to slaughter. This is another situation that is caused by undue stress imposed on the cow by the indoor farming system - one that ends badly for the cow not physically able to endure the imposed unnatural conditions. Cows and calves should not be subjected to system-caused stress E.g. lameness from being forced to stand on concrete - Diseases in "off pasture" animals. Potential for spread of disease could require unacceptable prevention measures e.g. antibiotics in food etc. A 2001 study comparing calves finished in feedlots with calves that stayed out on grass showed that **grass-fed animals had less E. coli overall**, and the E. coli that did show up was a different strand that was much less likely to infect humans. - Stock density should be set to a level which prevents the need for the use of any antibiotics other than those already employed in out-door farming. The use of antibiotics to counter disease and pestilence caused by crowed living conditions is an indicator that these conditions are unnatural and harmful to livestock. - "Miller & Wood (1991) observed that the occurrence of aggressive interactions was nine times higher when cows were housed indoors compared to when the herd was at pasture. Such an increase in the number of aggressive incidents in turn increases the chance of injury and lameness, social stress and mastitis (Cook and Nordlund, 2009b, Stafford and Gregory, 2008; von Keyserlingk et al., 2009)" (MAF, 2011, p.85).	

1 EFSA dairy report – a summary of key findings and recommendations, *Phil Brooke, Compassion in World Farming, 2010, p. 2*
2 P 17
3 P 17 – *From* Scientific opinion on welfare of dairy cows in relation to leg and locomotion problems
4 P 17

	- Regarding the report: Animal welfare risk assessment: Off-pasture management systems in the New Zealand dairy industry (MAF, 2011). The report notes that cow housing systems increase the incidence of stress and anti-social behaviour in herds, with incidence of aggression nine times higher than when cows are out-doors. This in turn increases the chance of injury and lameness, social stress and mastitis (p.85-87). - **443** SAFE's submissions are, in summary, that the proposed changes (b) will be detrimental to the welfare of dairy cattle, both in terms of suppressing natural behaviour and increasing health problems such as lameness and mastitis. The 2011 MAF report relied upon by NAWAC identifies numerous welfare "hazards", which will only increase in severity the longer cattle are confined indoors. SAFE is aware that NAWAC has reviewed many scientific papers on the welfare of indoor housed dairy cattle. It is therefore surprising that NAWAC is proposing to allow this practice to become established in New Zealand. Many of the papers reviewed by NAWAC strongly indicate higher levels of mastitis and lameness in cattle housed indoors compared to cattle kept on pasture. What is known is that a "dietary change away from pasture has a number of implications for housed cows." It is associated with increased rumen acidosis (and by extension, the incidence of lameness). It is associated with increased manure and urine outputs (increasing the likelihood of mastitis and lameness). Bacterial content of faeces can be greater (increasing the risk of mastitis). Thus, a direct link can be drawn between transitioning from a grazing system and a decrease in wellbeing.	
3, 10, 13, 15, 23, 32, 39, 52, 58, 70, 85, 111, 137, 143, 161, 177, 181, 182, 185, 201, 235, 237, 284, 295, 297, 303, 306, 312, 316, 327, 328, 329, 330, 336, 339, 342, 349, 375, 377, 413, 434	**Cows suffer enough already** - Already dairy cows are being factory farmed in paddock with no shelter, nothing to scratch themselves on and no shade. The calves are wrenched off them straight after birth - often clubbed to death in the paddock - yes I have seen (and reported this). - It seems like a very harsh joke that has been played on these poor, kind creatures; being impregnated year after year, having their babies ripped away from them much too early, not to mention what happens with bobby calves, or if a dairy cow cannot become pregnant for some reason - Is taking their babies from them at a few hours old and putting them through the uncomfortable pain of milkings not enough? What more must these poor animals endure before we say enough is enough? - Please do not contribute to the worsening practices of dairy farming with these outrageous recommendations. - Only adult humans are suckling cows and only adult humans nurse cows and adult humans nurse some other animals too ,but not women into own species - why adult humans nurse other animals ?That is rape - I am extremely disappointed to hear of the New zealand dairy industries latest plans involving the factory farming of dairy cows. These animals already stand as the most commodified, marginalized and exploited animals on the planet from leather to meat and dairy. - Dairy cows are ALREADY enduring an enslaved "life", deprived from their babies with profound psychological hurt as good mother cows are, raped, over production of milk for human consumption , often excruciating mastitis , and the final violent dead or a horrible journey on boat to land in China where no animal rights exist and more abuse and tortures are waiting for them..	**Noted**

	- Cows especially milking cows where there are sometimes forced abortions and sometimes their offspring are separated from them at birth already have a lot to contend with by the treatment handed out to them by human beings. To deny them the right of some free expression of their behaviour is just to prolong their suffering in life when our duty should be to minimize suffering. - Please consider not allowing the horrifying new factory farming law come into effect. I do not think dairy industry should be allowed for its history of animal abuses, particularly the bobby calves as well as other calves.It is well documented across the planet that diary industry pollutes, feed poisons such as GE, GMO and antibodies to the dairy cows as well as the live export. - Dairy cows should not be forced into pregnancy so they will produce more milk, then immediately separated from their calves. It's cruel. Calves of dairy cows should be treated with compassion and respect, regardless of gender. How is intensive farming in long-term housing going to increase compassion towards calves? There is no mention of this. I submit that : **Dairy cows should have free access to their calves and vice-versa for at least 6 months. Otherwise the emotional distress of both is severe.** - We moved out of Fonterra export cattle because the people in charge are complete idiots. They don't give a crap about what happens to the cows. In a 10 day period they would be moved from a back paddock to the yards (stress), hit and yelled at around the yards (stress), seeded (stress and uncomfortable), moved to a new paddock, left for a few days with something foreign inside them (stress), moved back to the yards where they are again chased around and yelled at (stress), seed removed and AI (stress), drafted (stress) and moved again back to a paddock. A few days off then something else happens to them. They lose weight and are not happy cows. What is the point here? This is how a 'professional' body works – who's to say that less professional bodies i.e individual farming units, are not going to act similarly? The result under the proposed changes would be cows unable to escape to a natural paddock to 'relax' in between.	
23, 34, 49, 58, 72, 77, 95, 102, 135, 137, 145, 156, 161, 167, 177, 182, 185, 197, 199, 205, 225, 226, 230, 235, 260, 264, 267, 269, 272, 274, 280, 288, 292, 296, 297, 308, 312, 348, 371, 375,	**Cows are intelligent / more than just machines / have rights** - Just because they don't drive cars, have lawyers etc etc doesn't make them any less then a human. - As Jeremy Bentham wisely said, "The question is not, Can they Reason? nor, Can they talk? but Can they suffer?" and yes, cows can. Let these cows lead a normal life, and say no to the proposed changes. They give us their milk, let us give them some humanity. - Cows are very intelligent animals, and deserves to be treated with respect and care and love, just like any other animals. - Cows are intelligent creatures, and not just lumps of meat, milk and money. - I live in a heavy dairy area and can see cattle/cows have intelligence and are well aware of their surrounds and interact with each other and their environment. - I believe that confining dairy cows to indoor crates is wrong. It should not be a matter of capital gains or saving money, as these are sentient beings who feel and experience pain as us humans do. - It would appear that this initiative, as with all factory farming is driven by the incentive to make more money with little or no consideration for the living, thinking, feeling living creatures that are subject to this cruelty.	**Noted**

386, 400, 403, 413, 428	- Humans are the controlling force on this planet, and I believe this means we have the responsibility to make sure each animal is treated fairly and humanely. Our "intelligence" over another animal doesn't give us the right to exploit them for our own gain! - I hope you realise that what you want to do is wrong, animals have rights. You have no right to change that. - Do you know cows have best friends? There is so much more I can say about these beautiful creatures and the feelings and personalities they have but I am just pleading with you to draft laws to lead the way for a better, humane life for all animals, in your beautiful country, - They are sentient beings - they feel and they are aware. They are not mechanical robots, don't treat them as such. - Please take the public's submissions seriously and start thinking of a cow as an animal and not just a product. - Cows and animals in general are just like us. Our DNA's are nearly identical - if we were confined in buildings in unnatural environments, it is not long before our bodies start breaking down and our mental health becomes impaired! - My grandfather was a dairy farmer and of course my mother a dairy farmers daughter and I fondly remember regular visits to the family farm in Whangarei. I was always amazed at what social and intelligent animals the cattle were. They recognized my grandfather's voice and would come when called. They were certainly relaxed and healthy looking animals and I put this down to their having plenty of good grazing area and space to themselves in their natural surroundings. - To deny them the right of some free expression of their behaviour is just to prolong their suffering in life when our duty should be to minimize suffering. It makes a cow out to be a robotic, mechanistic milk or meat producer instead of a sentient being with feelings, intelligence and I believe a soul (an animating force) as well as a being with a well developed social structure. - Cows belong in a paddock .. It isn't natural for them to be in sheds.. They have their own communities .. They mingle and most likely communicate with each other ... I know this to be true as I was a herd tester for 20 years .. I traveled from farm to farm staying with farming families .. A lot has changed from those days when cows had names ..	
3, 6, 7, 9, 19, 25, 31, 35, 43, 44, 59, 61, 62, 72, 79, 80, 83, 86, 89, 95, 100, 102, 107, 112, 113, 124, 143, 148, 154, 155, 156, 157, 161, 162, 163, 169, 170, 182,	**Against factory farming** - I understand that installing factory farming regulations now will help to ensure that the cattle who are keep in such conditions, will eventually have more protection in the future but please also consider that by providing such regulations instead of working to abolish factory farming, that you are only advocating and supporting this practice. I appreciate your intention with these recommendations but hope that you will not ignore the consumers who are increasingly speaking out about factory farming. I hope that you will reconsider your method of protection for the cattle in New Zealand. - Large scale factory farming of any animal should be banned not only for welfare reasons but also for environmental reasons. There are more than enough large scale dairy farms in this country already please reconsider your decision to allow even more intensive farming to go ahead.	**Noted**

184, 187, 190, 191, 197, 198, 202, 209, 210, 211, 215, 216, 218, 219, 242, 244, 246, 248, 265, 269, 274, 276, 277, 284, 286, 288, 289, 298, 338, 358, 373, 384, 391, 392, 394, 396, 397, 399, 406, 408, 409, 426, 428, 437, 438, 443	- What on earth is this I am hearing about cows being kept inside? Battery and factory farming is disgusting. I hope the souls of the people that decide the fates of millions of sentient beings shall be tormented for eternity. - As if the ridiculously inadequate new colony cages and farrowing crates, not to mention virtually the entire broiler industry, aren't bad enough, apparently NAWAC now want to approve the indoor farming of dairy cows. - NAWAC once again fails to uphold the principles of New Zealand's animal welfare legislation and is legalising this country's newest form of factory farming. - I do not support factory farming of any livestock. - I am proud that there is no factory farming of beef in NZ. I won't eat factory farmed beef because it involves inhumane treatment of animals, and results in poor quality produce. This is a terrible change in policy. - I am concerned that rather than installing good practice, this amendment works to pave the way for factory farming of cows in New Zealand. - I am absolutely appalled at the proposed changes to the code of welfare for dairy cows that has just been released! It will see cows confined to indoor factory farms for life. - Please don't tell me the factory farms are for the benefit of the cows as you say sow crates prevent piglet death. We know it is for the benefit of the farmers trying to make more money. I came from a farm background. Stop factory farming – it is cruel. - This is an urgent email regarding the upcoming plans for dairy factory farming. Factory farming is cruel and unnecessary – it must not happen. Think of factory farming as the animal's equivalent of the Holocaust. Now is your chance to be kind – do not legalise dairy factory farming. - **244** 8. It is the view of the SPCA that intensive farming practices are unacceptable for the following reasons: (a) The intensive nature of the practices deprives animals of the opportunities to express normal patterns of behaviour. (b) It is unacceptable, in the view of the SPCA, to opt out of the principles of the Act by enabling minimum standards that fall below acceptable standards (c) New Zealand's international reputation in trade and tourism is adversely impacted by an awareness of intensive farming in the market place 9. Intensive farming is a breach of the principles of the Five Freedoms and the physical health and behavioural needs of animals under the Act. In order for intensive farming practices to continue those farming operations, e.g. pigs, meat chickens and cage eggs, must have specific Codes of Welfare otherwise the practices of themselves would render them to be unlawful. 10. Similarly, off-pasture management systems are potentially a breach of the Act without the underpinning minimum standards of a code of welfare as permitted by s 73(3) of the Act.	

	11. The SPCA submits that there must be no new farming practice that will be perceived as intensive farming. Zero –grazing practices, or close to zero-grazing practices, are such that they will be seen to be intensive farming, by both the New Zealand public and the European Union and its member States, and as such should not be supported in any way. - A major objection to the proposed codes is that they do not restrict the amount of time cattle can spend in housing and therefore legitimise de facto cattle factory farming where animals can be kept inside for lengthy periods or all year round. - Recently I took two extensive tours through a Waitaki District indoor dairy farm complex. I went with an open mind as I wanted to see first-hand what the benefits were, thinking that it could be benign to the cows due to the protective features of indoor housing. The farmer extolled the virtues of the high-tech system and all its benefits. He proudly showed off what he called his 'happy' cows and demonstrated the mechanised systems for feeding, manure removal and the robotic self-determined milking setup. There are a number of 'welfare' aids such as scratching posts and padded sleeping mats, so initially I thought it looked good. Most of the cows looked in good condition and they were protected from inclement weather. However the more I observed and listened to the farmer, the more concerned I became about welfare issues inherent in this intensive method of farming dairy cows. Now, on reflection, I remain deeply troubled by what is essentially factory farming of cows. - If this is, as it seems to be, about intensification then it should be completely outlawed as we are heading away from intensifying all creatures including pigs and chickens. I submit that All off pasture long-term housing with the intention of intensification of dairy cows and/or calves must be outlawed. This is the same as chickens' and pigs' situation which is currently causing great concern, even outrage, among New Zealanders. - **443** By allowing the use of zero-grazing systems, NAWAC will be leaving it to the market to decide what systems are best. It cannot be argued that the market will be balanced by factory farmers incurring a cost due to consumer preference. Much of our dairy is exported overseas, where there is no mechanism for distinguishing between factory farmed and free-range New Zealand products. As a result, factory farmers will externalize the cost of the damage to New Zealand's reputation. Free-range farmers, on the other hand, will be given the cost of a damaged reputation, in addition to their normal operating costs. The result will be that individual farmers will have an incentive to intensify their farms, even if that is not what is best for New Zealand as a whole. NAWAC seems conflicted about the likelihood of an increase into indoor farming of dairy cows. On the one hand, the Chairman of NAWAC, Dr Hellstrom states "We will not see 70-80% of cows being farmed indoors. It will continue to be extremely low numbers."10 Just a week before this statement, Dr Hellstrom said, "The changes are to address the fact that there's a whole lot of housing that is becoming widespread in the dairy industry and there's been a lack of standards around how that should be."11 It is clear that NAWAC does not know (and cannot know) how many farmers will eventually move their cows indoors. The fact is that there is nothing in the Code that would stop the entire industry from moving their animals inside on a permanent basis should they wish to do so.	

44, 48, 49, 34, 51, 53, 54, 61, 67, 68, 75, 77, 80, 82, 87, 89, 90, 96, 97, 100, 115, 116, 118, 123, 124, 125, 126, 134, 147, 155, 158, 159, 175, 177, 192, 193, 198, 204, 212, 225, 227, 234, 236, 242, 243, 247, 251, 255, 278, 291, 306, 309, 320, 335, 344, 369, 378, 387, 402, 405, 414, 417, 418, 425, 441, 443	**This will negatively affect the market / our clean green image / the tourism industry** - As a key element of New Zealand's image as 'clean and green' and a 'food safe' country, natural farming is an essential component. The cost to NZ will be a reduction in milk quality, a reduction in reputation and an inability to take the moral high ground on these issues in the future. I am not interested in, nor do I intend buy products that have been produced in such an environment. - British people care a lot about animal welfare, and your dairy industry will lose its market in the UK if you allow the new rules. - Please consider NZ's reputation for quality grass fed dairy and beef products as well as the welfare of its "producers". - I know plenty of people who will avoid dairy all together if these proposed changes go ahead. - As a consumer I would be greatly put off supporting our dairy industry if these changes come into effect. - I do not believe the proposed changes will benefit anyone and will tarnish the image of Dairying in NZ. I for one will no longer want to buy milk from companies that do this, and I will urge others to do the same as we all as consumers want quality products and this type of quality is not attained by trapping animals inside all day. - One of the reasons our dairy industry thrives overseas is because the image people get of new Zealand. - The dairy industry is a significant source of National wealth and prosperity. It represents a source of environmental degradation through methane production, water table contamination and buttermilk disposal as it stands, and this will be intensified in close-housing of cows. - New Zealand has maintained a green image, with pictures of cows grazing green pastures being used as selling points for overseas tourists and buyers of our dairy products. - If this disgraceful thing happens in clean, green NZ I would no longer support the industry. It would be dairy-free for us and as a writer I'd have plenty of opportunities to explain my stance - and then add to the magazines there's social media. Gosh, the possibilities are endless. - Go to hell mpi, if you intend to put cows in NZ inside factory farms, I will never buy another glass or milk or eat another ounce of NZ made cheese in my life. Nor will any of my friends or family. Stuff you and stuff Fonterra. We will also sell out all our shares in Fonterra, which currently are many. Pure NZ- what a lie- our cows will graze on grass and grass only. - To the international community, New Zealand is a model of green, compassionate production of animal products. If New Zealand shifts to a factory farming model, it will lose that reputation, and move backwards while more advanced nations, such as the European Union, move to more free range models of animal agriculture. - I also believe this proposal to be to the detriment of our 'Clean Green' image, reputation and brand. - Intensive dairying without primary concern for animal welfare "looks disgusting" to some visitors to New Zealand and I wish to pass this view on.	**Noted. NAWAC does not make Codes according to market issues, trends etc.**

	- The relationship between New Zealand humans and their dairy cows is of great importance, not just financially for individuals and the nation as a whole, but in terms of our humanity and long term survival. Future-proofing our dairy industry will be much harder if the size and concentration of herds is permitted or encouraged. Our industry is highly competitive because we have year-round grass pasture available. The quality of our product depends -- at least in part -- on the resilience which pastoral farming as conventionally practised here has demonstrated. - To members of the National Animal Welfare Advisory Committee, I am a farmer in North Canterbury with 33 cows as well as deer. My cattle are outdoors and have shelter in winter when necessary. I also have a lot of European workers on our farm at various times. They notice how healthy, active and how much more personality our cattle have compared to the indoor cattle in Europe. They write home and tell friends and family this. I believe if we have indoor dairy farms we will once again wreck our' clean green' image as it is known the animals suffer from boredom and get more diseases so need more medication. Allowing factory farming of dairy cows will also threaten our dairy export markets. A key marketing strength of New Zealand's dairy industry is that it is predominantly pasture-based farming, images of suffering cows in factory farms will seriously damage that reputation. - This is wrong & will not be received well by the International community that see New Zealand as 'different & clean & green'. This IS our point of difference, in a polluted & rather messy world. Please preserve our ' god's own ' for all the generations to come. - Happy cows produce more milk. The NZ agricultural image of animals grazing on grass is important to our export sector and should not be falsified. It also is a unique selling point for NZ and one we should make the most of. We are experts at growing grass so lets keep doing this. If we don't have enough grass feed then we should limit the numbers and work on offering a premium product. If we let our standards slip on this there will be no return. - If this happens to the dairy industry, I'll go vegetarian, and I expect a hell of a lot of other people will feel the same. We care about our animals, even if the big producers don't. The only way we can show them is by NOT buying their product. - New Zealand's export industry is our biggest earner alongside tourism, we've all seen firsthand what happened with Fonterra in the headlines recently, can you imagine what will happen to our milk export industry when our so called 'clean & green' products are farmed and housed in the same conditions that other countries currently subject poor animals to? - I have until now been relieved that I do not live somewhere like America or China where intensive factory farming is the norm. It has allowed me (while still conflicted) to feel okay about buying and consuming products from NZ with our dairy products in, even our beef and free-range chicken and eggs. I will not eat factory farmed pig products, because of the conditions the pigs must endure. - The biggest thing you are going to loose out on is quality. New Zealand has one of the best reputations for dairy and beef in the world.....I should know, I work in a multi award winning steak house, and have worked with some multi Michelin star chefs in my time overseas, who all comment on how our products though expensive, are worth it. By keeping Cows indoors you are going to completly loose this quality and your ability to charge a premium price for our products, because it won't be worth it.	

	- Must we strike another blow to NZ's reputation in this way - OK, most people may be oblivious to the issue in China, but they certainly aren't in more enlightened and discerning parts of the world and it is these that we should take as our measure. - We have such an opportunity in NZ to sell free range grass fed milk and meat product and this is the basis of our reputation.I do not believe we have fully promoted this advantage. I can hardly believe you would consider letting this go. - I won't be travelling to or supporting your country while these practises are allowed to carry on. - **443** SAFE's submissions are, in summary, that the proposed changes (c) fail to take account of growing consumer awareness of animal welfare issues and resistance to intensive farming – a resistance that will continue to increase over time; and (d) will damage New Zealand's international reputation as a dairy producer.	
5, 53, 219, 221, 233, 391	**Labelling / consumer rights** - I understand there is a proposal that dairy cows be kept in sheds for their entire lives without ever having the right to graze outside. Without ever tasting green grass? I hope as a consumer i will have the right to know where my milk comes from...battery farm or freedom farm because I will never have something that involves such cruelty. - If there are cows that are not being allowed to exercise these behaviours, any products should be clearly differentiated, as for chicken and pigs so I can make an informed choice not to support these practices which I find abhorrent. - It is hard enough for people to make choices on their food knowing it has come from a safe, natural, humane farming practice. - If this were ever to be rolled out across New Zealand dairy farms, then I demand that the milk products from these farms (factories) be clearly labelled, so that I do not endorse this madness buy purchasing milk that was provided by a farm that would treat its cattle in this manner. - If "zero-grazing" is legalised, all meat and dairy products farmed under these conditions should be clearly labelled on packaging.	**Noted**
7, 56, 63, 90, 92, 102, 104, 119, 123, 126, 127, 139, 142, 150, 154, 155, 157, 161, 162, 163, 166, 174, 176, 179, 186, 188, 189, 191, 193, 199, 200, 201, 203, 204, 205, 207, 209,	**We can do better than this** - NZ has been at the forefront of human rights issues, lets show the rest of the world that we can be equally as forward thinking in our care of other species that inhabit this planet alongside us. - Please do not allow this to happen. New Zealand must be seen as a forward thinking country and to house cows indoors is contrary to the global trend toward animal welfare and ethical solutions to food production. - I am ashamed to be a New Zealander as we hide behind lies that we are clean and green and care for animal welfare, we do not. The world is watching..... - One of the beauties of living in New Zealand is seeing our cows and sheep grazing in the paddocks, knowing that up until their last moments they have a pretty decent life. Farming has traditionally been the backbone of New Zealand, and it is that traditional farming that New Zealanders will continue to support.	**Noted**

211, 218, 219, 220, 221, 222, 223, 225, 226, 229, 230, 238, 252, 260, 270, 271, 272, 273, 275, 285, 288, 289, 296, 303, 304, 311, 317, 318, 319, 323, 326, 327, 328, 329, 330, 331, 333, 336, 339, 341, 342, 344, 346, 349, 353, 357, 358, 359, 365, 366, 367, 372, 374, 375, 379, 380, 381, 390, 391, 394, 398, 401, 403, 405, 407, 408, 415, 416, 424, 430, 434, 436, 438	- I will be so disappointed in our country if the proposed reforms go ahead. - Mahatma Gandhi — 'The greatness of a nation and its moral progress can be judged by the way its animals are treated.' Let's not be found wanting. - I can't stress enough that if we as a country start doing this kind of thing now there will be no end. Please have some compassion. - As a nation with a reputation for being kind, we need to make sure we look after our animals. - New Zealand is known for it's free range animals to put them in barns is ludicrous, we have so much land in New Zealand for live stock. - I think internationally factory farming is being phased out as people are becoming more aware of what animals are subject to "behind closed doors." Please do not let NZ slip behind in the humanitarian factor. - I implore you to not allow this country to go down the slippery slope of indoor farming with cattle by opening the door and allowing this practice. I believe NZ is at a turning point on agricultural exports in that we must maintain our unique attributes and image, and not follow bad practices from other countries thereby losing our well respected position of provider of grass fed diary. - The proposed factory farming of New Zealand's dairy cows will surely harm our 'clean, green' image and send a clear message to the international community that this country doesn't care about animal welfare. - I think people don't have enough faith in our government as it is, but to go backwards more is just going to make it worse, and we will be going backwards while other countries (including India!!) are moving forward and changing their animal welfare laws. There will be big protests and ongoing issues if this goes ahead. And I and my family might just be a few people, but the more we tell and the more word we get out about it can soon become half the country very quickly. - The way people treat animals is a reflection on our culture. - We could be leading the world in cruelty-free, environmentally-friendly food production. - Having been in New Zealand now for 8 years, believing this country was a small dot on the map that offered it's people a Land where the rights, welfare and interests of both animals and humans mattered, I am seeing the New Zealand Govornment in a different light as time goes by. - Please don't do this, NZ is an animal loving nation and we will not stop this will become a media storm and I will march in protest against this change. - Just yesterday I was asking my neighbour if New Zealand had factory farmed cows, she told me no and I was so happy, so proud of my new and beloved country. Then today I was dismayed to read you are considering recommendations to change this. Please reconsider doing this. - New Zealand is better than this. We need to continue to be socially responsible. - Please make the decisions that help Little Guy New Zealand stand tall amongst the other countries. Don't make us look like idiots.	

	- It is 2013. Wake up and be alive to the fact that ethics matter. How we treat each other matters. And how we treat the environment matters, too. - Just when we have the opportunity to hold our heads high in the world and show how compassion and farming can go hand in hand, there is a proposal which will lead to a rapid intensification of the dairy industry and more suffering for cows. - How could it have come to this?... - When will New Zealand once again lead the world and do things right again regardless of what other places are doing. - The dairy industry around the world has long been known as inhumane in its treatment of cows, but New Zealand was one of the better, if not best countries due to there being less restrictions on quality grazing land and a generally compassionate population. However this looks set to change. - New Zealand should be proud of our relatively less cruel farming practices and aim to stop battery hen and caged pigs. This is common sense. Where is your heart! (Not you personally.) - New Zealand prides itself for delivering some of the best dairy product in the world, driven by the fact its cows live in a fantastic environment for them. This situation should be persisted with so that our country's reputation for dairy is upheld. New Zealand is also a country that prides itself on its animals - both in conservation and treatment of them, native or otherwise - and, again, this reputation is a valuable commodity that should be sustained. - Now i start to question myself if it really was a good thing that (a few years ago) i received the citizenship of this country. I was proud to be a Kiwi! What is wrong with this country? - If the animal is treated well the product quality speaks for itself, not to mention says a great amount about our nation. - I am writing against the proposals which may see our heritage .. Something we as New Zealanders have held in high regard changed .. For no other reason than greed ...Please keep New Zealand apart from the ,not good ,in the world ... Stand for what is moral and good ... Not for greed under the disguise of progress ..... Protect what we hold dear for the health of the human soul is more important than anything ..... - New Zealand prides itself on its clean, green image and confining cows to factory farm is a betrayal to our animals and our people.	
14, 22, 44, 45, 47, 51, 64, 66, 67, 69, 72, 84, 89, 99, 105, 120, 160, 163, 175, 227, 237, 238, 243, 247,	**Food safety / product quality will be negatively affected** - If we start to follow the farming ethics of the US which require factory farmed animals to be constantly fed antibiotics from the time of birth, we risk not only tainting our brand New Zealand but also endangering our health by raising the levels of immunity to antibiotics in our population. (The statistics out of the US regarding the cruelty of their farming methods and the use of antibiotics consequently damaging their own society's health are indeed alarming).	**Noted**

262, 300, 304, 351, 370, 377, 416, 425, 435, 439	- Aside to being cruel to the animals that feeds us, this proposal will in the end effect us all with the usual adverse side effects of some mutated disease for which we need yet another lab cure for. Just ask yourself how many diseases, ailments and conditions are on the increase since we the so called superior race started dicking around with our food, all in the name of saving a buck. - Thirdly it is not possible to predict the negative impact on the cows themselves and thereby the people consuming them. An argument raised by those compaigning to have free range chickens is the obvious distinction between the eggs produced by caged versus free range chickens, whereby free range eggs are noticed to be larger and the yolks brighter. Given this obvious negative impact on chickens it is impossible to predict the negative impact on the cows and the products people consume. - Without the ability to graze, a cow's life becomes unnatural. The basis of New Zealand's dairy industry internationally depends wholly on associations with product and ingredient quality. That quality is a direct result of the environment in which cattle are raised. To remove this from the equation (aside from ethical concerns that only a psychopath would need pointed out) is to permanently and irreversibly cripple New Zealand's dairy industry. - Cows that are not full of well-being will not produce milk that is full of goodness. - I am from America, where factory farming is an unfortunate reality of life, dominating the agricultural industry. What is increasingly clear to Americans is that factory farming, although profitable, is not in the best interests of the larger human community, and certainly not in the best interests of the animals. - I assume soon you will be adding palm crap to their food soon too , so our beautiful NZ butter that is currently a beautiful sunny yellow will soon be an insipid white colour like the US butter since they feed their cows all sorts of crap other than grass too. - the public is sick of ingesting growth hormones in the tissue of the animals farmed in new zealand and the world.new zealand imports meat products from overseas i.e pork.i was reading today of a new growth drug induced procedure not yet on the market that has been in test labs in the united states for the last 15 years.a product that can significantly raise meat yield in farmed animals yet again by the process of drugs. - This form of farming is unsafe for human consumption - I have signed the Green Party petition, but wanted to add that aside from the welfare issues for these animals, there is a welfare issue for us – the meat from a grass-fed cow is vastly more nutritious for humans that that reared on grains and other muck. The fact that ALL our red meat is grass-fed is a defining point for consumers overseas who have seen the health effects of eating crappy grain-fed meat. Feeding an animal a diet that is not species-appropriate is ludicrous and results in poor health for both the animals and whatever consumes it. - I do not consume any dairy products, since I do believe they are of benefit to us, but I do believe that if an animal is denied its natural behaviour, the results will be dire. E.g. In the recent past, the wrong foods fed to cows eminating in foot and mouth disease.	

	- It concerns me that dairy cattle can be held off pasture for as long as 2-3 days. This is detrimental to the animal, as well as to the product. Studies have shown that dairy products from cows which are raised off pasture, which is often accompanied by poor diet and limited movement, is not as nutritionally dense as dairy products from cows raised on pasture. This is particularly in regards to the proportions of omega 3 and 6 in the product. In pasture fed animals, these omegas are in ideal proportion whereas in off pasture raised animals, there are much higher levels of omega 6. Humans are supposed to have omega 3, 6, and 9 in proportion to each other, and higher levels of omega 6 have been linked to increased risk of cancer and other diseases. There is no possible improvement to off pasture facilities which would ensure that the dairy cattle would be as well off as they would be on pasture. - Dairy cows (recent research) produce milk with a much better proportion of free fatty acids (ie much higher in omega 3) than grain, or meal fed cows. A low Vitamin D level is implicated in helping forge a remarkable range of diseases. People are increasingly interested in their free fatty acid intake, their Vitamin D intake, and of course, their Calcium intake. I am sure people will be realising that supplements to a shed held cow's diet, will miss out the benefits we do not recognise yet. New Zealand cows should spend at least 10 hours daily grazing outside. - Take a very long, and not so hard look at the United States, the disgusting nature in which they factory farm their animals and the disease that is a result of this is horrific practice, E.coli in their milk, meat and numerous deaths in people as a result. - Cows should NOT be abused for the profits. It is vital important that the cows are well taken care of so the milk produces healthy milk. Sick and sad and stressed cows produces sick milk which can make humans sick. - For all the so called gains, the added regulations and controls, the basic truth is food today is generally less nutritious and less healthy. Serious deficiencies exist in depleted soils and chemical modification does not improve this situation. It does nothing for nuturing husbandry of animal, plant and environment. The materialst practices encouraged do not take into account the etheric and spiritual basis of life. Healthy food is far more than just a pile of chemicals joined together in material form representing product a profiteer pedals for pecuniary gain without any degree of care for it's true value to sustain and enhance healthy living. - Irrespective of animal welfare concerns, there is, or there is at least perceived to be, a danger of infection to humans associated with dairy cows affected by such infectious diseases as mastitis, endometritis and digital dermatitis. - What's the bet a sad animal, produces sad 'produce'.	
443 SAFE	**Grooming** Behavioural needs (Grooming) Cows, unsurprisingly, prefer to avoid contact with fresh faeces, and it is clear that they suffer when they cannot. However, there is no provision for requiring that cows are able to avoid faeces, as they are able to in a pastoral system. Further, allogrooming, an important social bonding behaviour, is increased between cows that are able to graze together.	**Noted. MS 9 RBP includes provision of grooming devices. In addition, MS 9a requires that buildings and facilities are maintained so as not to cause**

		injury and meet the health and welfare needs of the dairy cattle. **MS 9 requires provision of a well-drained lying area with a soft compressible surface or bedding that is maintained to avoid manure accumulation where cattle are housed for more than 16 hours a day for more than 3 consecutive days.**
17, 22, 49, 64, 69, 73, 76, 88, 94, 97, 106, 109, 122, 137, 138, 140, 160, 172, 175, 191, 192, 194, 196, 220, 221, 223, 229, 233, 235, 242, 243, 257, 282, 287, 289, 290, 344, 378, 405, 408, 409, 422, 443	**Comments on NAWAC** - I believe that many members of the National Animal Welfare Advisory Committee have conflicts of interest that in my opinion prevent them from fulfilling the function they were appointed to perform. In particular I question the presence of representatives with accounting, economics, and medical backgrounds. I consider these representatives to hold little knowledge of value regarding animals, their natural behaviour, and how best to meet the obligations of the Animal Welfare Act. These are irrelevant to the issue of animal welfare and I request that consideration is given for new appointments to be made that better reflect the task that is set for the committee. - There comes a time when you have to stand up and say no, we expect you to do this for us and abide by the stated guidelines of animals being able to display normal animal behaviour etc. - You can lie to yourselves. You can lie to us. You will probably get away with it too. just know that you are the type of person that is sending New Zealand, and the world, backwards. What makes New Zealand great? why do you love this country? Is it because we put money and economic prosperity over lives? Is it because you believe that the lives of other living things are worth less than yourselves and therefore deserve to be treated as inhumanely as it takes to cut every last expense out of the yearly budget? I don't approve of your recommendations that promote intensive cattle farming in factories. ...I don't even know why I bother with these emails. You have all made up your mind already. This submissions process is just an empty display of democracy behind a corporate oligarchy. - Don't be evil. Just don't be so bloody evil. - I urge the NAWAC Committee to consider any decisions they make regarding dairy farming in pens with compassion. It is easy to disregard all the evidence on animal welfare when economics are pushed upon us. However, being as you are in a position of power I urge you to consider the policy you are potentially approve and contemplate it's long term effect on the environment and the animals. - NAWAC must listen to the concerns of the public, not just those who wish to introduce and profit from these systems. To allow such systems to be introduced would show that NAWAC is clearly out of touch and out of date.	**Noted**

	- This issue concerning Factory Farming dairy cow is another example that is sickening to even hear about. I find it incredibly concerning that this is even an issue that you are considering. I no longer have any faith in the government and its associated organisations that are in charge of creating a healthy New Zealand society for both the people and the environment. Therefore I am requesting that you truly consider the repercussions of what may happen if you do allow this to go through. - In future I highly recommend using properly qualified, ethically-minded personnel to prepare drafts for public discussion in order to avoid the need for such dialogue [basic] to occur at "Public Discussion" level. - [to the Minister] Please do not listen to the NAWAC they obviously have no concern for the welfare of animals! - You guys are either crazy or corrupt....maybe both? - Stop being so greedy and stop bowing to the demands of Fonterra. Are you the same welfare committee that thinks battery hens are happily performing normal behaviours too? - I really think that you committee needs an overhaul of its members and be replaced by common sense people. Preferably people who have not spent over half their lives in front of computers and square buildings. Replace them with people who have admirable human qualities. People who stand up for those who cannot speak for themselves in our language. Just a few who are prepared to stand up for principals because they want to live a life that improves the world rather be push buttons to serve the interest of a minority. Just a few that know animals are not “things”. Maybe than and only than this absolute hideous nonsense from your committee again and again might stop. - To members of the National Animal Welfare Advisory Committee, Please, just this once, try to do the right thing instead of just chasing a few more quick bucks at the expense of the environment, animal welfare, and probably our overseas credibility... if we still have any left! - Animal Welfare Advisory? Cows need to be on grass. They have long needed shelter but that should still mean they can come and go freely. Why is anyone on this Committee if they think otherwise? Get a job you where can be honest to yourselves. - NAWAC board members need to be seriously reassessed and questioned. - Since the committee is clearly failing dismally to uphold its responsibility to protect the interests of animals, the entire body should be sacked and replaced by qualified people who do care about animal welfare and are not swayed by or beholden to the pecuniary interests of the farming sector. - I wonder how 'those in command' sleep at night when making decisions that ensure unnatural environments for these animals? - I am in disbelief at the stated position of NAWAC advisors about cows’ natural behaviour and their environmental needs. - I am ashamed of you as a so called committee, if you see this as being in anyway acceptable. - I realise the general level of human intelligence is low, but surely you are not this stupid. noun: empathy 1. the ability to understand and share the feelings of another. If you cannot separate your heart from your wallet, you do not deserve to be in a position of power. - Please examine your conscience.	

	- your all pieces of shit if you let this happen. how will you sleep at night if this goes through. it's a crime and you know it - How can you call yourselves the National Animal Welfare Committee, this is not welfare, this is torture to a smart, loving and amazing animal. Who you are and how you got to be on the committee is beyond me, you should be ashamed of yourselves! - How you people sleep at night I don't know, we imprison people for keeping other people in a confined space yet we think it is ok to do this to an animal? You really need to seriously look at the welfare of these animals not just think of them as milk/cheese making machines , it is as though you have lost your souls, I can only hope many people protest against this barbaric practice and put a stop to it, it is wrong , wrong , wrong. - I just hope that the people on this committee are able to think outside of what they currently believe and have some compassion for other beings before bringing this shame to themselves and our country. - I am shocked that educated people could recommend to confine cows to factories for the duration of their lives. - I believe, given your position of power to affect the standard that farmers are made to adhere to, that a recommendation of anything below this already minimal recognition of what is normal and healthy behavior achievable by farmed cows, severely brings into question the competence of this committee. - Animal welfare. To help those who cannot help themselves. That is what it is all about. Not making animals miserable. How backward you all are in your thinking. It is unbelievable! Why would anyone want to increase the suffering of cows? - In the background to the Consultation document it is mentioned that NAWAC is required to take into account good practice, available technology and scientific knowledge. Nowhere is mentioned the necessity of having people trained in ethical thinking. - Come on NAWAC, do your job, which is to safeguard the welfare of animals, not the commercial interests of those whose first interest is profit. I urge you to show some courage and resist. - You are intelligent Kiwi's, in your hearts you must know this is a mistake and would not make you proud...so I ask you to stand up for wisdom. Even if you were just set on making a sound financial decision this would not stack up. Any one in the world can raise a factory cow and feed it on genetically modified surplus corn....it is our advantage to have pasture and therefore get a premium price. - I am ashamed to think that NAWAC gets away with calling itself an animal welfare advisory committee! - If NAWAC feels any confusion on the topic of their proposed changes has arisen from the public then perhaps the committee should review and reword their draft code. - Here are some words that I think you need to look up or refresh your memory with. Morals, conscious, values, beliefs, feelings, patronising, demoralising, care, listening, understanding. - We will all be held accountable for our actions. So make sure you listen to your conscience. - **443** SAFE also takes this opportunity to record its concern that, despite the provisions of section 58(3)(g) of the Act, NAWAC does not currently have a single animal welfare advocacy representative among its members. In recommending minimum standards NAWAC is	

	exercising statutory powers and duties under the Act, an Act fundamentally concerned with animal welfare. NAWAC's current membership profile fails to reflect that, and will further undermine public confidence in its decision-making.	
23, 29, 30, 31, 36, 173, 179, 181, 216, 289, 432	**Comments on the Government** - The government has subtly turned a blind eye to the treatment of animals here in new zealand, but the public are starting become aware and are wanting a change. - I have lost alot of faith in the government after coming from timaru (a place where they shun all responsibility and let farmers away with anything) - The fact that this ridiculous and cruel proposal has even been raised is extremely disappointing and should this proceed I for one will withdraw my support for the National party hereafter. - I thought the purpose of the Animal Welfare Act Review was to IMPROVE conditions for the animals, not to burden dairy cows with the same confinement our chickens and pigs must endure. - I'm outraged. Once again animals are being let down by this govt. - Let's put governmental, upright walking decision makers in a large house with darkened windows and locked doors. Then, let's give them access to a sun lamp and unlimited boxes of macaroni and cheese and bologna sandwiches as a regular diet. We will then ask them to work unconditionally 12 hours a day for a boss who will deem them used up within maybe seven years and destroy them. Of course, they will be placed in a mass grave and forgotten. - If what I have just read about the plans to change the animal welfare act to allow farmers to lock cows indoors for their entire life is true then National has lost my vote. If this change is true then I will do my utmost to make everyone I know vote and campaign against this. - I'll be voting Green next time if the animal welfare act is changed to allow this disgusting farming practice to happen. What happened to NZ being a green farming country, this sounds more like greedy America to me. - This is a time where animal welfare should be at the forefront and instead the NZ Government is turning away from our once valued practices of being a clean, green country against live export and nuclear power. - To allow this kind of cruelty to maximize profits is a confirmation that truly governments all round the world including New Zealand really are becoming owned by corporations and big business. - Down with national!!!	**Noted**
17	**Conflict of interest** - You, as the Minister for Primary Industries, also have a huge conflict of interest in appointing members of the committee as you also represent those in the business of making money from the suffering of animals. I therefore also request that an independent "Minister for	**Noted**

	Animals" if you will, be appointed to support the aims of the Animal Welfare Act independently of economic and production considerations.	
22, 42, 67, 72, 74, 91, 159, 187, 227, 238, 246, 159, 240, 254, 263, 347, 441	**Negative environmental effects** - This proposed intensification of the farming process leads me to wonder how this waste will be disposed of - I suspect there will be a high number of instances where farmers will opt for the easy way out and fail to either thoroughly clean the cows' living quarters on a daily basis (an act they currently do not have to perform, thus adding to their workload and costs), or will opt to dump waste in nearby waterways to avoid the costs of treating and disposing of it safely and correctly. While policies can be put in place, we all know that they cannot be policed on a constant basis, which leads to unacceptable risks for both cows and the natural environment. - Factory farming intensifies waste production, with the result that greater pollution ends up damaging surrounding waterways, watersheds, and the air. Indoor housing of cattle does not solve the problem of polluted waterways: the waste produced by intensive housing must still be dealt with, and there has yet to be a solution that is not every bit as bad, or worse, than free range cattle near waterways. The solution to this issue is NOT to house cows indoors, but to create the bridges, barriers, buffers and filters that protect waterways while allowing cows to graze naturally. - - Intensive farming of any species is also BAD FOR THE ENVIRONMENT. We don't need it here in NZ to spoil what little remains of our clean green credentials. - I don't see how this kind of farming can be justified,green house omissions control will have no greater success by adding confinement and oxidization management to the mix. By the way did the 3 factory farms in the south island get the okay to start intensive farming,was the by-product ie the new zealand environment considered, in light of disasters in the northern hemisphere to do with this stile of farming, the broader picture is of cause world environment,which other countries have neglected to think of in the there hast to look after themsevles. - Intensive dairying is already responsible for significant pollution of our environment – particularly rivers and streams. We need less dairying, not more. - I do hope that Clean Green New Zealand does not go the way of further environmentally disturbing practices by extending factory farm laws. It should be reversing them. Sustainable farming ought to be the only practices allowed. Where animals and plants grow and live together in the harmonious relationship that is best for the planet. I understand this will inevitably drive the cost of meat and dairy and even vegetables up but I believe it is high time that people stop wasting, start conserving and start being realistic about climate change and the environmental impact we as humans are having upon the planet - What will happen to the land then? More housing? I shudder to think.	**Noted**

	- Is it just for convenience sake that we would choose Factory Farming? If so, then in the end humans will lose out. It's always that way. We know that from introducing foreign animals and plants into our NZ ecosystem. Let's keep doing farming the kiwi way, i.e. animals on the paddocks. - Quite apart from the issue of whether or not raising animals indoors leads to happier or healthier animals I consider the argument around feedlots lowering nitrate runoff and cleaner waterways to be specious at best. Waterways are compromised by ever expanding dairy herds and the notion of infinite growth in a country with finite resources and limited ability to absorb or ameliorate the 'downstream' effects of dairying and industrial farming practices. - Furthermore transferring inappropriate farming methods to susceptible regions such as the McKenzie basin, simply for greater bulk production, to damage soils and environment is ridiculous. Science knows the greater farming density and pressure caused by mass dairying in Southland has seriously and deleteriously affected water, soil and environmental qualities, regardless of what the "official view" portrays. The added costs to cover or alleviate this problem, which would equally apply to the McKenzie basin region, are actually unnecessary except they provide more work for bureaucrats to administer and regulate the extra work-load placed on farming producers, whilst also making unhealthy returns to the financiers of such endeavours. - Although indoor systems may help to reduce nitrogen loss to water compared to the relatively intensive cows per hectare grazing in New Zealand, globally with the feeding of palm kernel msupplement etc, it is not an environmental alternative. My concern is that NZ, with the help of these codes, is fast tracking to cattle factory farming where off-pasture systems will be used particularly in the South Island addition to the existing dairy farms as Fonterra tries to expand. Not only can New Zealand not substain this expansion environmentally, but its reputation of free ranging cows is under threat. We need less intensive, less cows per hectare, not more, and better welfare for cattle, reflected in the codes, ie - shelter, but not incarceration and a true focus on what is best for the cattle, not what is best for industry. - If effluent running off the land into the waterways is a problem, fix THAT problem, challenge the nation to come up with a workable solution! We are a nation of entrepreneurs and experts. - If environmental issues are a concern then stock numbers should be reduced. - Intensive farming of any species is also bad for the environment. We don't need it here in NZ to spoil what little remains of our clean green credentials. - I do hope that Clean Green New Zealand does not go the way of further environmentally disturbing practices by extending factory farm laws. It should be reversing them. Sustainable farming ought to be the only practices allowed. Where animals and plants grow and live together in the harmonious relationship that is best for the planet. I believe we are running out of time. The climate is changing and quickly this is a DIRECT result of factory farming! we MUST STOP this! It is the ROLE of government to guide and make policies that protect people NOT corporations! Giving corporations allowances to further destroy resources is disgraceful! PEOPLE and the Planet OVER Profits!	
240	**Justification**	**Noted.**

	In the Executive Summary of the AWRA, the difficulties with the methodology of the report not allowing for cumulative effects of repeated exposure to hazards, which is surely very important, means that a complete picture was not obtained and should not be the basis of regulations and recommendations.	
244 SPCA, 246	**Regulations** **244** 31. While Codes of Welfare have for the last 13 years been the sole source of regulatory control of the use of animals in a range of industries and activities, the SPCA is aware of course that the Animal Welfare Amendment Bill currently before the Primary Production Select Committee will impact on the role of codes of welfare in that, subject to Parliamentary approval of the amendment, regulations will be able to regulate for animal welfare and husbandry practices. 32. Having said that the SPCA reserves its position until the direction of regulations is clearer and will consider then whether or not the minimum standards proposed should also be the subject of regulations. **246** A concern with these codes and particularly the recommended best practices is they have no legal effect. The standards only state the bare minimum and the recommendations cannot be enforced. It is not clear how these will be upgraded to regulations and what impact this will have with enforcement. In the meanwhile it is concerning that changes are being made to the codes that formerly legitimise indoor systems yet have no authority to ensure compliance of even the basics.	**Noted**
248	**Boredom** [RE: trip to indoor facility] I saw cows behaving in a disturbed manner, repeatedly going to be milked and being refused by the robot. This seemed to be an attempt to relieve boredom, not dissimilar to a caged zoo animal pacing back and forth. When I asked about this the farmer explained that some cows do not cope with the indoor environment and these cows are either sent to outdoor farms or culled. I deem the latter a callous response to a situation that is caused by undue stress imposed on the cow by the farming system. It is not acceptable to slaughter a cow because she does not adapt to confinement in the intensive farming setup.	**Noted**
248	**Robotic failure** [RE: trip to indoor facility] I witnessed a cow being repeatedly hit by a failed electronic arm in the robotic milking machine. The cow fell to her knees on the concrete. She was traumatised and bruised from the battering from which she could not escape. This did not stop until a workman arrived by vehicle from another locality and climbed up into the workings to deactivate the machine to release the exit mechanism. The cow endured repeated injury and extreme stress for approximately 10-15 minutes before she was able to escape the milking cubicle. I discovered from this incident that the sheds are not staffed fulltime. The workers may be in other sheds on other properties, so they are not on site and therefore unable to immediately rescue cows from robotic failure. This is unacceptable. Cows and calves should not be subjected to system-caused accidents E.g. robotic milking cubicle failure	**Code amended. MS9 and RBP daily checks of automated systems and provisions for emergencies.**

	E.g. unable to be milked during a power failure - all dairy farms should be able to generate enough power independent of the normal grid to milk the herd until normal supply is restored	
248, 247	**Stockmanship** - [RE: trip to indoor facility] I witnessed a farm worker abusing a cow when she went in a direction he didn't want her to. I can only presume that the worker felt a high level of stress perhaps due to working with so many cows but to see him yell at and hit the cow with a bucket a number of times was appalling. Another worker threw lime in the eyes of a cow she didn't like and angrily verbally threatened and abused her, a situation that was also appalling to witness and absolutely unacceptable. I was horrified when I went to the calf rearing sheds because the calves looked in a state of neglect as they were skinny and scouring, with many dead calves in full view of the living ones, tossed aside or piled in a heap nearby. When I asked about the dead calves I was told that calves die and I should not look at the calves. I have reared calves myself and never had any not thrive. I can only assume that it is the high calf numbers in this intensive method of farming that reduces the level of care. Cow herd size should be limited according to grazing availability and worker ratio - There are widely held concerns that New Zealand lacks the husbandry skills necessary for this type of dairy farming, a concern exacerbated by the reduction in labour costs associated with factory farming in general. Alex Ulrich, a proponent of this method of farming, had this to say recently in the Timaru Herald about an indoor dairy barn being built in Cave, South Canterbury: "The 97-metre building … will milk 300 cows using robots when it is completed". This is despite NAWAC's acknowledgement in the draft proposals that 'While kept in off-pasture management systems (dairy cattle) are totally dependent on stock handlers for all their daily requirements and farmers need to be aware that there are additional responsibilities of care …'. In a survey of indoor-housing producers in 2007*, just over 16% of respondents reported closely monitoring their cows and removing those that had any health or welfare issues (i.e. lameness, not lying down, bullying). This is not reassuring.	**Noted. Stockmanship already part of Code (MS 1).**
75, 82, 86, 90, 98, 103, 111, 123, 127, 129, 145, 146, 151, 159, 160, 165, 167, 171, 176, 192, 200, 206, 210, 211, 212, 223, 225, 226, 231, 235, 238, 239, 240, 241, 246, 247, 249, 260, 262, 267, 270, 273, 281, 282, 284, 291,	**Shelter is good, but cows must be free to leave** - Feed pads and overhead shelter are beneficial and in my view essential for extreme weather conditions of intense cold and intense heat. However they need efficient and constant cleaning to avoid spread of disease. Footrot is a real problem in wet and cold weather and heat exhaustion where cows cannot escape the blazing sun. Frankly, I deplore the cutting down of shelter belts on many large-scale dairy farms, with no equivalent compensation for the animals. Judicious adjunct use of feedlots and housing that improve animal welfare and health is to be welcomed but industrial-scale dairy farming that does not put animals' social and physical well-being as the primary concern should be made illegal. - There is absolutely no justification for dairy cattle to be kept in off pasture management systems and I would like to see the animal welfare code for dairy cattle clearly establish that dairy cattle need to be uncontained and on pasture for the overwhelming majority of the day. - I love that Cows are able to access shelter, but they must be allowed to leave this shelter. I don't think our climate is such that we need to house animals day in day out! - My submission is that regulations should require that ALL dairy cattle have access to shelter (trees or barn) available to them in adverse weather conditions. Shelter belts and shade trees were ripped out as farms were modified for irrigation and converted to dairying on a	**Noted.** **Shelter already in Code (previously MS 6, now MS 7).** **See MS 9 outdoor access requirement.**

292, 294, 295, 300, 303, 309, 310, 311, 313, 314, 318, 319, 320, 321, 323, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 339, 341, 342, 346, 349, 356, 358, 359, 361, 363, 364, 365, 370, 371, 372, 374, 380, 381, 383, 393, 398, 407, 411, 413, 415, 416, 419, 424, 425, 429, 430, 431, 434, 435, 437, 438, 439, 442, 443	scale unprecedented in this country. No effective planning requirements were enforced to balance this onslaught on the land. Trees should have been retained. It is common knowledge to country folk that trees and hedges have multiple long term benefits to the ecosystem and environment as well as providing essential shade for stock. The Regulations should require that all dairy cattle have access to shelter in weather conditions which would otherwise cause stress to the animals. - I certainly do not dispute that cows should be given shelter and that at some times keeping them indoors may benefit them. But this certainly does not apply all year around. Generally, what they need is shelter from which they can come and go as they please. - In other countries putting them on sheds/barns was partly because their climate differs from ours and the animals would have frozen to death outside. - Every cow should be able to graze in a paddock, the way it is, and always has been, natural for a cow to live. They should also have a dry run off block to go to at night, not a muddy paddock to lie in. To confine a cow indoors for any amount of time is wrong & cruel & against nature, it's good to provide them with over head shelter but they must be free to leave. - Yes, cows should have the CHOICE to seek shelter from the extremes of weather, but to increase the intensity of dairy farming is cruel. - Please ensure that legislation protects animals right to indoor/outdoor access throughout the day, and that housing levels do not exceed humane levels - or that density means that true access is unlikely. - I am a breeder of beef cattle and know well the behaviour of cows. Whilst they enjoy warmth and shelter in bad weather there is no doubt they are grazing animals. They enjoy roaming as free as possible because they become bored and eventually stressed when confined to one place. They like to explore and enjoy the sun when they choose and shelter from trees when raining or too hot - as they feel like it. They are also very social and prefer the company of some cows over others. - Yes give the cows shelter but allow them to come and go freely!! - yes i believe they should be provided shelter if they want it but also should be free to come and go as please i mean honestly look at all the open space and farm land in new zealand what can possibly be gained by locking them up apart from loss of jobs for a lot of dairy workers as they won't be needed to move the cows from paddock to paddock and to the milking sheds - There would be no objection if indoor housing was voluntary or to serve the purpose of extreme weather or winter shelter, or even for short-term soil damage due to unusually high rainfall, provided cows had regular access to grazing and exercise. If cows are confined due to damaged soil in normal regional weather conditions, it suggests overstocking. The promotion by Dairy NZ to expand the dairy industry in Southland where the climate and soil are unsuitable in winter has forced the issue of inside housing /cubicles regardless of whether this expansion is detrimental to the environment or animal welfare. I understand in some regions some cows are kept in at night during winter and allowed to graze and thus exercise during the day (MAF technical paper 2008). However some (20% in this report) put the cows out to graze at night when it is the coldest, denying also the enjoyment of daytime sun. With no restrictions in the codes, some cows will not have daily access to grazing and can be kept inside indefinitely regardless of the weather. If cattle are needing to be confined in summer to provide shade then the farms in question are breaching the Act by not providing accessible shade (unless the	

		housing is used to provide voluntary access). With large amounts of money spent on indoor systems such as Aztec buildings, farmers will be tempted to use their systems increasingly to increase milk production to recover finance. For this reason it is essential the code have restrictions on standing off periods or time inside in conjunction with seasonal circumstances - if not, the shelter is a cattle prison serving only economics. - I agree they NEED shelter too but should be free to wander. Tell the farmers to plant more shelter belts!! Do not put them inside 24/7!! At night sure, or on terrible stormy, snowy nights, well that would be the humane thing to do, but do not confine them for long periods of time – that is CRUEL and AGAINST nature!! - I understand that regulation of the present factory farming standards is necessary to avoid another fowl and swine catastrophe, however I believe that 24/7 year round factory farming should NOT be allowed of dairy cows in New Zealand. - Long Term Confinement Housing (LTCH) as opposed to Required Shelter (RS): LTCH is primarily to allow intensive dairy production. The idea that this housing might help reduce carbon emissions is unlikely and compromises the animals' welfare. These types of housings should never be used to confine animals for pecuniary gain nor, of course, animal experimentation. RS is for the purposes of animal welfare. This is laudable and it would be mandatory that the cows and calves would be able to *come and go to pasture as they choose to*. I submit that: For sustainable livestock production, the best method is on pasture. However, shelter must be supplied in the form of green shelter or open-access sheds with rubber flooring. - We would understand shutting them up for extended periods during the depths of winter, but not for the rest of the year… overall cattle have spent generations handling the weather outdoors….also, do you really think that cattle that appear to be poorly adjusting to indoor sheltering will actually be provided with alternative accommodation? Don't be so naive. - Given the report's statement that "the focus and intent of Minimum Standards in New Zealand Codes of Welfare are based on a key principle of animal welfare science that wherever possible the measures of welfare delivery should be based on the outcomes for the animals concerned" (MAF, 2011, p.24) it is clear that off-pasture management systems should be highly controlled and used only if the welfare of the cows depend on it. It is my submission that off-pasture management systems should never be used to increase productivity at the expense of cow welfare. Off-pasture systems should be restricted to intermittent use during adverse weather conditions. "Continuous" confinement of between six to eight weeks (MAF, 2011, p. 12) as necessitated in cold climates indicate that dairy and beef farming is unsuitable in certain parts of New Zealand. The risk of the "gross agonistic behaviours" amongst such herds is contradictory to the previously mentioned Minimum Standards and Codes of Welfare. - **443** The long-term indoor housing of dairy cattle is currently not widespread in New Zealand, but over the last few years there has been an escalation in suppliers aggressively promoting indoor confinement systems to dairy farmers. If NAWAC fails to properly address this issue now, the practice will become entrenched and New Zealand will have yet another factory farming problem on its hands. By setting limitations now on the amount of time dairy cattle can be confined indoors NAWAC will give dairy farmers the clarity they need to plan for the future, and will reassure consumers that dairy cows will continue to have access to the outdoors. NAWAC needs to show leadership and to set minimum standards that will ensure that dairy cattle cannot be confined year round. SAFE supports the provision of access to shelter for dairy cows. At times conditions can be extremely harsh in New Zealand, and access to adequate shelter is often lacking despite this being a requirement of the Act. Access to housing can therefore be beneficial to the animals, especially in inclement weather. Providing adequate shelter, however, is not the same as confining animals to the indoors on a permanent basis. The reference to "adequate shelter" in section 4(b) of the Act does not mean permanent indoor confinement. SAFE would like to see minimum standards that impose more	

	rigorous obligations to provide appropriate shelter (including shade) when cattle need it, but that also ensure that cattle continue to have daily access to the pasture. Indoor confinement should never be long term or permanent or exclude pasture access. - There are of course many parts of New Zealand (such as the McKenzie Basin) where the climate is inherently unsuitable for dairy farming. Permanent indoor confinement should not be used as a means of establishing dairying in these areas. Nor should feed pads or stand-off areas be used in place of good farming practices. Subject to temporary adverse weather conditions, dairy cows should have the opportunity to graze every day if they choose to do so. There is clear evidence that cows prefer to be outdoors. Even during the winter, cows spend an average of 4.8 hours outside each day. In the summer, this increases significantly, to 17.2 hours per day. It is only in truly extreme cases (near 0 degree temperatures) that cows prefer to be indoors for the entire day.	
93	**Effluent and smell** We are Sheep & Crop Farmers from Mid-Canterbury we also do some dairy grazing. The Farmer directly above us (next farm up) built one of these dairy barns to house his cows and how we and our Neighbours have suffered for a good year and a half with smell, very strong smell . first it was the Ponds, then we got some stink from the shed, and the effluent was very bad, like he was dumping it outside my Bedroom window. We were told by Ecan that it takes a year or so for the ponds etc to settle down, I don't think this is very fair of the councils or the farmer wanting these barns not to talk to People living round about these, not to warn us that we might get stunk out. I also believe that the disposal of effluent has to be looked at and a change from using irrigators must be looked at to cut smell out.	**Noted**
95, 284, 392	**Flooring** - One type of flooring suggested, involves woodchips or metal which we not only damage cows hooves, causing pain, but is also painful to lie on. Further, providing concrete flooring similarly, causes pain and discomfort to cows through its hard cold unforgiving surface. - The European Commission is moving towards animal welfare, not away from it. They note that large numbers of dairy cows suffer from lameness on European dairy farms (*Welfare Quality conference proceedings 17/18 November 2005, Brussels, Belgium, p.55-56).* The conference identified floor type, space allowance, social rank, food type, hygiene and phenotype as contributing factors. Lameness is high among dairy cows farmed in sheds. Therefore I submit that: Dairy cows should not be forced to stand on surfaces which have been proven to cause high numbers of lameness. Rubber surfaces are required in shelter sheds. - Concrete flooring would cause discomfort to the animals as it would be uncomfortable for any person or animal.	**Noted. MS 9 requires well-drained lying area with a comfortable surface or bedding that is maintained to avoid manure accumulation for animals kept in an off-paddock facility for more than 16 a day for more than 3 consecutive days. References to concrete and stones has been removed.**
392	**Noise** Another point is continuous excessive noise that these indoor farming factories would produce. This causes pain, discomfort, distress, fear, injury for the animal, diminishing almost all of the five welfare freedoms we are suppose to enhance for animals in our care yet it will be the opposite if factory farms are put in place.	**Noted**
247	**Welfare monitoring**	**Noted.**

	While monitoring and enforcement of compliance with the provisions of New Zealand's Animal Welfare Act continue to be woefully non-existent (no sign of this changing in the forseeable future), any change in farming practices which potentially increases the vulnerability of animals will, inevitably, increase in actuality the levels of suffering experienced by animals farmed within these systems. This situation will not be helped by the removal of any opportunity for the animals to be 'in sight' of the public, and the industry will increasingly rely on secrecy and the careful management of public 'awareness' in the same way that the battery hen and factory farm pork industries do. It is worth noting that the MAF Technical Paper referenced above contained a number of other pertinent observations. For instance: 'Both veterinarians and producers expressed similar beliefs about the need for recommendations about space allowances in housing systems' – the proposals to amend the Code contain no such recommendations. The Paper also reports: 'Some producers expressed a belief that provision of voluntary access to either pasture or farm tracks was a beneficial management strategy providing exercise and assisting with inspections' (for lameness and other problems). Furthermore, 'Compared with outdoor systems, cost-cutting within indoor systems may hold a greater animal welfare risk' and 'It was very clear from the producer workshop that monitoring of cows in indoor facilities is important' – again I would ask, monitoring by whom? Based on present levels of government investment in animal welfare, the chances of such monitoring being carried out by an accredited independent body are zero. This reality needs to inform NAWAC's decisions about the acceptability of confinement housing.	**Noted. Regarding space allowances: MS 6 requiring dairy cattle are able to walk, turn around, sit, lie down and rise freely, and express normal feeding behaviour and appropriate social interactions. MS 9 limit of one free stall per cow.**
307 DairyNZ	**Terminology** DairyNZ is currently leading a project to develop comprehensive guidance materials for the design, construction and use of off-pasture systems in New Zealand dairy farms. We see opportunities for this process to complement and support the Dairy Cattle Code of Welfare. For it to do so we recommend that changes to the Code be timed to enable alignment and compatibility. Specifically, we recommend that the final Code reflect common agreed terminology when it is finalised by industry – this will help support farmer and wider industry understanding and buy-in to the Code.	**Noted.**
121 WSPA	**Pictures** Given the fact that freestall use is still relatively new to New Zealand, WSPA believes that the Code would benefit from a short appendix illustrating examples of abnormal behaviour in freestall systems, e.g. dog sitting, perching, reverse lying, etc. The code already contains an appendix on Body Condition Scoring, so a precedent for this type of additional information exists and such a guide would help dairy farmers identify and resolve problems in these systems before they became endemic. WSPA suggests that NAWAC contacts Dr Neil Anderson, a Canadian expert on cow behaviour and freestalls for permission to reproduce his work in the Code (see Appendices 1 and 2). Thank you again for the opportunity to comment on the proposed changes to the Code. WSPA sincerely hopes that NAWAC chooses to accept the suggestions made in this submission and is happy to provide further input into the Code as needed.	**Noted. Reference to industry guidance in the code.**
26, 22, 120, 121, 243, 244, 246, 284, 307	**External links and references** - 26, 344: This link that follows is an advertisement for a video game. It provides an insight into the inevitable; of what we will become if we continue as we are. Link: http://www.youtube.com/watch?v=lUtnas5ScSE	**Noted**

	- 22: To achieve a basic understanding please read this introductory article immediately: http://tolivetolaughtolove.blogspot.co.nz/2010/01/why-cafo-meat-is-bad.html - 120: [RE: omega 3 and 6 levels in off-pasture cows] http://www.eatwild.com/articles/superhealthy.html http://www.medscape.org/viewarticle/555736 - 121 WSPA References: AHAW (2009) Scientific Opinion of the Panel on Animal Health and Welfare on a request from the Commission on the risk assessment of the impact of housing, nutrition and feeding, management and genetic selection on leg and locomotion problems in dairy cows. The EFSA Journal, 1142: 1-57. Barker ZE, Leach KA, Whay HR, Bell NJ and Main DCJ (2010) Assessment of lameness prevalence and associated risk factors in dairy herds in England and Wales. Journal of Dairy Science, 93: 932-941. Haskell MJ, Rennie LJ, Bowell VA, Bell MJ and Lawrence AB (2006) Housing system, milk production, and zero-grazing effects on lameness and leg injury in dairy cows. Journal of Dairy Science, 89: 4259-4266. Krohn CC, Munksgaard L & Jonasen B (1992) Behaviour of dairy cows kept in extensive (loose housing/pasture) or intensive (tie stall) environments 1. Experimental procedure, facilities, time budgets – diurnal and seasonal conditions. Applied Animal Behaviour Science, 34: 37-47. - I urge you to watch Food Inc....The state of American farming a few years ago. Folk were driving 100's of miles to buy food that was Grass fed and free range I also urge you to read a cook book called Nourishing Traditions by Sally Fallon. It has an enormous following.It should be essential reading for your lamb beef and Dairy marketing team . - 244 EFSA dairy report – a summary of key findings and recommendations, *Phil Brooke, Compassion in World Farming, 2010, p. 2* - 246 MAF Report. Impacts of NZ Dairy Housing Systems, Aug 2008, J Dairy Science 2009 Nov, 92 (11) Factors for Lameness in Freestall – housed dairy cows across two breeds, dairy systems and countries PDF Dairy NZ - Southern Wintering Systems www.dairy.co.nz/file/filead/36783 Wintering Systems Performance: What you need to know to achieve your farm systems targets Aztec Dairy Housing Systems www.aztecdairyhousing.co.nz J Dairy Sci 2006 Nov 89 Haskell MJ NZ Vet J 2008 Aug 56 (4) The Effect of Housing on Lameness Prevalence in Wisconsin Dairy Herds, Cook NB - The public are increasingly aware of the plight of farmed animals. In 2005, the European Union's Welfare Quality held a conference in Brussels which highlighted that this is increasingly the case. Noted and highly respected and educated people took part in this proceedings. See http://www.welfarequality.net/everyone/31550/5/0/22And a further conference details needs of animals. For example, see graphic below. http://www.welfarequality.net/everyone/43160/5/0/22. Health: See http://www.animalwelfareapproved.org/consumers/health-benefits/ Methane emissions. For grass-fed cows – see http://www.animalwelfareapproved.org/wp-content/uploads/2013/01/A-Breath-of-Fresh-Air-v1.pdf - DairyNZ: Normal' behaviour of the legal animal is more than just 'what they do in the wild'. Agriculture and Horticulture Development Board (2012), 'Dairy Housing: A Best Practice Guide'. 'Performance and nutrient intake of high producing Holstein cows consuming pasture or a total mixed ration', Kolver and Muller (1998) found that high producing cows were not able to maintain body condition on a diet of pasture only as they had additional nutritional needs. For example, Charlton, Rutter, East & Sinclair (2011),'Preference of dairy cows: indoor cubicle housing with access to a total mixed ration vs. access to pasture' (in Applied Animal Behavioural Science 130(1/2): 1-9.	

Specific Comments

Section	No.	Comment	NAWAC Response
Behavioural needs and MS X	**121**	1.1. WSPA strongly believes that all adult dairy cattle should have access to the outdoors to promote the expression of normal behaviour. Under ideal conditions, this would involve free access to pasture, as is commonly practiced in New Zealand. However, WSPA accepts that as dairy farming evolves this may not always be practical. Nonetheless, daily access to a comfortable outdoor area that allows animals to exercise, socialise and forage should be provided as a bare minimum and the Minimum Standard should be amended to reflect this. 1.2. Outdoor access is important to dairy cows. When given a free choice, cows generally choose to spend at least some time each day at pasture, even during the winter. Krohn *et al* (1992) gave cows in Denmark access to a straw-bedded barn, a gravel yard and pasture. They found that in summer cows spent around 17 hours outdoors each day, mostly at pasture, while in winter they spent around 5 hours outdoors each day. The only time that cows stayed indoors all day was during frosty weather. What is interesting about this particular finding is that Danish winters tend to be far colder than those in New Zealand[5], yet still the cows expressed a desire to spend some time outdoors each day. 1.3. Housing animals for long periods in zero grazing systems, especially cubicle/freestall systems, has also been associated with an increased incidence of lameness, which is a very serious welfare and productivity issue (Barker *et al* 2010, Haskell *et al* 2006). And, as noted by the Animal Health and Welfare Panel (AHAW) of the European Food Safety Authority (EFSA): "Magnitudes of the adverse effects and risk estimates in housing are much greater in systems involving cubicle housing or tie-stalls, than in straw yards or at pasture" (AHAW 2009). 1.4. Given that cows want to be outside for at least part of the day (regardless of the season) and that outdoor access seems to reduce both general welfare risks and the risk of lameness in particular (see above), it would make sense for NAWAC to enshrine the requirement for outdoor access as a Minimum Standard in order to ensure dairy cattle welfare is maintained. 1.5. WSPA also suggests that the reference to 'walking to and from milking' (Recommended Best Practice (d)) is removed. By its very nature walking to and from milking is a controlled activity, not unrestricted. And in many cases the distance between the paddock or shed and milking parlour will not be sufficient to provide adequate daily exercise for the cows. 1.6. Furthermore, WSPA disagrees with the suggestion that cows need a minimum of only eight hours lying time each day (General Information, bullet point one). A substantial amount of research suggests that dairy cattle in New Zealand need around 12 hours lying time each day[6]. This need is inflexible and cows suffer if they cannot achieve it[7]. Given the statement is currently in the General Information section and has no legal effect, it makes no sense to compromise animal welfare by recommending a minimum lying time that is well below what science has shown cows need. 1.7. Finally, WSPA suggests that the following statement in the General Information section is deleted: "Dairy cattle may benefit from being provided with the opportunity to graze, where this does not interfere with feeding regimes". While WSPA appreciates the	**MS 9 outdoor access where in off-paddock facility for more than 150 days in any 365-day period.** **Removed. Agreed that it is not 'unrestricted'.** **Agreed and changed to "sufficient to meet behavioural needs", and RBP added for 10-12 hours.** **Removed.**

[5] The average winter temperature in Copenhagen is -2ºC, compared to 8ºC in Dunedin/Invercargill. Sources: http://www.worldweatheronline.com/Copenhagen-weather-averages/Hovedstaden/DK.aspx and http://www.niwa.co.nz/education-and-training/schools/resources/climate/overview/map_south.
[6] L. Matthews, pers comm.
[7] L. Matthews, pers comm.

		sentiment behind the statement, it believes that if retained it will undermine NAWAC's credibility in the eyes of dairy farmers, the majority of whom will almost exclusively be grazing cows on pasture.	
Behavioural needs and MS X	**244**	**MS** 17. The need to provide for the opportunity to express normal patterns of behaviour is inherent in any animal rearing system and needs to be reinforced at every opportunity. 18. The SPCA therefore submits that the first clause of the proposed Minimum Standard X should be: **(a) Provision must be made to ensure that every dairy cow has the opportunity to express its normal patterns of behaviour.** 19. The SPCA generally supports the minimum standards in the proposed Minimum Standard No. 9 but there are some omissions – direct reference to zero-grazing, and emphasising the importance of good stockmanship. 20. The proposed minimum standard does not refer to zero-grazing management systems and in the view of the SPCA this should be specifically addressed. 21. For the reasons set out above zero-grazing systems are unacceptable. The Minimum Standard must reflect that by adding as sub-clause (a) **Feeding and pasturing systems must be such that all dairy cows have access to pasture, either controlled or uncontrolled, and thus avoid establishing a zero-grazing system.**	**MS 1 Dairy Code already deals with stockmanship Disagree.** **MS 9 requires outdoor access, but not necessarily pasture (see previous comments related to pasture access)**
Behavioural needs and MS X	**246**	**MS** The proposed minimum standard states (b) Dairy cattle must be able to lie and rest comfortably for sufficient periods each day to meet their behavioural needs. It then says in Replacement Section 4 Where dairy cattle are held off-pasture for more than 12 hours per day and for three consecutive days, they need to be provided with a dry, comfortable surface for lying and enough room to be able to move about freely. This allows for more than 12 hours for up to 3 consecutive days on concrete; it could mean 3 whole days on concrete – to quote one South Island farmer 'they have to get used to sleeping on concrete'. The resting comfortably each day does not match the replacement section. In the Wisconsin report there was less prevalence of lameness on farms where there were sand lying areas compared to concrete areas covered with bedding. The UK report concluded lameness increased with decreased lying comfort (Haskell). Dirtiness was a factor in data across the countries for all types of inside housing, with cows having muck on their bodies and also less space for personal grooming.	**Noted.**
Behavioural needs and MS X	**250**	1.1. Federated Farmers submits that: 1.1.2. The Minimum Standards be changed to reflect that the welfare of dairy cattle is not dependent on grazing opportunities	**Noted.**

		3.1. Behavioural needs for all dairy cattle. Federated Farmers agrees with the addition of this new section and agrees with the Minimum Standards suggested on providing for these behavioural needs. This minimum standard is relevant to all dairy cattle, no matter the age or sex, or where they are. It sets out basic needs for all conditions. 3.1.1. Recommended Best Practice. Federated Farmers agrees with items (a), (b) and (d). 3.1.2. Opportunity to graze. Federated Farmers submits that item (c) 'Dairy cattle should be given the opportunity to graze' be altered to read: 3.1.3. Dairy cattle should be given access to sufficient nutritional feed and water to meet their needs. 3.1.4. Dairy cattle do not need the opportunity to graze. They do require to be fed. It has been scientifically proven and shown in many parts of the world that the welfare of dairy cattle does not rely on grazing. They do not have to be on green grass and under the blue sky (and rain, hail or snow) in order to have their welfare needs met. Indeed, many countries bring their dairy cattle indoors in order to improve their welfare outcomes. The opportunities for New Zealand farmers should not be restricted by a perception based on emotion and not on science. 3.1.6. Requiring those farmers who base their whole herd nutrition on what is known as a total mixed diet, but not necessarily including green grass, to send their cows onto paddocks to graze in order to give them fresh grass in a grazing situation is impractical. It would require a transition period over three weeks to get them used to each change in diet. 3.1.7. On farms where they use a stand off pad (or a herd home as a stand off pad only) the grazing requirement is more manageable as the cows are moving back and forward from grazing anyway, with standing off generally being only a part of their daily routine. 3.1.8. The total mixed diet cows get in a barn is as balanced as one can get and is arguably a significantly better balanced diet than they get on grass. Grass, too, can at times be toxic to cows, where high levels of nitrate can lead to cow mortality and toxins in grass can lead to conditions like facial eczema. 3.1.9. Calves are not able to digest grass until their rumen has been developed and so requiring them to be given the opportunity to graze is not necessary. Calving in many areas occurs when the weather is very changeable with low temperatures, rain, wind and sometimes snow. Keeping calves indoors allows better welfare outcomes for calves, provided their other needs are met. 3.1.10. Exercise. Federated Farmers agrees with the wording in (d) ('Dairy cattle be given the opportunities for unrestricted exercise…….to and from milking'). 3.1.11. Where cows are milked by on-demand robot systems they chose when to walk to the robot, which may be some distance away even when a barn system is used. For many cows this is on average three times a day. Where cows (both on and off-pasture) are milked according to a schedule they are usually milked twice daily and a walk is required, twice daily. 3.1.12. In off-pasture systems water is usually piped in to only a few areas of the structure, requiring cows to walk for a drink. The feed is generally fed out down a central line, while comfort items like a back scratcher require the cow to walk to use it. 3.1.13. Cows on pasture in paddocks, on the other hand, may have many miles to walk to the farm dairy for milking, and while New Zealand cows are known as being the fittest in the world, distance can lead to lameness issues.	**MS 9 requires outdoor access, not necessarily pasture.** **NAWAC acknowledges lameness risk of pasturing cattle.**

Behavioural needs and MS X	**443**	The description of the "behavioural needs" of dairy cattle in proposed new Minimum Standard x is extraordinarily restricted. Paragraph (a) states only that cattle must be able to "walk, turn around, sit, lie down and rise freely". A very limited range of behaviours. There is no recognition of grazing, a defining behavior of a dairy cow, as a behavioural need. Nor is there reference to reasonable exercise ("walking" does not convey this, and may mean nothing more than walking from a stall to milking, all under one roof). Nor is there any reference to the social behaviours that cows engage in. It is difficult to resist an inference that the range of behavioural needs has deliberately been narrowly described to 'fit' within a confined housing system. Paragraph (b) of Minimum Standard x states that dairy cattle must be able to lie and rest comfortably for "sufficient periods each day to meet their behavioural needs". There is no stated minimum rest/lying down periods, either in the new Minimum Standards or in the Recommended Best Practice. The "General Information" sector gives as an "indicator" a minimum rest/lying down period of only 8 hours each day. That presumably means that cattle could be left confined inside, standing or sitting (presumably on concrete, stones or other hard material) for the remaining 16 hours each day. Even the MAF Report that NAWAC relies on suggests that 11 hours is more appropriate.	**Expanded MS 6 to include lie in a natural position and express normal feeding behavior and appropriate social interactions. "Sit" has been removed as this can be an abnormal behavior indicating problems.** **RBP now suggests 10-12 hours resting time**
Behavioural needs and MS X	**284**	**MS** (c) Dairy cattle should be given the opportunity to graze. *This is a minimum standard and add the words "on pasture at all times". See Higashiyama, Y. et al (2013) ref below re forcing cows to go where they don't want to go, and enforced lying places.* (d) Dairy cattle should be given opportunities for unrestricted exercise, where this is not already provided by the housing or management system. For lactating cows, this can include walking to and from milking. *This is unacceptable. There must be choice of pastural grazing at all times.* **EI:** Dairy cattle can lie down and rest for a minimum of 8 hours in total each day. Should be "when they choose to", not just 8 hours. **General Information** Dairy cattle may benefit from being provided with the opportunity to graze, where this does not interfere with feeding regimes. *This should be "free access to grazing" as a minimum standard. For cattle's choice of pasture see Lee, C et al, 2013 (ref below) .*	**Noted.** **MS 9 now requiring outdoor access, not necessarily on pasture (see previous comments and report for reasons)**
Behavioural needs and MS X	**101**	**Recommended Best Practice** Recommended best practice states: (c) Dairy cattle should be given the opportunity to graze.	**Noted. RBP has been changed. MS 9 now addresses outdoor access for cattle in off-paddock facilities.**

		(d) Dairy cattle should be given opportunities for unrestricted exercise, where this is not already provided by the housing or management system. For lactating cows, this can include walking to and from milking. In order to conform with good standards of welfare these need to be amended as follows, and upgraded to **Minimum Standard:** (c) Dairy cattle must be given the opportunity to graze for at least 6 hours per day for at least 280 days per year. (d) Dairy cattle must be given opportunities for unrestricted exercise, where this is not already provided by the housing or management system. For lactating cows, this can include walking to and from milking. Such an inclusion is consistent with a number of European countries which mandate or will shortly mandate minimum grazing periods outside winter months. Even under adverse weather conditions on heavy soils, good management should ensure minimal pasture damage with a 6 hour grazing period. However there may need to be exemptions for special circumstances (ie experimental herds).	
Behavioural needs and MS X	**230**	**Recommended Best Practice** I certainly see that the proposed changes to the current standards do not go far enough to protect the well-being of these gentle animals. At the very least, the recommended best practices should be the minimum standards. Unfortunately when money and profit is involved, there will always be business that use only the minimum standard and possibly even below this if not monitored. I would prefer to see the following from your recommended best practice for all dairy cattle, be adopted as minimum requirements and thereby apply to off-pasture animals as well: (c) Dairy cattle should be given the opportunity to graze. (d) Dairy cattle should be given opportunities for unrestricted exercise. Grazing and unrestricted exercise can only be done on suitable pasture land and having these provisions would mean that off-pasture farms would need to make these provisions. Ultimately I would prefer that cattle were permanently kept in their natural farm surroundings and not indoors, except as a protection in times of inclement weather.	**Noted. RBP has been changed. MS 9 now addresses outdoor access for cattle in off-paddock facilities.**
Behavioural needs and MS X	**235**	**Recommended Best Practice** The minimal standards given in the proposed bill are very different from the best practice standards and to some extent can be considered contradictory. This is seen in the consideration given of best practice in regards to the care of cows where attention is given to the behavioural needs of cattle in term of hierarchy and social needs and the ideal of grazing and resting. To go against this and to only give cattle room to turn around and to lie down for some periods of the day as the amendment would allow is a somewhat humorous incongruous insertion if it was not so serious. Of course cows need space as well as company gained from being in a herd as well as some stimulation gained from exploring their territory.	**MS 6 amended to include social and feeding behaviour.**
Behavioural needs and MS X	**307**	**RBP (c) and (d)**	**Noted. RBP has been changed. MS 9 now**

		We do not consider 'the opportunity to graze' is a behavioural need. We recommend removing proposed RBP (c) in the behavioural needs section due to feasibility concerns and to avoid any room for confusion or conflict with other MS concerning essential animal needs; We do not consider that the RBP(d), providing dairy cattle 'opportunities for unrestricted exercise', is well defined. We recommend deleting RBP(d); ▯ Should our request for RBP(c) to be deleted not be met: o The RBP be reworded as follows (bold text added), "Dairy cattle should be given the opportunity to graze **where this does not interfere with feeding regimes or where grazing will not conflict with another other aspect of the Code."**	**addresses outdoor access for cattle in off-paddock facilities.** **Removed.**
Behavioural needs and MS X	**307**	Behavioural needs section: Introduction 40. Fifth line, the word 'the' be replaced with 'more', so that the sentence reads, "when kept on pasture, they have the more opportunity to display normal patterns of behaviour." As discussed in our earlier comments on 'the opportunity to graze', it is not correct to imply that animals not kept on pasture cannot display normal patterns of behaviour. Behavioural needs section: General information 41. The second and third bullet points refer to 'stocking density and herd size' being 'managed relative to the facilities' – this is ambiguous and could be misconstrued. DairyNZ considers that the key issue is to ensure that stocking density is managed to allow sufficient lying area and feeding space for adequate lying, eating and drinking. We recommend the two bullet points be redrafted as follows: ▯ "Space along or around feeding and watering facilities should be sufficient to ensure all animals in the herd can freely move around and have access to adequate food and water, without excessive competition." "Paddock or break size, or the size of off-pasture management systems, should be sufficient to ensure all animals in the herd can move around freely as well as lie down and rest for 8 hours, without excessive competition." Behavioural needs section: Recommended best practices 42. RBP(b) deals with two distinct issues (1) mixing unfamiliar animals and (2) releasing cattle from an off-pasture system. As written the RBP confuses the two. We suggest deleting the following text, "or when releasing cattle from long periods of indoor housing" and replacing it with a new RBP (e) that reads "when releasing cattle from an off-pasture management system animals should be regularly observed for signs of not adapting to the new environment". In this situation aggression is typically alleviated when animals are released so monitoring for signs of aggression is not relevant here. 43. RBP(b) should then read, "when mixing groups of unfamiliar animals, or introducing new animals to a stable social group, animals should be observed regularly until settled and monitored for signs of continuing aggression."	**Noted. Introduction has since been changed.** **Removed.** **Addressed by MS 6.**
Behavioural needs and MS X	**101**	**General Information** Under "General Information" it states "…dairy cattle prefer to lie down for a minimum of 8 hours in total each day…" This may be incorrect. According to DairyNZ cattle *require* a minimum of 8 hours lying time but prefer 11. This may have implications for the amount of area provided for lying as dominant cows will tend to monopolise bedding if space is limited. (www.dairynz.co.nz/file/fileid/28515)	**Removed.**

Off-pasture management and MS 9	**120**	**Minimum Standards** I would like to see pasture underlined as a necessary everyday environment for dairy cattle. It should be established as more than just a recommended thing but rather an absolutely necessary thing. I feel an improvement to section 4 would be to state a maximum period of time that dairy cattle can be held off pasture. Given the problematic nature of this unnatural environment, as small as possible a time would be better, such as absolute maximum 12 hours, except in very rare circumstances. While I don't support the idea of off pasture facilities for dairy cattle at all, I understand how it has come to be included in the code, and how it has developed as a practice. My biggest concern is that the amendment to the code does not stipulate strongly enough the fact that off pasture management is unnatural and detrimental to the animal, and thus allows the possibility that such a practice could become more wide spread and more intensive in the future.	**Noted. See MS 9 outdoor access (see previous comments on reasons for not including a requirement for pasture access per se).**
Off-pasture management and MS 9	**81**	**General Information** I believe the change to the minimum standards proposed are adequate however I have one comment and that is with regard to Minimum Standard No.9 under General Information bullet point 2. Surfaces are non-slip and allow effluent to drain away – I believe this should state "Surfaces are anti-slip and allow effluent to drain away" this is because no floor is non-slip, there is always the possibility of an animal slipping for various reasons and under various circumstances as I am sure you can appreciate.	**Noted and changed.**
Off-pasture management and MS 9	**121**	1.8. WSPA believes that MS9(b) should be amended to include the word 'humane' between 'alternative' and 'management' to ensure the welfare of cows that cannot adapt to off-pasture systems. 1.9. WSPA also believes that MS9(e) should be amended to reflect the wording used in the introduction about the provision of a dry, comfortable surface for lying, as this will help reduce ambiguity about what is required from a 'suitable lying area'. 1.10. Finally, WSPA disagrees with Recommended Best Practice (d) and believes that the figure should be 10% more freestalls than cows, in order to avoid aggression. Although WSPA is not aware of any specific scientific research in this area, 10% is generally accepted by countries that routinely use freestalls as the minimum additional number needed to ensure subordinate cows are able to avoid dominant animals. Also, as a Recommended Best Practice, which has no legal effect, it makes no sense to be recommending a practice which will increase, rather than decrease animal suffering if followed.	**Disagree.** **MS 9 requires a well drained lying area with a compressible soft surface or bedding that is maintained to avoid manure accumulation.** **MS 9 now requires one free-stall per cow.**
Off-pasture management and MS 9	**128**	**MS** LIC does have concern in relation to Minimum Standard no. 9 (h). In Europe, dairy cattle are tethered indoors for extensive periods of time, often placed in head-bales during feeding. It is presumed that the clause aims to prevent tethering for 100% of the time when cattle are housed in off-pasture management systems, but as it is currently worded, the proposal is unclear.	**Noted.**

		LIC respectfully recommends that the wording of MS 9(h) be amended to specifically define its scope.	
Off-pasture management and MS 9	**240**	**MS** 1. Minimum Standard No9 Managing Dairy Cattle off Pasture Section(e) states that:- 'Dairy cattle kept on off-pasture management systems for more than three consecutive days must be provided with a suitable lying area.' This appears to mean that it is acceptable for cows to be deprived of lying down for three days. This is inhumane and at variance with the other recommendations in the code. It should read-' Dairy cattle kept on off-pasture management systems must be provided with a suitable lying area.' . In order to ensure the best animal welfare outcomes 'Best Practise' recommendations should become the 'Minimum Standards'.	**Noted. Disagree. Takes into consideration stand-off pads to keep stock off muddy pastures.**
Off-pasture management and MS 9	**391**	Minimum standards should be met ensuring all cattle receive regular and frequent opportunities for exercise and grazing on open pasture. Although some other countries do allow the indoor captivity of livestock, these countries climates necessitate the protection of livestock from harsh environmental conditions. New Zealand has a notably mild climate for large portions of the year which does not pose long-term risk to cattle health, causing the need of temporary shelter only.	**Noted. MS 9 outdoor access.**
Off-pasture management and MS 9	**307**	**MS** We consider that, as worded, the lying requirements in the off-pasture section inadvertently capture feed pads and overnight yarding, where an animal's lying requirements are met elsewhere. We recommend wording changes to ensure the relevant MS are clearly targeted at only those off-pasture situations where providing a separate lying area is necessary; DairyNZ is concerned that the current wording could also capture the exceptional circumstance where cattle can be held in yards overnight in wet weather to protect both animals and pasture. In some cases time off pasture can be up to 18 hours. This upper limit of time off pasture would only occur in extraordinary conditions e.g. in spring wet weather, at peak lactation, with twice a day milking. It is only after animals have been in this situation for more than three days will they experience undesirable welfare outcomes because cattle will often lie in the yard. It is not practical in this case to provide a separate lying area, because, as it is weather dependant, the situation occurs only infrequently. We consider that our suggested wording changes below strike an appropriate balance and will ensure good welfare outcomes are delivered across all systems. Our proposal is consistent with the minimum lying time of eight hours because in all cases except overnight yarding, eight hours lying time on an appropriate lying surface is provided for. Overnight yarding in cases of extreme weather is an accepted practice and does not result in negative welfare outcomes if limited to three days or less. Our recommended changes are: • Combining MS9(e) and MS9(f), and rewording as follows: (e) When dairy cattle ~~kept on~~ are held off-pasture ~~management systems~~ for more than 16 hours per day and for more than three consecutive days, they must be provided with a suitable lying area. [combine with (f) below] (f) In these circumstances, and where ~~dairy cows or bulls are kept in~~ facilities ~~with~~ use concrete, ~~stones~~ or other hard materials as a base, bedding material or a soft surface must be provided for lying." • Amending the introduction to this section (fourth paragraph, second sentence) to read: "In many situations, dairy cattle are only held off-pasture overnight and for ~~only one or two~~ up to three consecutive days"	**MS 9, time restriction of more than 16 hours and more than 3 consecutive days for provision of bedding.** **Added 16 hours.**

		• Amending the introduction to this section to read (fourth paragraph, third sentence, bold text is added); "Where dairy cattle are held off-pasture for more than ~~12~~ 16 hours per day and for three consecutive days, they need to be provided with a dry comfortable surface for lying and enough room to be able to move about freely. **In exceptional circumstances, such as severe wet weather, cattle can be off pasture for up to 18 hours if held overnight in the yard and once milking time is taken into account; in this case a separate lying area does not need to be provided so long as the situation does not extend beyond three consecutive days."** Given there is insufficient evidence on the issue, we do not agree that additional bedding material is required when river stones are used as a base. We recommend removing reference to stones in the proposed MS9(f). DairyNZ requests that: • Reference to stones should be removed from MS9(f). • Should our request not be met we suggest that the MS should explicitly exclude river stones and should read as follows: "…*and where facilities use concrete, stones* ***(other than river stones)*** *or other hard materials as a base, bedding material or a soft surface must be provided for lying".* We consider that the proposed MS9(k) requiring a documented management plan is unclear, and has significant potential for duplication, overlap and confusion. We recommend refocusing it on managing fire risk and evacuation planning. DairyNZ considers that the proposed MS 9(k), a requirement for a documented management plan, is unclear and there is significant potential for duplication, overlap and confusion with other requirements elsewhere in the Code. We think that the intended outcome here may be to ensure that risks, which are specific to off-pasture systems, are well managed. In this regard, we see one gap in the current Code – providing for evacuation in the case of an event such as fire. In summary, DairyNZ recommends: • MS9(k) be moved to become a new RBP and it be worded as follows, 'appropriate fire prevention measures and an emergency evacuation plan must be in place.' • The general information section could further suggest that the emergency plan be documented and staff trained to implement it.	**Removed. RBP for calves to be reared on a soft surface.** **Contingency plan including fire and evacuation MS 9, and RBP**
Off-Pasture Management and MS 9	**307**	<u>Off-pasture management section: Introduction</u> 44. The first sentence in the introduction to the off-pasture section is incorrect. The sentence should read: "An 'off-pasture management system' is a form of housing where dairy cattle are not kept on paddocks, but are kept on a constructed surface". The reference to housing is incorrect as some off-pasture systems are not housing. <u>Off-pasture management section: Minimum standards</u> 45. The wording of MS9(a), concerning buildings and facilities, is inconsistent with text elsewhere in the current Code on hazard management such as MS7 (farm facilities). For any constructed building or facility it is impossible to remove all hazards completely in that some of the construction materials can be considered hazards in themselves (e.g. concrete). But there absolutely should be a minimum requirement to manage hazards and minimise the likelihood of injury. We recommend the following change to MS9(a) (bold text is added): '…and in such a way that there are no hazards likely to cause minimises the likelihood of distress or injury to the animals'. 46. MS9(g) on bedding materials needs to be clarified so that the focus of it is on requiring proper maintenance of the bedding materials. We suggest the following wording changes (bold text is added); 'If bedding is used, it must not be maintained so as not to	**"housing" removed and replaced with "facility".** **Re-written.**

		pose a threat to the health and welfare of the animals'. Most bedding has the potential to pose a threat to health and welfare, so the key requirement needs to be about ensuring the bedding is maintained. Off-pasture management section: Recommended best practice 47. We recommend that: RBP(a) be worded as follows (bold text shows additions), "bedding should be checked and topped up daily or replaced as required. For facilities using free-stalls bedding should be cleaned daily." For RBP(b) on familiarisation of the animal to the off-pasture system, replace the words 'confined to' with 'managed in' to be consistent with language throughout the rest of the document. For RBP(c) the language after the brackets (i.e. "…or stalls or separate pens of different sizes provided to accommodate animals of different ages, stages or with special needs") should be deleted, so that the RBP reads, "Freestalls should be adjustable or built to accommodate the largest animal (with manure management adjusted accordingly for smaller cattle)." Providing stalls or separate pens of different sizes is impractical and will not necessarily result in good welfare outcomes.	**Changed. Now incorporated in MS requiring well-drained lying area with a comfortable surface or bedding maintained to avoid manure accumulation where animals are kept in the off-paddock facility for more than 16 hours a day and more than 3 consecutive days.** **Changed.**
Off-pasture management and MS 9	**250**	Off-pasture management. Federated Farmers welcomes the addition of this new section. As stated in the introduction above, more farmers are taking dairy cattle out of the paddock and putting them on constructed surfaces. Their welfare does need to be managed here. Page 5 of 6 3.2.1. Federated Farmers submits that the first sentence of the introduction to this section be amended to reflect that an 'off-pasture' management system is not about housing animals, and suggest that the phrase 'is a form of housing' be removed from this first sentence. 3.2.2. Building and facilities (Minimum standard (a)). Federated Farmers submits that minimising the likelihood of injury is more achievable than ensuring that there are 'no hazards likely to cause injury'. We therefore submit that the latter part of the phrase be amended to '…welfare needs of dairy cattle and in such a way that minimises the likelihood of distress or injury to the animals. 3.2.3. Documented management plan (Minimum standard (k)). Federated Farmers notes that similar requirements in the rest of the Code of Welfare are contained in the Recommended Best Practice sections, and submit that requirements in (k) be shifted into the Best Practice Section in the new addition to the Code. We are unsure whether NAWAC requires extra plans to be made over and above any that are already in place in the Code and wonder whether just a plan to deal with emergency evacuations is required. 3.2.4. Bedding (Recommended Best Practice (a)). Federated Farmers submits that bedding should be maintained and topped up or replaced as required. The frequency of this will depend on the animals. We also submit that those systems using freestalls should be inspected at least once a day (preferably twice) and cleaned when soiled. 3.2.5. Freestalls (Recommended Best Practice (c)). Federated Farmers submits that this recommendation be amended by deleting the last section ('or stalls or separate pens of different sizes…….special needs') as being not necessary and not necessarily leading to better animal welfare outcomes.	**Reference to housing deleted.** **Changed.** **Consistent with other Codes for housing.** **Added free-stalls to be cleaned daily to RBP.** **Noted.**

		3.2.6. Stocking rate (Recommended Best Practice (d)). Federated Farmers disagrees with the requirement to have a stocking rate of five percent lower than the number of freestalls. 3.2.7. Federated Farmers submits that the number of freestalls provided be equal to the number of animals in the system. This is particularly so with systems using robot milkers, where there is less synchronicity of cows. Even where the herd is milked at set times, cows will not all want to lie down at the same time. This behaviour is seen in New Zealand by farmers who use this system and requiring this excess will be an unnecessary expense to them. 3.2.8. Cows close to calving (General information, last bullet point). Federated Farmers submits that the last part of the phrase be deleted because of the impractical nature of it. The complete bullet point should read: 'Cows close to calving should have room to separate themselves from the herd'. 3.2.9. Professional advice (Last section). The Federation welcomes the additional considerations noted for those who are contemplating an off-pasture management system. We would go further and recommend that guidelines and possibly a code of practice be developed for the design and construction of such systems, much like has been developed by DairyNZ in consultation with the industry, for effluent management systems. Getting it right will look after the welfare needs of the animals and will save farmers money.	
Off-pasture management and MS 9	**244**	**Quality Assurance Programme** 33. NAWAC proposes "a documented management plan, including contingency and pest and disease management plans". The term "management plan" in proposed Minimum Standard No. 9 (x) Is not defined and in the view of the SPCA it is too vague. Consideration should be given to changing this to a minimum standard that will require a quality management system. 34. The SPCA submits that the new minimum standard must be subjected to the rigors of a quality assurance system. While an ISO 9000 system would be preferable the minimum standards should provide for a robust quality assurance system as a minimum standard to ensure that standards of animal welfare and husbandry are maintained 35. The SPCA submits that the following minimum standard be included in the amendment. **Minimum Standard No.X – Quality Assurance Programme** **(a) Each off-pasture dairy system must have a fully documented and auditable quality assurance programme that ensures compliance with the minimum standards required by this Code of Welfare.** **(b) The documented programme must identify:** **(i) The positions of individual persons who are responsible for carrying out specified tasks; and** **(ii) The methods and procedures the owner or operator of the premises will implement to achieve specified tasks; and** **(iii) The system and frequency of checks on facilities and equipment; and** **(iv) The training, competence and supervision ; and**	**See RBP under Quality Management in existing Code.**

		(v) The procedure for recording numbers and circumstances for all animal deaths and injuries prior to slaughter and the corrective actions (if any) taken; and **(vi) The corrective actions that will be taken in the event of non-compliance with the requirements of the programme.** **(c) The documented programme must be independently verified using performance based audits on at least an annual basis. Corrective actions must be completed as required by the audits.**	
Off-pasture management and MS 9	**244**	22. The discussion *document* refers to "Replacement section 4". It is assumed that this should read "Replacement clauses 4.4 and 4.5." Clauses 4.1 to 4.3 of the Dairy Code of Welfare are not specifically related to off-pasture management systems. 23. The NAWAC discussion paper includes in Recommended Best Practice (c) "Dairy cattle should be given the opportunity to graze". Access to grazing is a basic behavioural need and the lack of access becomes a zero-grazing system which as argued in this submission can give rise to stress and other negative animal welfare issues. 24. This should be a minimum standard, not recommended best practice, and this clause should be moved to the minimum standard thus — **(a) Dairy cattle must be given the opportunity to graze except where access to grazing needs to be temporarily restricted for therapeutic reasons.**	**MS 9 outdoor access although not necessarily with grazing.**
Off-pasture management and MS 9	**246**	**RBP** The recommendation states Dairy cattle should be given opportunities for unrestricted exercise, where this is not already provided by the housing or management system. This means the thin concrete lane of a housing system, which may be the only form of exercise for animals kept inside all year is seen as appropriate by the codes. The Act also requires that animals be able to express normal behaviour. Roaming and grazing are basics for cattle. The Minimum standards do not require grazing and only that a cow is able to walk (a). The recommendations which have no legal effect state cows should be given the opportunity to graze, without stating frequency. Further on it undermines this by stating Dairy cattle may benefit from opportunity to graze, where this does not interfere with feeding regimes. Grazing and proper exercise are clearly not requirements in these codes and totally undermine the Act and animal welfare.	**Noted.** **MS 9 outdoor access, but not necessarily grazing.**
Off-pasture management	**284**	Add "*Intensive farming must be outlawed."* After "Close monitoring and effective preventative and remedial action is particularly important for hygiene and disease management." Dairy cattle are likely to suffer significant discomfort if surfaces and stocking density are not appropriate, showing problems like reduced lying, underfeeding and increased mastitis and lameness. *Therefore long-term off-pasture housing should not be allowed. It is a step backward.*	**MS 9 requiring Outdoor access.**

		MS (c): (c) Dairy cattle must be provided with natural or artificial light of appropriate intensity for a minimum of nine continuous hours each day. *Natural light only, not artificial!* (j) Dairy cattle must be inspected at least once a day and timely preventative or remedial action taken to address identified problems. *Free access to grazing required.* Recommended Best Practice should be minimum standards! – and use for cows' choice of shelter only, not as long-term intensive farming. General Information - This shows it is really intensive farming and therefore should not be allowed at all. Look at what has happened to our poor chickens and pigs.	**Disagree.** **Noted.**
Stockmanship – suggested addition	**244**	**Stockmanship to MS 9** 25. A closely managed system such as off-pasture rearing of dairy cows is dependent on how competent and dependable the stockmen are who are expected to apply the standards of animal welfare. 26. In the 2008 Annual *Report* of NAWAC Dr Peter O'Hara wrote about stockmanship. Despite this the proposed minimum standards make no specific reference to stockmanship. Some of Dr O'Hara's comments are stated here: A standard section in all codes deals with stockmanship and includes a minimum standard that says something like: *"[Animals] must be cared for by a sufficient number of personnel who, collectively, possess the ability, knowledge and competence necessary to maintain the health and welfare of the [animals] in accordance with this code."* … The critical importance of stockmanship in the welfare of farm animals is widely acknowledged in the scientific literature and in welfare policy in many countries. The UK Farm Animal Welfare Council (FAWC) defines it as "the single most important influence on the welfare of farm animals". …NAWAC will continue to emphasise the importance of stockmanship in codes by putting the onus on farm owners and managers to ensure they and their staff are up to managing this critically important role. We cannot write rules about how to be a good stockman other than to promote the need for training and experience opportunities. We must rely on the farming sector to provide the formal and informal training, experience and mentoring which enable stockmen to acquire and hone the needed skills. 27. While there is full discussion of stockmanship in the Dairy Code of Welfare in section 1, the SPCA cannot emphasis *enough* the importance of good stockmanship and *submits* that this aspect should be restated in Minimum Standard No. 9. This requires more than general knowledge of dairy farming, it requires training and experience in off-pasture care. Minimum Standard No. 9 should have inserted as minimum standard 9(a):	**Stockmanship already in MS of Code and relates to all cattle covered by the Code, including those in off-paddock management facilities.**

		(a) Dairy cattle being kept to an off-pasture management programme must be cared for by a sufficient number of stockmen, who collectively, possess the ability, knowledge and competence necessary to maintain the health and welfare of the animals in accordance with this minimum standard.	
Tie stalls - suggested addition	**244**	28 A minority report of the EFSA dairy report recommended that tie-stalls, in which cows are tethered for part of the day, should not be used routinely. [8] *28.* Cows in tie-stalls are tied up on a tether for much of the day except for milking and, sometimes, for a period of exercise. Tie stalls generally enable cows to avoid aggression and to rest, but they prevent a range of natural behaviours. Cows are not provided with enough space. The risk of lameness is higher. According to the scoring system used in this analysis, the most important hazard in relation to the housing was the lack of space in tie-stalls. Larger space allowance, in the walking area as well as the lying area, is beneficial for the welfare of cows with respect to decreased aggression, injuries, and occurrence of lameness. Tied cattle have more lameness than those free to move with good flooring and resting facilities. 30. For these reasons the SPCA believes that tie-stalls should not be routinely used and an additional minimum standard should be added thus: **(x) Tie-stalls, in which cows are tethered for part of the day, must not be used routinely.**	**MS 9 does require that dairy cattle are not tethered within off-paddock facilities.**
Section 3.4	**244**	The SPCA supports the deletion of clause 3.4.for the reason that NAWAC considers it to be out of date.	**Noted.**
EI's	**307**	We consider the use of the term 'indicators' in both of the general information sections is confusing and inconsistent with NAWAC's description of their proposals. We recommend replacing 'indicators' with 'factors'. DairyNZ requests that the first sentence in each of the general information sections be changed to read, "indicators factors that could demonstrate that this minimum standard has been complied with include:"	**Disagree. Consistency with other codes.**
MS 9	**443**	At present the Code contains Minimum Standard 9, relating to "Housing Cows and Calves". It imposes few requirements. It merely states that: (a) Dairy cattle must be able to lie down and rest comfortably for sufficient periods each day to meet their behavioural needs. Significantly, Minimum Standard 9 imposes no restriction on the period of time during which animals may be confined indoors, and there is nothing to preclude the confinement of cows in small individual stalls or pens, or overcrowded conditions, as long as they have just enough room to lie down and rest. Thus, there is nothing currently to stop the factory farming of dairy cattle. Even Minimum Standard No 8, relating to "stand-off areas and feed pads", contains no restriction limiting the use of those facilities to temporary confinement during wet weather conditions. Minimum standards are defined in the Code itself as "the details of the specific actions people need to take to meet the obligations of the Act". These current minimum standards do not give effect to the obligations ofthe Act. In particular:	**MS 6 has been modified to include normal foraging and social behaviour.** **Limit of 150 days set.** **While no stocking density restrictions in MS 9 (apart from one stall per cow in a free-stall), MS 6 requires animals to be able to walk,**

[8] EFSA dairy report, p 10

		SAFE considers that cattle should have access to a lying down area whenever they wish. (iii) Proposed new Minimum Standard 9, relating to off-pasture management, also suffers from a number of shortcomings: • There is nothing to prevent the confinement of cows in individual small pens or stalls (other than by tethering, which is prohibited), where their ability to move is limited; • Where cattle are 'loose housed', the Minimum Standard does not prevent high stocking densities and overcrowding, also restricting movement; • Light may be "natural or artificial". Cattle may be kept in a dark shed with entirely artificial light. The recommended level of light need only be 50 lux, a dim "living room" level of light. The light need only be provided for nine continuous hours. That leaves the possibility of introducing systems with 15 continuous hours of darkness. • Paragraph (e) provides that dairy cattle need only be provided with a suitable lying area if they are kept off-pasture for more than three days. As this reads, if cattle are confined for three days or less they do not need to be provided with a lying area. How does that protect the animals' welfare? SAFE also queries how even these inadequate requirements for light, ventilation, lying time and so on will be enforced, given the minimal resources allocated to the monitoring and enforcement of animal welfare. As stated above, NAWAC has, in New Minimum Standard x(a), adopted a very narrow, and seemingly self-serving, definition of the 'behavioural needs" of dairy cattle. The meaning of "normal patterns of behavior" in section 4(c) of the Act cannot arbitrarily be limited by NAWAC in the purported exercise of its power to recommend minimum standards. Minimum standards are a form of delegated legislation, and cannot limit the statutory definition. Ultimately it is for the Court to determine what constitutes "normal patterns of behaviour" for dairy cattle. SAFE submits that there is indisputable evidence that grazing is a normal behaviour, as is reasonable exercise, and the opportunity to express social behaviours. The proposed new definition of "behavioural needs" is, in our submission, inadequate and unlawful. In addition, the proposed minimum standards, particularly the failure to prohibit permanent and long-term indoor confinement, reflect considerations that NAWAC is not authorized to take into account, namely the interests of producers, and NAWAC's own view of what constitutes the long-term interests of New Zealand, rather than the welfare purposes of the Act. In short, the proposed standards do not reflect a proper exercise by NAWAC of its statutory powers. The fundamental purpose of Part 1 of the Act, is to "ensure that owners of animals and persons in charge of animals attend properly to the welfare of those animals". Section 73(1) requires NAWAC to be "satisfied" that the proposed new minimum standards are the "minimum necessary" to ensure that that purpose is met. There is no reasonable basis upon which NAWAC could be so satisfied. Minimum standards that fail to meet the welfare purposes and obligations of the Act may in "exceptional circumstances" be permitted under the 'exemption' in section 73(3), having regard to the limited criteria set out in section 73(4). NAWAC is not, however, seeking to invoke the exemption. And nor could it lawfully do so. There are no special circumstances here that could justify the facilitation of the introduction of new intensive dairy farming practices that breach the Act. Section 73(3) is generally invoked to phase out, not phase in, noncomplying practices. In order to justify the transition from a relatively natural state (the pasture) to a thoroughly unnatural one (an indoor system), there must be considerable evidence that other areas of welfare can be advanced by making the transition, or that natural behaviours will not be inhibited to the detriment of the animal. Absence of evidence is not evidence of absence; when scientific knowledge of the	**turn around, sit, lie down and rise freely and to express normal foraging behaviour and appropriate social interactions.** **MS 9 now requiring outdoor access.** **Changed MS 6 to include foraging and social interactions.**

		consequences of denying those natural behaviours is scarce, it is especially important to only deny those behaviours for a very compelling reason (for instance, to advance welfare in another area). Indoor systems by their nature tend to be more crowded, which affects the expression of some behaviours and there is evidence of greater levels of social tension and aggression in larger groups. Gross agonistic behaviours generally occur more frequently in confinement systems than at pasture, and the more submissive cows show a high level of avoidance of dominant cows which impedes their ability to move around between feed, water and lying surfaces. Heifers may have more lameness in competitive environments that discourage lying, but the interactions between social rank, stocking rate and lying times are not well understood (Cook and Nordlund, 2009a). Miller and Wood-Gush (1991) observed that there was less behavioural synchrony when cows were housed than when they were at pasture. Cows spent between 34% and 56% of their time watching each other while indoors, suggesting that they were in a state of "social tension". Aggressive interactions and risk of injuries were negatively associated with space allowance (Menke et al., 1999). Behavioural needs (Walking, exercise, play and explorative behaviour) Walking is an important natural behaviour for cows, but the degree to which confinement systems produce frustration as a result of this is uncertain. Once again, in the absence of scientific evidence to demonstrate that there is no harm to the cow, it must be assumed that denying a basic behaviour is harmful. And of course, what little evidence does exist supports this view- the behaviour of cows upon release from confinement "is evidence that confined cows experience behavioural frustration associated with lack of exercise." In addition to being an important natural behaviour, being denied adequate walking and exercise conditions impacts on physical health: "walking and exercise on soft surfaces such as pasture are considered beneficial for claw health … When cows on pasture were compared with those housed in free-stall barns, there was a lower incidence of clinical lameness and severe hoof disorders, cows were more mobile and lying times were longer and less disrupted." Behavioural needs (Grazing) The proposed changes to this Code will facilitate year round indoor confinement of dairy cattle. Such confinement will make it impossible for the animals to graze. SAFE considers that grazing is one of the most important normal behaviours of a dairy cow. Grazing occupies much of a cow's time. Research shows that cows graze between five and ten hours each day.7 NAWAC also appears to accept that grazing is a normal behaviour. The Chairman of NAWAC, Dr J Hellstrom, states that "grazing is clearly a normal behaviour of dairy cows." Grazing is a unique case for the behavioural needs of cows. It appears to be a key natural behaviour – a significant proportion of a cow's time budget is allocated to grazing, even if given the option to be indoors. This holds true in all but the coldest weather. Yet there is virtually no research on the importance of this behaviour. SAFE submits that NAWAC should include in the proposed new minimum standards appropriate restrictions to ensure that dairy cattle cannot be confined indoors on a permanent or long-term basis. One important means of achieving this would be to incorporate into the Minimum Standards a requirement that all dairy cattle must be given the opportunity to graze on pasture on a daily basis if they so choose.	

Questions	
Do you consider that the proposed minimum standards are sufficient for managing animal welfare in dairy cattle kept in off-pasture management systems?	**250:** Yes, we do. The Federation appreciates that the majority of the standards are outcome focussed, allowing farmers to find their own solutions. This will mean that the welfare of their beef cattle is at the forefront of their decisions. **284:** No. **307:** Subject to our earlier comments and in addition to DairyNZ's recommended changes to improve the technical feasibility and practicality of the overall package of MS, RBPs and supporting information, we consider that the proposed MS provide good, outcome-focussed bottom lines that are sufficient for ensuring good welfare outcomes for dairy cattle in off-pasture management systems. The MS do not exist in isolation; however, and we consider the overall package, with changes, will be further supported by industry guidance (under development), and building standards under the Building Act.
Do you have any evidence to support your view?	**250:** Federated Farmers has consulted with farmers who use herd homes. Many New Zealand farmers have been using feed pads, calf sheds, standing stock in yards awaiting transport for many years and their experience has informed our submission. **284**: Yes, please read my submissions above, notes on the code itself and references below. **307:** Our comments have been drawn together from a range of experts within DairyNZ who draw on a wide body of research, experience and evidence, both domestically and internationally. It is good to see that, for the most part, accepted knowledge on off-pasture systems has been reflected in the proposals; such as lying times and signs of lying deprivation, light and gas levels, and other necessary management factors that are important in off-pasture systems. Where available, and particularly on 'the opportunity to graze' issue, we have cited key pieces of relevant international literature.
Do you consider that the code needs amending elsewhere to address the needs of dairy cattle kept in off-pasture management systems?	**250:** No. **284:** I do not have time at the moment but can go through this also if you request me to. However, I believe my submissions clarify that off-pasture is not acceptable farming, and

	should only be “cow’s-choice-of-shelter” as clearly shown by what has happened to, for example, pigs and chickens. **307:** As noted above in our general comments, we support the outcome of the NAWAC review which found that no further changes to the Code are necessary beyond those recommended here.

Optional to consider - submissions from overseas

6x identical emails with more than one signatory on each (from Belgium, Austria, Germany, France etc…):

Dear Madam, dear Sir,

The National Animal Welfare Advisory Committee (NAWAC) released its recommendations about the welfare and housing of dairy cows.

The draft code allows for the year round indoor confinement of dairy cows.

"NAWAC's recommendations will condemn thousands of dairy cows to a life in crowded sheds on concrete floors.

The animals will never walk on grass or experience life outdoors," says SAFE Executive Director Hans Kriek.

"NAWAC once again fails to uphold the principles of New Zealand's animal welfare legislation and is legalising this country's newest form of factory farming."

"The Animal Welfare Act requires that animals be able to display their normal behaviour.

Research shows that dairy cows graze between five and ten hours per day yet bizarrely NAWAC appears not to recognize grazing as an essential behavioural need.

This is utterly ridiculous and brings into question the competence of this committee."

I'm concerned that the proposed changes to the code of welfare for dairy cows will lead to a rapid intensification of the dairy industry and will result in increased suffering for the cows.

In general, cows farmed indoors suffer from higher levels of mastitis and lameness than cows that have access to pasture.

I'm against the indoor housing of dairy cows !

- Grazing in a paddock is normal behaviour, and cows should be allowed to do it.
- Cows should not be confined for extended periods of time.
- Cows should be given shelter, as long as they are allowed to leave.

Sincerely,