

28 January 2022

Mr Andrew Metcalfe AO Secretary Department of Agriculture, Water and the Environment GPO Box 858 Canberra ACT 2601

Via: <u>Have Your Say website</u>

Dear Mr Metcalfe

Submission regarding the review of live sheep exports by sea to, or through, the Middle East during the Northern Hemisphere summer

Thank you for the opportunity to provide a submission in response to the Draft Report of the review of live sheep exports by sea to, or through, the Middle East during the Northern Hemisphere summer.

The RSPCA is pleased to see that the Department of Agriculture, Water and the Environment (the Department) supports a prohibition on the export of sheep to the Middle East during some of the hottest parts of the Northern Hemisphere summer. However, we are *very* concerned that the overall proposed reductions in current prohibition dates coupled with the proposed additional prohibition periods strongly favour industry over animal welfare.

We caution that implementation of the proposed regulations in the Draft Report will most certainly expose the majority of Australian sheep live exported to and through the Middle East to conditions that exceed known heat stress tolerance levels and will result in extremely poor animal welfare.

The Draft Report notes that the key issues considered in the review include whether regulatory settings are maintaining acceptable animal welfare outcomes and supporting industry sustainability, yet its recommendations will achieve neither. While it is the RSPCA's long-held view that these objectives are fundamentally incompatible, we will always take the opportunity to assist Government in ensuring the highest standards of animal welfare while the trade continues. Therefore, it is fundamentally important for the Australian Government to adopt and apply a robust and scientifically valid approach of animal welfare in its policy and operations.

Animal welfare should not be reduced to the basic biological functioning of the animal as implicit in the Draft Report. A regulatory approach that adopts such a narrow and blunt understanding of animal welfare will repeat the same regulatory failures of the past. To properly assess animal welfare requires a systematic, structured, comprehensive and coherent approach that considers the overall affective experience of the animal. As you would know, the contemporary benchmark of good animal welfare is based on the Five Domains (Mellor, 2018; Ledger and Mellor, 2018) - nutrition, environment, health, behaviour, and mental state. Over Australia's long history of live export, it has been evidenced that live export does not measure well against any of these Domains and cannot do so and remain profitable.

RSPCA Australia Inc.

ABN 99 668 654 249

P 02 6282 8300 F 02 6282 8311 E rspca@rspca.org.au W rspca.org.au

PO Box 265 Deakin West ACT 2600





A more risk averse, precautionary approach to regulating the trade is needed. The RSPCA provides the following recommendations in response to the Draft Report in the submission that follows:

A: The prohibition of sheep to, or through, the Middle East by sea needs to be expanded to include 01 May - 31 October, to safeguard animal welfare throughout the Northern Hemisphere summer.

B: The government needs to co-design an industry exit plan to facilitate a five-year phase out of live sheep export within that time.

C: The Department must re-deploy competent, unbiased Independent Observers (IOs) on all live export voyages immediately to enable transparency and provide independent reports on animal welfare.

D: Sheep should not be exported to Oman between 01 May - 31 October inclusive, to reduce the known and increasing risk to sheep welfare.

E: Sheep should not be exported to Persian Gulf countries, including Kuwait, between 01 May - 31 October inclusive to reduce the known and increasing risk to sheep welfare.

F: Sheep should not be exported to Kuwait between 01 May - 31 October inclusive, to reduce the known and increasing risk to sheep welfare.

G: Sheep should not be exported to, or through, the Red Sea between 01 May - 31 October inclusive, to reduce the known and increasing risk to sheep welfare.

H: The required maximum wet bulb temperature (WBT) threshold measurement from the bridge should be 26°C (not 29°C) to safeguard the welfare of sheep on board the deck and better reflect animal welfare science.

I: Conditions associated with prohibition dates must prevent heat stress when ambient temperatures exceed the known heat stress threshold for sheep, which occurs to and through the Middle East between 01 May to 31 October inclusive.

J: Conditional prohibition dates should not be implemented as they will become the default periods for live exporters and ensure more sheep will suffer.

K: The proposed additional conditions should be the rule (not be the exception) for any shipment of sheep live exported to the Middle East.

L: The Export Control (Animals) Rules 2020 need to be fortified with a revised enforcement policy.

M: The Department's inspection regime needs to be updated to include mandatory independent third-party full inspection arrangements for live export shipments to monitor any such conditions.

N: A minimum k-value of 0.047 for all animals onboard vessels and housed in registered premises is required.

We remain committed to working constructively and collaboratively with the Department and the live export industry on reforms that adopt best practice and contemporary animal welfare science.

Yours sincerely

Richard Mussell Chief Executive Officer RSPCA Australia



Submission on the review of live sheep exports by sea to, or through, the Middle East during the Northern Hemisphere summer

This submission contributes to the Federal Government's regulatory review of live sheep exports and specifically responds to the Draft Report that was published by the Department on 17 December 2021. It is structured in two parts. Part one provides comment on the evaluative methodologies and evidence outlined in the Draft Report prepared by the Department of Agriculture, Water and the Environment (the Department), and the RSPCA's key concerns. Part two provides our specific responses to the eight recommendations proposed in the Draft Report.

The RSPCA is very concerned that the recommendations proposed within the Draft Report will expose more Australian sheep to conditions that exceed known heat stress thresholds and will most certainly result in unacceptable suffering, if implemented. We strongly urge the Department to expand the prohibition dates and set its heat stress risk threshold for sheep to what has been scientifically demonstrated as acceptable for this species.

1. Key concerns with the Draft Report

1.1. Inappropriate risk assessment parameters

The RSPCA is concerned that the risk assessment parameters, both proposed and used to evaluate current regulations within the Draft Report, are flawed because they are set *above* the known heat stress tolerance of sheep. Specifically, the threshold set by the Department in the Draft Report is the 95th percentile maximum wet bulb temperature (WBT) of 29°C ambient WBT. It also proposes a lower risk setting, to a 95% probability. However, the Heat Stress Risk Assessment Review Report (HSRA Review) recommends that the threshold in Australia's heat stress risk assessment model should be applied in conjunction with 98% point on the distribution of deck WBT probabilities throughout the voyage (Barnes et al, 2019).

Therefore, the Draft Report deviates from existing animal welfare science and the Technical Panel's past advice without any reasoning and at great risk to animal welfare. The risk assessment parameters set in the Draft Report, at 29°C ambient WBT results in deck WBTs of between 30°C - 32.5°C which is evidenced by the Australian Veterinary Association (AVA) and the HSRA Technical Review Panel to exceed most classes of exported sheep (AVA, 2019; Barnes et al, 2019; Stacey, 2017). Measuring the WBT from the deck, where the animals are located, is recommended because it is a more accurate animal welfare measure.

The fact that the evaluation of the current regulatory settings was based on the incorrect risk threshold deems the findings and subsequent recommendations in the Draft Report as extremely tenuous and would place Australian sheep at high risk. Implementing the recommendations based on the incorrect heat stress risk threshold will most certainly expose sheep to unacceptable welfare outcomes including open mouth panting, extreme heat stress and higher mortality. Previous reports (Stacey, 2017; McCarthy, 2018; Barnes et al, 2019; Carnovale and Phillips, 2020) concluded that open mouth panting in sheep is an unacceptable animal welfare indicator. However, the ambient WBT thresholds outlined in the Draft Report will cause sheep to routinely experience this known unacceptable welfare state.

Allowing sheep to be exposed to these conditions under the proposed recommendations in the Draft Report would be reckless and is not supported by RSPCA Australia.



1.2. Unfounded proposed reductions in prohibited export periods

Existing evidence substantiates the need to implement an increase in the prohibited dates for exporting sheep to, and through the Middle East.

While the Draft Report supports a prohibition, it proposes an overall reduction in the current prohibited dates which ignores existing scientific evidence and deviates from the expert advice and previous recommendations made in the Moss (2018), McCarthy (2018), and HSRA Reviews (Barnes et al, 2019). The RSPCA reiterates the AVA's expert advice (2018) that:

... "voyages carrying live sheep to the Middle East during May to October cannot be recommended..."

based on poor and unacceptable animal welfare outcomes. Yet the Draft Report proposes shortening the prohibited periods based on the outer shoulder period for some routes presenting a "similar" risk profile to the immediate period preceding the commencement of the prohibited period (as per reasoning for Kuwait, other Persian Gulf destinations, and the Red Sea conditional prohibited periods). The RSPCA notes that a *similar* risk profile is not the *same* risk profile or a lower risk profile - it is an added degree of risk. Precision is required to safeguard animal welfare given WBT changes of as little as 1°C can have significant consequences for health and welfare of sheep on live export vessels.

Ideally, regulatory settings should address the basic animal welfare principles and fundamental risk mitigation measures as substantiated by animal welfare science. However, the proposed overall decrease in the prohibition period will significantly increase the risk to animal welfare. It would also erroneously position the inherent risks to sheep as acceptable outcomes of live export during the Northern Hemisphere summer. Furthermore, the proposal to introduce conditional prohibition dates to Middle East destinations are based on self-regulated risk mitigation measures that already exist within the current regulations. Yet, these have proven to be ineffective due to the inadequacy of current compliance and enforcement regulations. Therefore, eroding prohibition dates with existing poorly monitored and enforced conditions will not safeguard animal welfare.

If implemented, the Draft Report's recommendations will significantly increase the risk of heat stress, heat associated conditions and mortality in more Australian sheep each year, than the current regulatory settings. The proposed reduction represents more than three weeks from the current 14-week prohibition period during the hottest times of the year. Specifically, with Kuwait, Qatar and Red Sea destinations representing 85% of Australia's export markets in the Middle East, the proposed reduction in prohibition dates will impact a significant number of sheep exported from Australia. Meaning that *more* sheep will be exposed to unacceptably dangerous risks during voyages and whilst being held in feedlots at their destination which may extend for up to six weeks. For these reasons, the RSPCA is concerned that this review disregards existing evidence and fails to generate genuine policy change to improve animal welfare outcomes.



1.3. Insufficient evidence

There is insufficient evidence to enable adequate evaluation of the current regulatory settings and, whether the current regulatory settings have improved animal welfare outcomes.

1.3.1. <u>Insufficient data and lack of quality evidence</u>

The Draft Report lacks robust data and relies on limited meteorological data yet proposes modifications to prohibition dates. The RSPCA argues that the Department has been unable to provide the scientific rigour required to adequately determine whether the current regulatory settings have been effective in improving the welfare of sheep live exported to the Middle East and is unable to ensure that any reduction in the export prohibition period will protect animal welfare in the trade.

The Draft Report acknowledges multiple caveats in the evaluation process. These include data limitations related to short evaluation period, low number of voyages, as well as incomplete, inconsistent, and subjective reports from the live export voyages that occurred between 2019-2021 period. Importantly, deficiencies exist in the daily and end of voyage reporting, particularly on heat stress indicators, and the issue of "observer bias" from Australian Accredited Veterinarians (AAVs) is noted. Furthermore, only six of the 15 voyages included independent observers (IOs) - five in 2019, one in 2020 and zero in 2021 due to COVID-19 travel restrictions. The RSPCA notes that 100% of the voyages accompanied by IOs reported heat stress, while only 60% of those without IOs noted heat stress observations. Another deficiency, not recognised in the Draft Report, is the lack of acknowledgement and analysis of the numerous voyages in the 2019-2021 period that represented significant animal welfare failures (e.g., Maysora in October 2019 and Al Kuwait in June 2020). The Draft Report's exclusion of such data appears to be positively weighted towards the improvements that the regulatory settings have enabled as opposed to providing a balanced view of the improvements and the failures.

1.3.2. Insufficient evidence on animal welfare indicators

The Draft Report indicates that sheep mortality rates have declined significantly because of the current regulatory settings and acknowledges that sheep mortality rates alone are insufficient indicators of animal welfare. However, the Draft Report sets a dangerous heat stress threshold benchmark in its evaluative data analysis and proposed recommendations, which indicates a significant lack of understanding (or consideration) of animal welfare indicators. Both the McCarthy (2018) and HSRA Reviews (Barnes et al, 2019) concluded that open mouth panting in sheep is an unacceptable animal welfare outcome. Yet the ambient WBT thresholds outlined in the Draft Report would cause sheep to be routinely subjected to that known unacceptable outcome.

The recommendations to increase allowed export dates during the Northern Hemisphere summer implicitly accept that subjecting sheep to prolonged heat stress is an acceptable outcome for the trade. Despite existing evidence that sheep suffer heat stress during these months, the Draft Report indicates that heat associated behaviours were reported in approximately 60% of voyages and implicitly indicates that this is acceptable. The RSPCA notes that the lack of quality data from all 15 voyages would result in a higher number of animals being exposed to heat stress than what has been reported in the 2019-2021 period. Moreover, it is apparent that even on low mortality shipments, such as that on the Al Kuwait in June 2020, there can be extended periods where sheep accumulate heat load over many days and suffer significant and prolonged heat stress, which is not considered as acceptable animal welfare. This highlights that the majority of sheep exported during these times are exposed to unacceptable climatic conditions. Allowing more voyages during this time will result in more suffering.



Therefore, the RSPCA is concerned that neither the heat stress risk, heat load accumulation nor other animal welfare indicators have been properly considered in the Draft Report or its recommendations. The HSRA Technical Reference Panel (Barnes et al, 2019) highlighted that animals:

"...may suffer and have reduced welfare without actually dying, and that mortality levels may represent the 'tip of the iceberg' in terms of impact of animal welfare."

As such, there are multiple animal welfare indicators in addition to heat stress that regulatory settings should consider yet have been overlooked by the Draft Report. As mortality and heat stress are not the only issues that impact animal welfare under continued exposure to extreme heat, those measures alone are insufficient markers of animal welfare. Other important animal welfare indicators that should be considered and therefore measured include feed and water intake, air quality and faecal pad condition (Willis, 2021). For example, a known ramification of exporting sheep over long distances in extreme heat will result in increased water consumption which results in wet bedding (reduced hygiene and reduced resting time) and higher ammonia concentrations which cause respiratory irritation and nasal discharge (Pines et al, 2011). Additionally, these co-morbidities will reduce the capacity of sheep to cope with their environment (AVA, 2019).

The RSPCA advises that a broader suite of measures is needed to properly evaluate animal welfare outcomes. We are concerned that those currently measured and unmeasured are considered acceptable by government and industry. However, approving the recommendations within the Draft Report would be inconsistent with past reviews, expert advice, community sentiment and the Department's own regulatory responsibilities for ensuring that travel conditions are appropriate for the animals' health and welfare.

1.3.3. <u>Insufficient meteorological data</u>

We note that the Department sought climatic data from the Bureau of Meteorology (BOM) to counter the limitations of its own evaluative data. Specifically, it introduced BOM data from 2021 and rainbow graphs from the past forty years to justify modifications to prohibition dates. The RSPCA questions the relevance and validity of the meteorological data presented in the Draft Report and reiterates AVA's (2018) expert advice that:

"Where there is insufficient or inconclusive meteorological data, the precautionary principle should always be employed to ensure the welfare of the animals is prioritised. Certain times of the year are a known risk (May to October). Further, this heat stress can occur at any time of the year when shipments cross the equator... in all months of the year. This will be even more important into the future, given that climate change is expected to result in an increased frequency of extreme heat events."

The Draft Report referenced evidence on the climate's increasing temperatures in the Literature Review yet failed to consider this evidence in the overall recommendations. Specifically, the Literature Review identified that greater frequencies and intensities of very hot periods are expected in future (Tradesse, 2019) and that the number of days per year of extreme heat and risk of extreme heat stress for ruminants is predicted to double (Thornton, 2021). However, the Draft Report did not consider this evidence or provide predictive climate data as part of the evaluation methodology. Rather the Draft Report provides decades of historical data in the form of rainbow graphs and one year of BOM analysis for 2021 to base the recommendations on. The RSPCA is concerned that no consideration has been given to the evidence indicating increasing frequency and intensity of climatic temperatures, nor has any predictive analysis been provided to forecast the temperatures that animals would be shipped in under the proposed regulatory settings.



Therefore, the government's acceptance of any proposal to increase live export dates throughout the northern summer would ignore the evidence and impact of increasing climatic changes, overlook future climate predictions and lack scientific rigour and logic required for regulatory change. The RSPCA cautions that implementing the proposed recommendations will further limit the buffer between heat stress and mortality thresholds for sheep being shipped to the Middle East despite evidence substantiating increases in the frequency and intensity of very hot periods.

1.4. Ignores community expectations for higher animal welfare

The majority of Australians want an end to live animal export. An independent poll commissioned by RSPCA Australia (Digital Edge independent poll, 2018) highlighted that approximately three in four Australians support the end of live export, and more than nine in 10 want to see long-haul live export standards improved so animals can lie down and freely access food and water. While the Draft Report acknowledges that the live export industry's social license is tenuous and that community expectations demand higher animal welfare, none of the proposed recommendations in the Draft Report provide solutions to achieve either of these objectives. RSPCA supporters oppose live export because of the inherent cruelty of the trade, and we are disappointed that the proposed regulatory settings in the Draft Report reflect both the industry and the government backing away from prior commitments to improve animal welfare.

Furthermore, other countries around the world are responding to their respective national communities by prohibiting the live export of animals for slaughter (for example, New Zealand and the United Kingdom).

The risks of inadequate revisions to the current regulatory settings, as currently proposed, include:

- unacceptable animal welfare outcomes on voyages to, or through, the Middle East
- further reputational damage to Australia with regard to animal welfare
- risk Australia's reputation as a producer of high-quality livestock
- loss of trust in government regulation
- further erosion of the live export industry's social licence to operate
- decline in consumer trust for livestock production systems in general.

The RSPCA cautions the government that a more risk averse, precautionary approach to regulating the trade is needed to avoid these risks becoming more pronounced in the near future.



2. RSPCA responses to the Draft Report recommendations

This section of this submission provides the RSPCA's considered responses to the eight recommendations that have been proposed by the Department in the <u>Draft Report</u> published on 17 December 2021. The issues outlined in the prior section of the submission underpin the following responses.

2.1.

Draft Report Recommendation 1	RSPCA's recommendations in response
There should continue to be a prohibition in place to reduce the risk of heat stress and heat related mortalities during export of sheep to, or through, the Middle East during the hottest, most humid part of the Northern Hemisphere summer.	Recommendation A: The prohibition of sheep to, or through, the Middle East by sea needs to be expanded to include 01 May - 31 October, to safeguard animal welfare throughout the Northern Hemisphere summer. Recommendation B: The government needs to co-design an industry exit plan to facilitate a five-year phase out of live sheep export within that time. Recommendation C: The Department must re-deploy competent, unbiased Independent Observers (IOs) on all live export voyages immediately to enable transparency and provide independent reports on animal welfare.

Extend the prohibition period

RSPCA Australia agrees that a prohibition should be in place to reduce the risk of heat stress and heat related mortalities in sheep exported to, or through, the Middle East. Moreover, we recommend the prohibition should cover the entire Northern Hemisphere summer, from 01 May through to 31 October, commencing now and extending to a five-year phase-out of Australian live sheep export. This is based on animal welfare science that has previously evidenced the inherent risks and inevitable suffering of sheep during voyages to, and through, the Middle East and on arrival during these times. It is also supported by past and existing expert advice, independent reviews and comments made by independent observers on voyages carrying sheep to and through the Middle East.

Further justification for an expanded prohibition of live sheep export is provided by climatic predictions of increasing temperatures. Sending more sheep to the Middle East in increasing temperatures will result in extremely poor animal welfare and does not support the objective of stated regulatory settings to reduce the occurrence of heat stress and heat-related mortalities. Regulatory settings must address the basic animal welfare principles and fundamental risk mitigation measures to be effective. Therefore, the RSPCA does not consider the current regulatory settings effective in adequately protecting animal welfare. The substantive body of animal welfare science coupled with climatic predictions overwhelmingly supports that exporting sheep from 01 May to 31 October exposes animals to an unacceptable level of risk.

RSPCA Recommendation A:

The prohibition of sheep to, or through, the Middle East by sea needs to be expanded to include 01 May - 31 October, to better safeguard animal welfare.



Phase out of live sheep export

The RSPCA is concerned that this review has been used as an opportunity to wind-back the government's prior commitment to improve animal welfare despite animal welfare science, climatic evidence of increasing temperatures, and continued public support to end live export. The recommended risk setting thresholds from the Moss (2018), McCarthy (2018) and HSRA Review (Barnes et al, 2019) pose major challenges to the ongoing viability of sheep exports to the Middle East during the period of May to October as the temperatures exceed the heat stress threshold (HST) of sheep causing prolonged heat stress during this period. However, the solution to this policy problem is not to increase the risk thresholds for animal welfare. Rather, the solution is for government to support the transition of the few remaining live sheep exporters to wind-down and adapt.

A planned and supported phase-out of live exports would also better reflect what most Australians want, contrary to the <u>Statement of Reasons</u> that allowed the Al Kuwait to sail in June 2020. Three out of four Australians want an end to live export and RSPCA supporter sentiment to end the trade remains strong. The public release of the undisclosed CCTV footage of sheep behaviour (i.e., 5,000 sheep open mouth panting during transit of the Strait of Hormuz) on the Al Kuwait in June 2020 supports this poll). This provides further evidence of the diminishing sustainability of the industry and the need for alternative action. Therefore, the RSPCA calls on the government to provide leadership by better protecting animal welfare, responding to public sentiment and proactively planning to phase out the live export of sheep. It is time to address the lack of sustainability by working with the industry and animal welfare organisations to co-design a national five-year exit plan for live sheep exports. In the meantime, it is imperative that prohibition dates are expanded to protect the welfare of Australian sheep.

RSPCA Recommendation B:

The government needs to co-design an industry exit plan to facilitate a five-year phase out of live sheep export, and support exporters to adapt resources and operations within that time.

Re-deploy independent observers

The Draft Report demonstrates that live sheep exports during the northern summer period routinely result in poor welfare outcomes. It also acknowledged deficiencies in the daily and end of voyage reporting, particularly on heat stress indicators, and recognised the issue of "observer bias" from Australian Accredited Veterinarians (AAVs). The RSPCA notes that every voyage that included an independent observer (IO) recorded heat stress. With only six of the 15 voyages including IOs, it is highly probable that more animals on more of the voyages suffered from heat stress yet were not recorded. Therefore, it is vital that IOs be redeployed immediately and in-between any regulatory amendments.

RSPCA Recommendation C:

The Department must re-deploy competent, unbiased IOs on all live export voyages immediately to enable transparency and provide independent reports on animal welfare.



2.2

Draft Report Recommendation 2	RSPCA's recommendations in response
Sheep should not be exported to Oman via the Persian Gulf between 8 May and 21 September (instead of 8 May to 14 September under section 6- 12 of the Animals Rules as currently in force). However, for single port of discharge voyages sailing directly to Oman (i.e., not via the Persian Gulf), the prohibition should apply from 8 May to 14 August (instead of 8 May to 14 September under section 6-12 of the Animals Rules as currently in force).	Recommendation D: Sheep should not be exported to Oman between 01 May - 31 October inclusive, to reduce the known and increasing risk to sheep welfare.

Extend the prohibition period

The RSPCA would support an increase in prohibition dates to the Middle East as a positive incremental change, though highlights that this recommendation is insufficient in adequately reducing the current and future risks to animal welfare. We note that the net effect of this recommendation would be an overall reduction of three weeks on the current prohibition to Oman and would impact 0.9 per cent of Australian sheep who are exported to the Middle East. Therefore, the RSPCA is concerned that this minor adjustment to current regulatory settings is inadequate and represents symbolic policy to appease public sentiment, as opposed to addressing the root cause of the issue of exposing sheep to intolerable conditions, which would be to address the unsustainability of the live export trade.

In addition, modifying the dates based on single port discharge does not account for the true impact on sheep of the duration of exposure to high environmental heat and humidity without respite. Ships must never commence voyages to or through the Middle East in May through to October, regardless of the number of destination ports. Animal welfare science, industry voyage data and expert opinion continues to support this. The HSRA Technical Panel (Barnes et al, 2019) highlighted the duration of effect on winter-acclimatised sheep as a vital consideration of the effects of high heat loads. A single port of discharge does not mark the end of a sheep's exposure to heat once docked and is not a risk mitigation initiative. Any reduction in the current prohibition disregards substantiated animal welfare science and will force sheep to endure extreme heat stress resulting in poor animal welfare outcomes.

RSPCA Recommendation D:

Sheep should not be exported to Oman between 01 May - 31 October inclusive, to reduce the known and increasing risk to sheep welfare.



2.3

Draft Report Recommendation 3	RSPCA's recommendations in response
Sheep should not be exported to Persian Gulf countries other than Kuwait between 22 May and 21 September (instead of 1 June to 14 September for countries other than Qatar under section 6-14 of the Animals Rules as currently in force; in the case of Qatar, the current prohibition dates are 22 May to 22 September under section 6-13 of the Animals Rules).	Recommendation E: Sheep should not be exported to Persian Gulf countries, including Kuwait, between 01 May - 31 October inclusive to reduce the known and increasing risk to sheep welfare.

Extend the prohibition period

The RSPCA supports the recommendation that sheep should not be exported to Persian Gulf countries and agrees that an expansion of the current prohibition is required to better protect animal welfare. However, we propose the prohibition period should be further expanded to include 01 May to 31 October inclusive for reasons outlined earlier, including the existing evidence that sheep suffer extreme heat stress during these months and that future climatic predictions indicate increases in the frequency and intensity of hot weather. The RSPCA does not support the exclusion of Kuwait from an expanded prohibition (as outlined below in the response to the Draft Report Recommendation 4).

RSPCA Recommendation E:

Sheep should not be exported to Persian Gulf countries between 01 May - 31 October inclusive, including Kuwait, to reduce the known and increasing risk to sheep welfare.



2.4

Draft Report Recommendation 4	RSPCA's recommendations in response
Sheep should not be exported to	Recommendation F: Sheep should not be exported to Kuwait
Kuwait between 1 June and 7	between 01 May - 31 October inclusive, to reduce the known
September (instead of 1 June to 14	and increasing risk to sheep welfare.
September under section 6-14 of the	
Animals Rules as currently in force).	

Extend the prohibition period

The RSPCA refutes the proposal to reduce the prohibition to Kuwait by a further seven days. The justification to reduce this prohibition period is flawed because the lower temperatures recorded for Kuwait do not remove the known risk to sheep of heat accumulation and heat stress en route crossing the Equator and in the excessive temperatures in the Strait of Hormuz to Kuwait.

Furthermore, the 2021 BOM analysis data used to verify the slightly lower temperatures of Kuwait compared to other Middle East destinations is not new information. This information was acknowledged by the Department when setting the current regulations and initial rejection of the *Al Kuwait* exemption application in 2020. Therefore, this recommendation fails to consider the newly identified evidence of increasing temperatures and climatic predictions for hotter periods in the Draft Report's Literature review and proposes unacceptable conditions to export live sheep.

RSPCA Recommendation F:

Sheep should not be exported to Kuwait between 01 May - 31 October inclusive, to reduce the known and increasing risk to sheep welfare.



2.5.

Draft Report Recommendation 5	RSPCA's recommendations in response
Sheep should not be exported to, or	Recommendation G: Sheep should not be exported to, or
through, the Red Sea between 15 June	through, the Red Sea between 01 May - 31 October
and 14 September (instead of 1 June to	inclusive, to reduce the known and increasing risk to
14 September under section 6-14 of the	sheep welfare.
Animals Rules as currently in force).	

Extend the prohibition period

The RSPCA does not support the proposal to reduce the prohibition to, or through, the Red Sea by a further fourteen days because the Indian Ocean equatorial region is hottest in May and June. Updating the Animal Rules in support of this proposal would be irresponsible given the scale of known animal welfare risk and the government's responsibility to protect animal welfare. The RSPCA understands that Red Sea destinations (i.e., Jordan and Israel combined) represented 22.6 per cent of the sheep exported from Australia under the current regulations in the three-year period between 2019-2021 (pers comm, K Crocker, 19 January 2022). A reduction of a further two weeks of the current prohibition represents a sizable market opportunity for exporters. Therefore, we are concerned that this proposal demonstrates a willingness to support industry profitability and efficiency over the welfare of Australian sheep. While the RSPCA recognises that the Department has supported increased profitability and efficiency of industry, this conflict cannot be resolved at the risk of animal welfare.

RSPCA Recommendation G:

Sheep should not be exported to, or through, the Red Sea between 01 May - 31 October inclusive, to reduce the known and increasing risk to sheep welfare.



2.6.

Draft Report Recommendation 6	RSPCA's recommendations in response
The Animals Rules should be amended to require the relative humidity and wet bulb temperatures in at least 2 locations on the bridge of the vessel to be automatically measured and recorded by data loggers every 20 minutes during the voyage.	Recommendation H: The required maximum WBT threshold measurement from the bridge should be 26°C (not 29°C) to safeguard the welfare of sheep on board the deck and better reflect animal welfare science.

Apply contemporary animal welfare science to set the appropriate WBT threshold

The RSPCA supports the implementation of additional data collection to monitor WBTs aboard live export vessels. We note that animal welfare science and expert advice supports that the WBT welfare limit for a standard shipper sheep is 28°C and that the model should use a 98 per cent probability that the deck temperatures the sheep would be exposed to during a planned voyage, would remain at or below the WBT welfare limit (Barnes et al, 2019; AVA,2019). However, the Draft Report refers to a threshold of 95th percentile maximum WBT of 29°C which represents a significant increase in the risk threshold given evidence that the temperature difference on the deck can be two-three degrees higher than on the bridge.

Therefore, if data loggers are to be installed on the bridge, a lower WBT threshold than the 29°C proposed in the Draft Report is required. That is, the threshold required should be set at a maximum WBT of 26°C measured from the bridge. A WBT measurement threshold any higher than 26°C will significantly increase the risk of heat stress and heat related mortality of sheep onboard.

RSPCA Recommendation H:

The required maximum WBT threshold measurement from the bridge should be 26°C (not 29°C) to safeguard the welfare of sheep on board the deck and better reflect animal welfare science.



2.7.

Draft Report Recommendation 7	RSPCA's recommendations in response
A conditional prohibition should apply to the following destinations and time periods, when sheep can be exported provided they meet additional conditions (to be specified in the Animals Rules) aimed at further mitigating heat stress risk: •Kuwait: 1 June to 14 June •Persian Gulf other than Kuwait: 22 May to 31 May and 15 September to 21 September to 30 June and 7 September to 14 September	Recommendation I: Conditions associated with prohibition dates must prevent heat stress when ambient temperatures exceed the known heat stress threshold for sheep, which occurs to and through the Middle East between 01 May to 31 October inclusive. Recommendation J: Conditional prohibition dates should not be implemented as they will become the default periods for live exporters and ensure more sheep will suffer.

<u>Prevent the on-set of heat stress by prohibiting live export when ambient temperatures exceed the known</u> heat stress threshold for sheep

The RSPCA does not support these additional conditions because they will be ineffective in safeguarding animal welfare where the ambient temperatures exceed the known heat stress threshold for sheep. Such conditional prohibitions will erode the shoulders of the prohibition period and increase animal welfare risks. The Northern Hemisphere summer, including 01 May to 31 October, has been shown to regularly exceed these thresholds. Therefore, exporting more sheep to the Middle East during this time would result in more sheep being exposed to extremely poor animal welfare outcomes including, but not limited to, severe heat stress and increase mortality rates.

We note that the Department has adopted a heat stress risk threshold that is known to be above the heat stress of most classes of exported sheep i.e., it references 29°C ambient WBT, equating to deck WBT of 30 - 32°C. This means that exporting sheep during these conditional prohibition periods will push the risk settings out even further. However, these temperatures significantly exceed the HST of sheep and should not be considered as an acceptable threshold for justifying further reductions to prohibition durations.

RSPCA Recommendation I:

Conditions associated with prohibition dates must prevent heat stress when ambient temperatures exceed the known heat stress threshold for sheep, which occurs to and through the Middle East between 01 May to 31 October inclusive.

Do not implement proposed conditional prohibition periods

Furthermore, the RSPCA is concerned that such "conditional prohibition periods" will become the default periods in which sheep exports will be permitted from Australia to the Middle East.

RSPCA Recommendation J:

Conditional prohibition dates should not be implemented as they will become the default periods for live exporters and ensure more sheep will suffer.



2.8.

Draft Report Recommendation 8	RSPCA's recommendations in response
The additional conditions to mitigate heat stress are upper weight limits, selection of heat tolerant breeds, wool length	Recommendation K: The proposed additional conditions should be the rule (not be the exception) for any shipment of sheep live exported to the Middle East.
requirements, minimum vessel pen air turnover scores while sailing (sailing PAT), additional space on	Recommendation L: The <i>Export Control (Animals) Rules 2020</i> need to be fortified with a revised enforcement policy.
board, additional preparation time and feeding requirements at Registered Establishments and increasing the fodder provided during the voyage.	Recommendation M: The Department's inspection regime needs to be updated to include mandatory independent third-party full inspection arrangements for live export shipments to monitor any such conditions.
	Recommendation N: A minimum k-value of 0.047 for all animals onboard vessels and housed in registered premises is required.

Mandate these conditions for all shipments

The RSPCA acknowledges that the conditions listed have been shown to mitigate heat stress. However, we do not view these conditions as improvements in the current regulatory settings because they are already available to exporters. Moreover, such conditions have not proven to protect animal welfare to date due to inadequate inspection requirements and insufficient enforcement. These conditions will certainly not mitigate heat stress when ambient temperatures continue to exceed heat stress thresholds as commonly occurs during the northern hemisphere summer.

The RSPCA is very concerned that these conditions, which have already proven to demonstrate regulatory failures at the expense of animal welfare, will become the minimum conditions with which most classes of sheep will be live exported in known conditions that are above their heat stress risk threshold.

RSPCA Recommendation K:

These proposed additional conditions should be the rule (not be the exception) for any shipment of sheep live exported to the Middle East.

Revise enforcement policy and mandate independent third-party inspections

While physiological factors such as weight, breed, wool length, and reproductive status of an individual sheep have been shown to impact an animal's response to heat stress, the live export sector has consistently demonstrated that it does not adequately monitor these factors. This is consistently evidenced in voyage reports. Despite such measures already being available to exporters the welfare for sheep continues to be compromised. Animal welfare failures continue on live export voyages to and through the Middle East despite the consideration of physiological factors that the proposed additional conditions provide. Voyage reports consistently show that sheep suffer unacceptable animal welfare regardless the existence of such conditions.



The following case studies provide examples from the 2019-2021 period which, despite the existence of such conditions, failed against physiological animal welfare measures, over and above mortality rates. The RSPCA notes that animal welfare failure is common in the live export trade.

Case Study 1

MV Maysora - Fremantle to Eliat and Aqaba

October 2019 (report released July 2020)

<u>Animal welfare indicators reported</u> - high heat stress scores 2-3, food and water deprivation, frantic feeding events observed, max. WBT on sheep decks 31.4°C (3.5°C above maximum tolerance level), 35% (14,000 head) of the sheep on-board had a fleece length >10mm over most of their trunk, fleece lengths >50mm observed, open-mouth panting observed in 10-20% of sheep (heat stress indicator deemed unacceptable), live but moribund sheep found and 2% mortality.

Case Study 2

MV Al Kuwait - Fremantle to Kuwait

June 2020 (report released August 2020)

<u>Animal welfare indicators reported</u> - high to extreme heat stress scores 3-4, max. WBT on sheep decks 32°C (4°C above maximum tolerance level), distressed demeanor, open-mouth panting with tongue out observed in 12% of sheep (indicating severe heat stress) and 3% mortality.

These examples demonstrate that current regulatory settings are failing to protect animal welfare by enabling the live export industry to self-regulate. The RSPCA has previously highlighted deficiencies in existing regulations at key points in the supply chain which continue to enable animal welfare breaches without recourse. In alignment with the Moss Review (2018), prioritisation of the Department's inspection regimes and revisions to the 2012 Guideline for the Management of Non-compliance are required to improve Australia's HSRA model and better protect animal welfare in this sector. Therefore, implementation of such conditions without independent third-party inspection protocols will fail the basic principles of animal welfare and subject Australian sheep to higher risk. A more robust and transparent compliance management framework is needed for the live export trade. This means increasing regulation, not relaxing it.

RSPCA Recommendation L:

The Export Control (Animals) Rules 2020 need to be fortified with a revised enforcement policy.

RSPCA Recommendation M:

The Department's inspection regime needs to be updated to include mandatory independent third-party full inspection arrangements for live export shipments to monitor any such conditions.

Increase the minimum allometric k-value

Neither the proposed additional space on board, nor a minimum vessel sailing PAT, will reduce the risk to sheep if the heat stress threshold proposed in the Draft Report (i.e., of 29 degrees Celsius from the bridge), is approved. The AVA (2019) previously highlighted that:

"If ambient /bridge WBT is at or above the calculated HST for a particular class of sheep, no amount of ventilation improvement or increase in space allocation will reduce heat stress in that class of sheep."



The RSPCA notes that the Draft Report does not specify the additional space that would be allocated as part of the proposed conditional prohibition factors. Reiterating that no additional amount of space will mitigate heat stress in sheep at an ambient WBT threshold of 29 degrees Celsius from the bridge, as proposed by the Draft Report, this conditional requirement is also futile. We note that the review committee for the Australian Standards for the Export of Livestock (ASEL) recommended that the standard 0.033 k-value should remain in place for May to October inclusive and be reviewed considering the voyage reports and industry performance after several northern hemisphere summer periods. While voyages with increased space allocation in 2018 (ASEL 2.3 +17.5%) and 2019 (k-value 0.033) resulted in fewer mortalities, it did not adequately alleviate heat stress or improve other animal welfare indicators.

Additionally, given the lack of robust quality data from the voyage reports outlined earlier, the RSPCA strongly refutes that the 0.033 k-value has proven to reduce animal welfare risks sufficiently on live export voyages. Therefore, we continue to recommend a minimum k-value of 0.047 for all animals onboard vessels and/or housed in registered premises to ensure space to be able to lie down comfortably at the same time and easily access feed and water.

RSPCA Recommendation N:

A minimum allometric k-value of 0.047 for all animals onboard vessels and housed in registered premises is required.



References

Al Kuwait IO voyage report from Jun 2020. Report 219 (Aug 2020). https://www.awe.gov.au/sites/default/files/documents/report-219.pdf

Australian Government, Department of Agriculture, Fisheries and Forestry. (2012). Guideline on the management of non-compliance, exporter supply chain assurance system (ESCAS) for feeder and slaughter livestock. Canberra, Australia. https://www.awe.gov.au/sites/default/files/sitecollectiondocuments/biosecurity/export/live-animals/livestock/escas/guideline-for-management-of-non-compliance-all-markets.pdf

Australian Government, Department of Agriculture, Water and the Environment. (2021). Review of live sheep exports by sea to, or through the Middle East during the Northern Hemisphere summer, draft report. Canberra, Australia.

AVA. (2018) A short review of space allocation on live export ships and body temperature regulation in sheep. Department of Agriculture McCarthy Review, Australian Veterinary Association.

AVA, (2019). AVA Submission to the Draft Report by the Heat Stress Risk Assessment (HotStuff) Technical Reference Panel. Department of Agriculture HSRA Review, Australian Veterinary Association.

Barnes, A, Phillips C, Fisher A. (2019). Final report by the Heat Stress Risk Assessment Technical Reference Panel. Agriculture, D.o. (Ed.), Commonwealth of Australia, Canberra.

Carnovale F, and C Phillips. (2020). The Effects of Heat Stress on Sheep Welfare during Live Export Voyages from Australia to the Middle East. Animals 10, no. 4: 694.

Carver, D and Ares, E. (2021). Animal Welfare (Kept Animals) Bill. P26. House of Commons Library, United Kingdom.

Digital Edge independent poll public sentiment towards live export (2018). Commissioned by RSPCA Australia, Canberra, Australia.

Ledger M and Mellor D (2018). Forensic use of the Five Domains Model for assessing suffering in cases of animal cruelty. 8 *Animals* 101

Maunsell-Australia (2003). Development of a heat stress risk management model. Live Export Project LIVE.116, Meat & Livestock Australia.

Maysora IO voyage report from Jan-Feb 2019. Report 70 (Oct 2019).

https://www.awe.gov.au/sites/default/files/sitecollectiondocuments/biosecurity/export/live-animals/livestock/compliance-and-investigations/report-70.pdf

McCarthy, M. (2018). Independent Review of conditions for the export of sheep to the Middle East during the Northern Hemisphere summer. Department of Agriculture and Water Resources. Canberra, Australia.

Public Statement of Reasons 20200613 (2020).

https://www.awe.gov.au/sites/default/files/documents/public-statement-of-reasons-20200613.pdf.

Mellor D. (2017). Operational details of the Five Domains Model and its key applications to the assessment and management of animal welfare. 7 *Animals* 60

Moss, P. (2018). Review of the Regulatory Capability and Culture of the Department of Agriculture and Water Resources in the Regulation of Live Animal Exports, Department of Agriculture and Water Resources. Canberra, Australia.

New Zealand Ministry for Primary Industries (2021). <u>Live sheep and cattle export reports | Export | NZ Government (mpi.govt.nz)</u>. Accessed 17 January 2022.

Pines M, Phillips CJ (2011). Acumulation of ammonia and othre potentially noxious gases on live export shipments from Australia to the Middle East. Journal of Environmental Monitoring. Royal Society of Chemistry, Cambridge UK.

Public Statement of Reasons 20200613 (2020).

https://www.awe.gov.au/sites/default/files/documents/public-statement-of-reasons-20200613.pdf.

Stacey, C. (2017). HotStuff V5: Improvements to the Live Export Heat Stress Risk Assessment Method, Live Export Project. W.LIV.0277, Meat & Livestock Australia, North Sydney.



Tadesse D, Puchala R, Gipson, TA & Goetsch, AL. (2019). Effects of high heat load conditions on body weight, feed intake, temperature, and respiration of Dorper, Katahdin, and St. Croix sheep. Journal of Applied Animal Research, vol. 47, no. 1.

Thornton P, Nelson G, Mayberry D and Herrero M. (2021). Increases in extreme heat stress in domesticated livestock species during the twenty-first century. Global Change Biology, vol. 27.

Willis RS, Fleming PA, Dunston-Clarke EJ et al. (2021) Animal welfare indicators for sheep during sea transport: Monitoring health and behaviour. Applied Animal Behaviour Science 240.