AN ANIMAL LIBERATION SUBMISSION

DA2020/0005

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WE ACKNOWLEDGE THE TRADITIONAL & TRUE OWNERS OF COUNTRY THROUGHOUT AUSTRALIA AND RECOGNISE THEIR CONTINUING CONNECTION TO LAND, WATERS AND CULTURE.

WE PAY OUR RESPECTS TO THEIR ELDERS PAST, PRESENT AND EMERGING.

DOCUMENT DETAILS

Animal Liberation 2020. *An objection to DA2020/0005.* A submission by Animal Liberation.

ABOUT ANIMAL LIBERATION

Animal Liberation has worked to **permanently improve the lives of all animals** for over four decades.

We are proud to be **Australia's longest serving animal rights organisation.** During this time, we have accumulated considerable experience and knowledge relating to issues of animal welfare and animal protection in this country.

We have witnessed the growing popular sentiment towards the welfare of animals, combined with a diminishing level of public confidence in current attempts, legislative or otherwise, to protect animals from egregious, undue, or unnecessary harm.

Our mission is to **permanently improve the lives of all animals through education, action, and outreach.**

Hilltops Council
planning@nsw.gov.au

I write on behalf of Animal Liberation in opposition to the above mentioned Development Application coded **DA2020/0005**.

Animal Liberation is a non-profit animal rights organisation, operating in the field of animal justice for over four (4) decades. During this time, we have accumulated considerable experience and knowledge relating to issues of animal welfare and protection across the country. We are proud to be Australia's longest serving animal rights organisation. I am proud to work for this organisation and our ethos of interspecies equality.

Our mission is to **permanently improve the lives of all animals through education, action and outreach.**

Animal Liberation is significantly concerned by the proposal to build a total confinement pig-meat production facility. These concerns will be laid out in the following submission. I thank you for your consideration,

Alex Vince
Campaign co-ordinator

"Pigs are active and intelligent participants in their worlds in much the same way as other cognitively complex animals"

- Marino and Colvin (2016)

Applicant number: DA2020/0005

Development proposal: Intensive Livestock Agriculture (2,200 sow pig farm consisting of a "breeder" site with 5 sheds, a "grower" site consisting of 16 sheds and ancillary infrastructure, tree removal and electricity generating works.

Applicant: Blantyre Farms Pty. Ltd.

Site: Property known as 'Eulie'.

EXECUTIVE SUMMARY

ONE Animal Liberation welcomes and appreciates the opportunity to provide the following submission concerning DA2020/0005. The proposal intends to inflict another industrial, large-scale and inappropriate intensive piggery in Hilltops Council (HC), NSW. The facility containing twenty-one (21) total confinement sheds poses a range of threats to the local community, the environment, and the animals themselves.

TWO As the relevant local government authority, HC is obliged to assess and act in an objective and unbiased manner viz-à-viz DA2020/0005. Similarly, HC is required to ensure that the exercise of relevant instruments of law are followed at both State and Federal levels. A commitment to this standard is contained within Council's policy own legislative compliance policy which states that officials across the board are obliged to "comply with both the letter and the spirit of the law".

THREE We do not believe that the Applicant has provided Council with sufficient data and information with which it is expected to consider the risks and impacts outlined in this submission. Of particular concern is the general lack of critical or independent regulation. Self-reporting is unacceptable for a project of this scope. That a very similar proposal has been tabled and refused by past Councils and State authorities suggests that Council must seek further information. Failing to do so, or failure to provide sufficient information, ought to result in a rejection.

FOUR We strongly urge Council to recognise that a development of this kind represents an unsustainable effort to maximise economic benefits to the detriment of local business, ecology, human health and long-term amenity.

THE LEGISLATIVE FRAMEWORK

"What happens to them, matters to them"
- Regan (2004)

Identified as both an Integrated and Designated Development, the Project requires approval and licensing under a range of legislative instruments. These include the *Protection of the Environmental Planning and Assessment Act 1979* (the EP&A Act), the *Environmental Planning and Assessment Regulations 2000* (the Regulations), the *Environment Operations Act 1997* (the PEO Act), the *Water Management Act 2000* (the WMA Act) and the *National Parks and Wildlife Act 1974* (the NPW Act). A series of approvals are a prerequisite for the development to begin or be approved at Council level.

Under Schedule 3 of the Regulations, the proposed facility is classified as a "Designated Development" insofar as it intends to confine "more than 2,000 pigs or 200 breeding sows". Under Section 4.46 of the EP&A Act, the Project is considered an "Integrated Development". As such, it requires further approvals and licenses under other legislative instruments, including a water use approval under the WMA Act, an environment protection licence under the PEO Act and an Aboriginal Heritage Permit ('AHIP') under the NWA Act.

Under Section 79C(1)(b) of the EP&A Act, Council is obliged to consider social impacts that may arise as a consequence of such a development. Thus, consideration of public interest matters such as community expectations concerning animal welfare must be addressed. That public interest is applicable to the present case was amply exhibited by the number of objection submissions received during the Applicants prior application (DAT15/078) (Coote 2017; Ellicott 2017a; Thomson 2017; Bell 2017).

Ultimately, the Applicant has failed to properly, adequately and transparently provide information required under the instruments cited above. In particular, we hold that the Applicant has failed to properly account for requirements contained within the Secretary's Environmental Assessment Requirements (SEARs).

Finally, and in line with clause 81 of the *Environmental Planning and Assessment Regulation 2000*, we request Council provide a copy of this document to the Executive Director, Infrastructure Assessments, NSW Department of Planning and Environment.

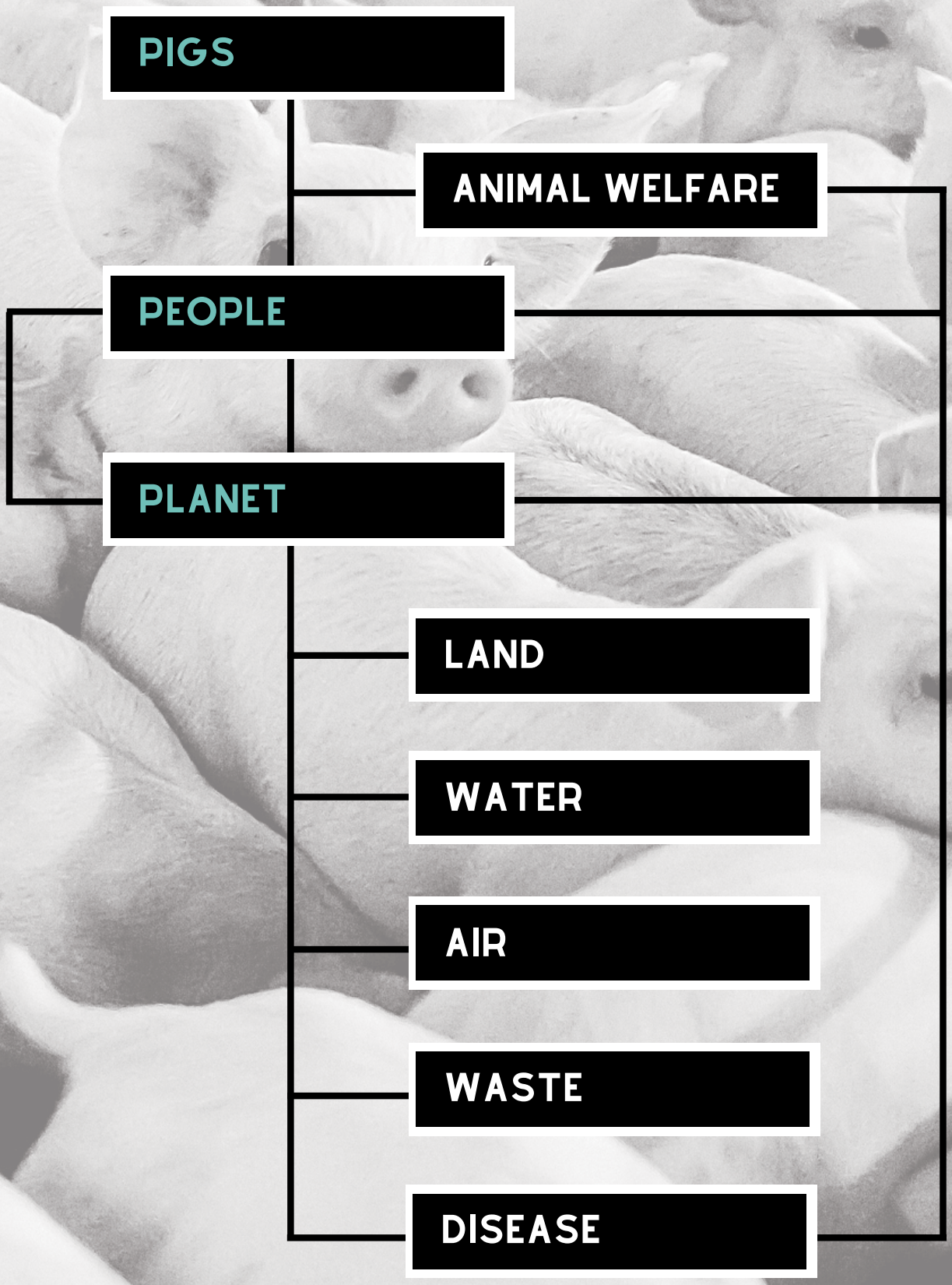
The following submission will contain a series of rationales for the refusal of DA2020/0005. It is made in relation to the DA and Environmental Impact Statement (EIS) provided by the Applicant. It will examine concerns relating to animal welfare impacts. It will also include scrutiny of impacts on human health, amenity and safety. It will conclude by assessing the environmental costs the Project will incur if approved.

IMPACTS

"All animals who are conscious or sentient beings should be viewed as the subjects of justice and as the bearers of inviolable rights"

Donaldson and Kymlicka (2011)

IMPACTS



In an epoch when food
cultivation is reduced to
a mere industrial technique,
it becomes especially
important to dwell on the
cultural implications of
"modern" agriculture - to
indicate their impact not only
on public health, but also on
humanity's relationship to
nature and the relationship of
human to human

BOOKCHIN 1972

1: **individual personality** (King 2017); 2: **inquisitive nature** (Held et al. 2009); 3: **self-aware** (Broom et al. 2009); 4: **Object permanence** (Nawroth et al. 2019); 5:**time perception** (Mendl et al. 2010); 6: **memory and spatial learning** (Muth 2013); 7: **discrimination between individuals** (Marino and Colvin 2016); 8: **perspective taking** (Held et al. 2001); 9: **emotional** (Bekoff 2015).

PREFACE, *or*

A BIT ABOUT PIGS

Animal Liberation is significantly concerned with the inevitable and negative ramifications a facility of this kind and scale will have upon a range of issues if approved, including animal welfare, human health, ecosystem functioning and entirely avoidable environmental damage. We submit the following in opposition to DA2020/0005.

HOGS: A NATURAL HISTORY

Pigs are the perhaps the most iconic yet anomalous of all domesticated animals. Naturally they have "the widest natural range of any ungulate" (Yamamoto 2017: 13). Pigs were finally domesticated between 1720-1850 CE (Lutwyche 2019: 14). Todays wild boar is the predecessor of commercial domestic pigs, whose presence on this planet stretches as far back in time as the Miocene epoch, approximately 23.03 to 5.333 million years ago (Yamamoto 2017: 7). In Australia, the pig meat industry has "evolved" from "a sideline enterprise" into one "in its own right" (Cutler and Holyoake 2007: 7).

'Wild boar and sow' plate from D Low (1842). Cited in Yamamoto (2017: 10).

THE CONTEMPORARY COMMERCIAL PIG

Contemporary pig farming is one of the most intensive of all animal protein production systems (Hemsworth et al, 2018: 3). Facilities of the kind proposed by the Applicant inherently involve exploitation of animals. Their captivity and waste byproducts present significant human health concerns, such as respiratory illnesses (Smith 2017). Other zoonotic illnesses afflict workers in intensive farming operations, including piggeries (Khan et al. 2013: 1). Despite the findings of the most recent Federal study of Australian attitudes to animal welfare, the present Project fails to meet burgeoning societal expectations (Futureye 2018). This was amply shown in the refusal of the Applicants previous application wherein Hilltops received an unprecedented number of objections (Coote 2017; Thomson 2017). Coupled with significant discrepancies, failures of the Applicant to provide Council with accurate information concerning risks and threats, and confirmation of monitoring, avoiding, minimising and managing these risks.

PREFACE, or A BIT ABOUT PIGS

MOTHER

MORE

MATERNAL BEHAVIOUR

The maternal behaviour of sows is most pertinent to the present submission.

The time immediately before and after birth is known as the "periparturient period". As progesterone levels drop prior to birth, other hormones increase. Some instinctual nest building behaviours in pigs has been shown to be associated with changes in these hormones (Algers and Uvnäs-Moberg 2007: 78). During lactation (the secretion of milk from mammary glands for newborns), stimuli from piglets also impacts the release of several hormones.

Despite domestication, sows perform elements of nest building "when appropriate space and materials are available". This is because the action of nest building is stimulated internally (via hormones) and externally (via interactions and feedback from the environment) (Wischner et al. 2009). During this pivotal time, the nursing behaviour of sows naturally ensure "an even distribution of milk to her piglets". In turn, the suckling behaviour of newborn piglets is recognised by the sow as "a way to communicate their individual nutritional needs" (Algers and Uvnäs-Moberg 2007: 78). This, and many more species-specific needs are denied to mothers and her piglets in concentrated animal feeding operations (CAFOs).

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During the final 24 hours before farrowing, sows in facilities of the kind proposed by the Applicant generally exhibit a significant increase in restless behaviour (Jones 1966). Such behaviour may be the result of denying sows of non-negotiable species-specific and instinctual needs. For example, recent studies assessing higher concentrations of specific hormones in sows provided nesting materials indicates that positive hormones increased while negative hormones decreased. This illustrates the integration of external and internal stimuli (Wischner et al. 2009).

According to RSPCA Australia, the lack of stimulus and the inability to perform species-specific behaviours in facilities such as the one proposed by the Applicant can systemically impair pigs on "both a behavioural and physiological level" (RSPCA 2020b). This results in hormonal imbalances and significant physical and psychological suffering.

AS SOCIETY DEVELOPS, SO TOO MUST THE MANNER IN WHICH IT IS GOVERNED.

Sow in farrowing crate, Golden Grove, Young

PHOTO COURTESY OF AUSSIE FARMS

PIGS

ANIMAL WELFARE

An introduction to animal welfare

Welfare is generally defined as the health, happiness and fortuity of an individual or a group of individuals (Phillips 2009). Studies are continuing to show that "many animals experience such emotions as joy, fear, love, despair and grief" (Bekoff 2000). Others have shown that evidence exists to suggest that other animals "can infer concepts, formulate plans and employ simple logic in solving problems" (Gould and Gould 1998). Grief following the loss of a valued partner, family or community member, for instance, has been witnessed in a range of species (King 2013). Some have even been known to engage in behaviour that strongly resembles rituals or rites (Brooks Pribac 2013). The graphic on page x briefly outlines the incredible capacities of pigs.

Pigs, disease, illness and psychology

Aside from structural obstacles, such as total confinement and forced denial of basic specific-specific needs, pigs in intensive total confinement facilities may fall victim to diseases, syndromes and other negative experiences not seen in the wild (Garner 2005: 106). Stereotypies of the kind in the insert below may represent the most visible expression of frustration. Illnesses and syndromes, such as "postpartum dysgalactia syndrome ('PDS'), present many of the same visible symptoms expected during the gestation and

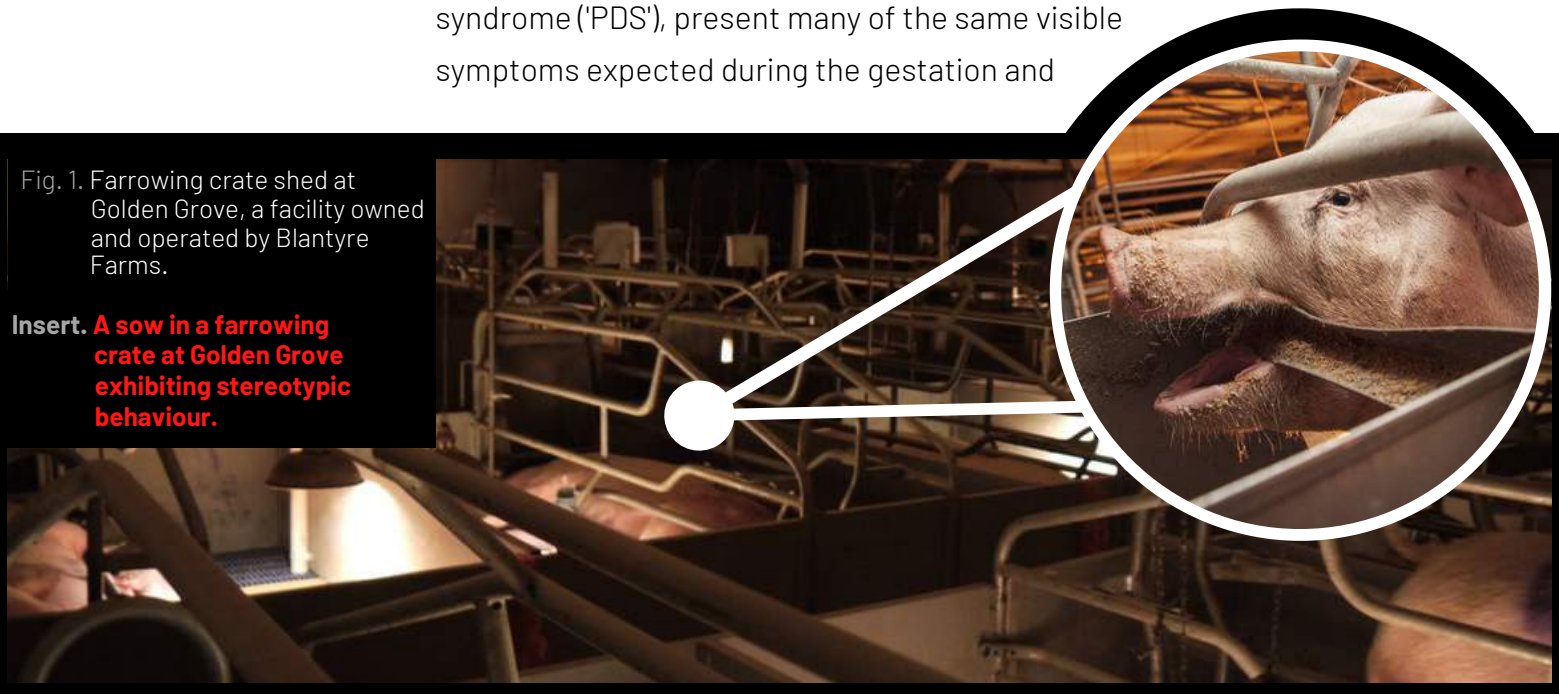


Fig. 1. Farrowing crate shed at Golden Grove, a facility owned and operated by Blantyre Farms.

Insert. A sow in a farrowing crate at Golden Grove exhibiting stereotypic behaviour.

PHOTOS COURTESY OF AUSSIE FARMS

Likelihood of harm and suffering

lactation period in intensive operations, including mastitis (an inflammation of the mammary gland most commonly caused by infection). That is, routinely witnessed symptoms of significant concern make "diagnosis difficult"because they are the same as those seen in intensive farming in general.

Pigs, stress and psychological harm

Younger sows of lower social ranking generally "show much more restlessness" than older sows, often exhibiting "stereotypies" (Csermely and Nicosia 1991). These stereotypies, defined as "repetitive and apparently functionless patterns" of behaviour or complex physical sequences "of obscure purpose", are indicative of underlying and "environmentally induced" problems (Blackshaw and McVeigh 1984; Lawrence and Terlouw 1993; Tatemoto et al. 2019).

It may be inferred that older sows who have previously undergone artificial insemination and subsequent confinement during previous pregnancies have experienced such a profound and prolonged level of abnormal interactions between external and internal stimuli that they succumb to the impregnation process in a detached or indifferent manner. Such behaviour has been noted in a range of captive animals, including animals kept for entertainment or experimentation (Wechsler 1991; Mason 1991; Swalsgood and Shepherdson 2005; Garner 2005).

"Sham chewing"

A frequently stereotypic bahaviour of sows in concentrated animal feeding operations (CAFOs) or total confinement facilities is "sham-chewing" on metal (see above)(Tatemoto et al. 2019).

Fig. Sows in insemination shed Golden Grove, Young. Courtesy of Aussie Farms.

Insert Artificial insemination.

PHOTO COURTESY OP AUSSIE FARMS


PIGS POSSESS
COGNITIVE CAPABILITIES
SIMILAR TO DOGS & YOUNG CHILDREN,
SHOW SELF-AWARENESS,
FORM LIKES AND DISLIKES,
ENJOY CREATIVE PLAY, &
EXPERIENCE EMOTIONS
NOT UNLIKE
OUR OWN

Sow in farrowing crate, Golden Grove, Young **PHOTO: AUSSIE FARMS**

Studies have consistently shown that "pigs possess a **sophisticated understanding of their physical surroundings, navigate efficiently, remember and anticipate experiences** and **enjoy their world through play**"

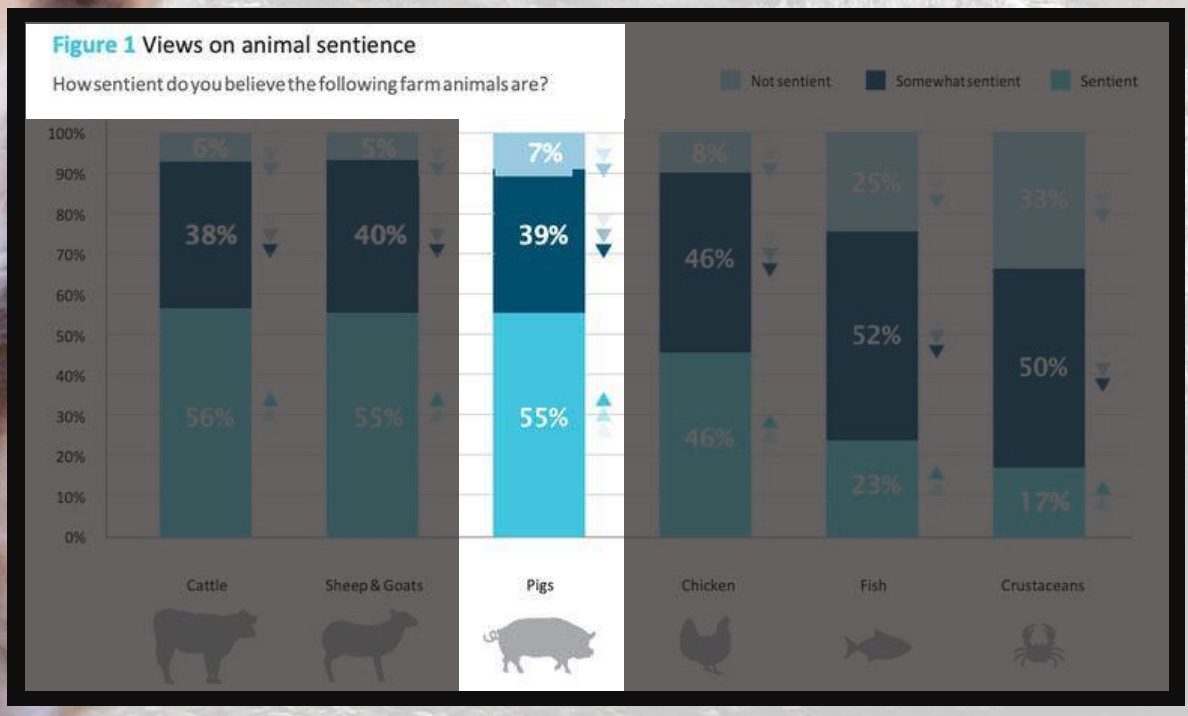
- Marino and Colvin (2016)

ATTITUDES TO WELFARE

Public opinion gleaned from the latest official figures on animal welfare issues are **unequivocal** (Futureye 2018).

A full 95% of Australians consider animal welfare to be an area of concern, with at least 91% of these wanting to see this improved through reforms. The results of a comprehensive study commissioned by the Commonwealth are anything but ambiguous: "the perceived gap between expectations and regulation spells increasing risk for the Australian federal government, and more specifically, the Department of Agriculture and Water Resources, which currently has very limited powers over farm animal welfare" (Futureye 2018: 4).

The graph below shows contemporary Australians attitudes concerning the sentience of species most commonly farmed for their flesh, fibres or bodily fluids. Approximately 55% of participants believe that pigs are sentient (Futureye 2018: 6)..



ONE PIGS

A PIGGERY IS NOT AN APARTMENT

"Housing" and "accomodation"

As the industry's peak body, APL acknowledges that "the *housing* of pigs, particularly sows (mother pigs), has been a controversial topic" (APL 2020b). Under the "Australian Pork Industry Quality Assurance Program" (APIQ), a "gestation stall free" operation is one wherein "sows and gilts are kept in loose housing from at least five days after service [artificial insemination] until one (1) week before farrowing" (APL nd). "Loose housing" is defined by APL as "a broad term" which includes "a range of alternatives to sow stalls". Under this definition, "any loose housing must provide a sow with freedom of movement" (APL 2020b).

Smokescreens and broken commitments

Despite industry commitment to "phase out" sow stalls, new operations such as the one currently under consideration continue to confine sows in cages for up to six (6) weeks. This time may comprise a week before birth until those piglets are taken from her. Ultimately, the focus on the slow abolition of "sow stalls" has thus acted as a smokescreen obscuring the daily lives of mothers in Australian pig farms. The present proposal includes plans for over 900 dry sow stalls.

PHOTOS COURTESY OF AUSSIE FARMS

A cage by any other name

According to RSPCA Australia, sow stalls and farrowing crates both involve "the confinement of pigs in metal-barred crates" and impair the ability to move appropriately (RSPCA 2020b). Despite acknowledging concern associated with "sow stalls," producers continue to confine sows in cages of varying kinds and captivity.

Community attitudes to animal welfarei

This system is severely lacking in regulation. Recent Commonwealth community attitude studies show that the overwhelming majority of Australians believe that farmed animal welfare is important. The report published by the Federal Department of Agriculture and Water Resources (DAWR) revealed that a full 95% of respondents considered animal welfare a key concern, with 91% believing that reform was necessary to make this so (see "Attitudes to welfare" above).

Holes and conflicts in self-reporting and regulating

The Applicants have therefore bargained on Council and consumers alike to be misled by the use of such terminology (e.g., "piglet protection pens"). A significant associated concern is the nature of the phase-out; the industry is practically permitted to self-report and self-regulate. Under APIQ, sows are confined to "a mating stall" for one day. Meanwhile, the Model Code requires sows to be confined in such a stall of five days (APL 2020a).

WE DO NOT BELIEVE THAT THE APPLICANT HAS PROVIDED SUFFICIENT OR APPROPRIATE INFORMATION CONCERNING ANIMAL WELFARE.

As we break their spirits, our own spirits are broken

AS WE SOW, WE REAP

Tuttle (2016)

Sow in farrowing crate, Golden Grove, Young.
Photo courtesy of **Aussie Farms.**

ANIMAL WELFARE

WHY CODES & GUIDES DON'T CUT IT

CLAIM ONE

*"The Applicant has **proven experience with managing animal welfare, biosecurity and disease risk** associated with the operation of an intensive livestock operation. **This is evidenced at the Young operation(s)** [i.e., Golden Grove and Dead Horse Gully]" (p. xvi; p. 123).*

The EIS claims that the Applicant has "proven experience" in "managing animal welfare". Specifically, the EIS refers to the code of practice for commercial pig production in NSW, claiming that "minimum space allowances for adults and growing pigs" will be followed (Urbis 2020: xvii; Urbis 2020: 123-126).

Stillborn piglets in Golden Grove, the Applicants current grower facility

Given the size of contemporary facilities, individual assessment is rarely if ever plausible. Thus, groups of animals are assessed "at the herd level", meaning suffering may be occurring without it being adequately addressed (Anil et al. 2009: 144).

References to "welfare"

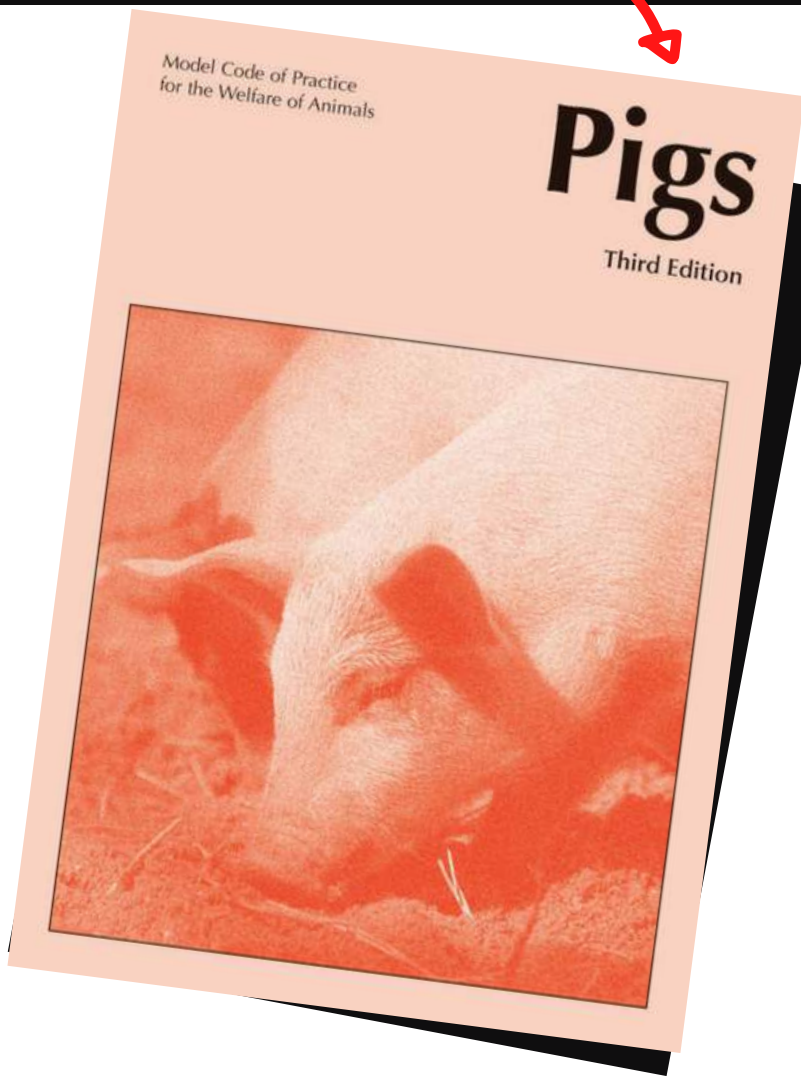
A total of 45 references to"welfare" are contained within the 323-page EIS. These references primarily relate to the recognition of Codes of Practice (COPs) and the pig meat industry quality assurance program ('APIQ'). Under s4.1.7 of the relevant COP states that sows may be confined in "farrowing crates" for less than six (6) weeks during "any one reproductive cycle" (MCOP 2008: 6).

ANIMAL WELFARE

WHY CODES & GUIDES DON'T CUT IT

CLAIM TWO

"[Standards of operation are proposed to be maintained in the Project with the]: ***[b] the nationally recognised Model Code of Practice for the Welfare of Animals - Pigs"*** *(p. xvi-xvii; p. 123).*



Specied-specific needs

The Model Code cited in the EIS ostensibly exists to protect "the basic needs of pigs" (see Appendix A). These needs include accessible, appropriate and sufficient food and water. Adequate shelter and protection from disease and injury is also considered a need. Similarly, the "opportunity to display appropriate patterns of behaviour" and the "freedom for necessary movement" is included as *a need* for pigs bred and confined in intensive production systems (MCOP 2008: 1).

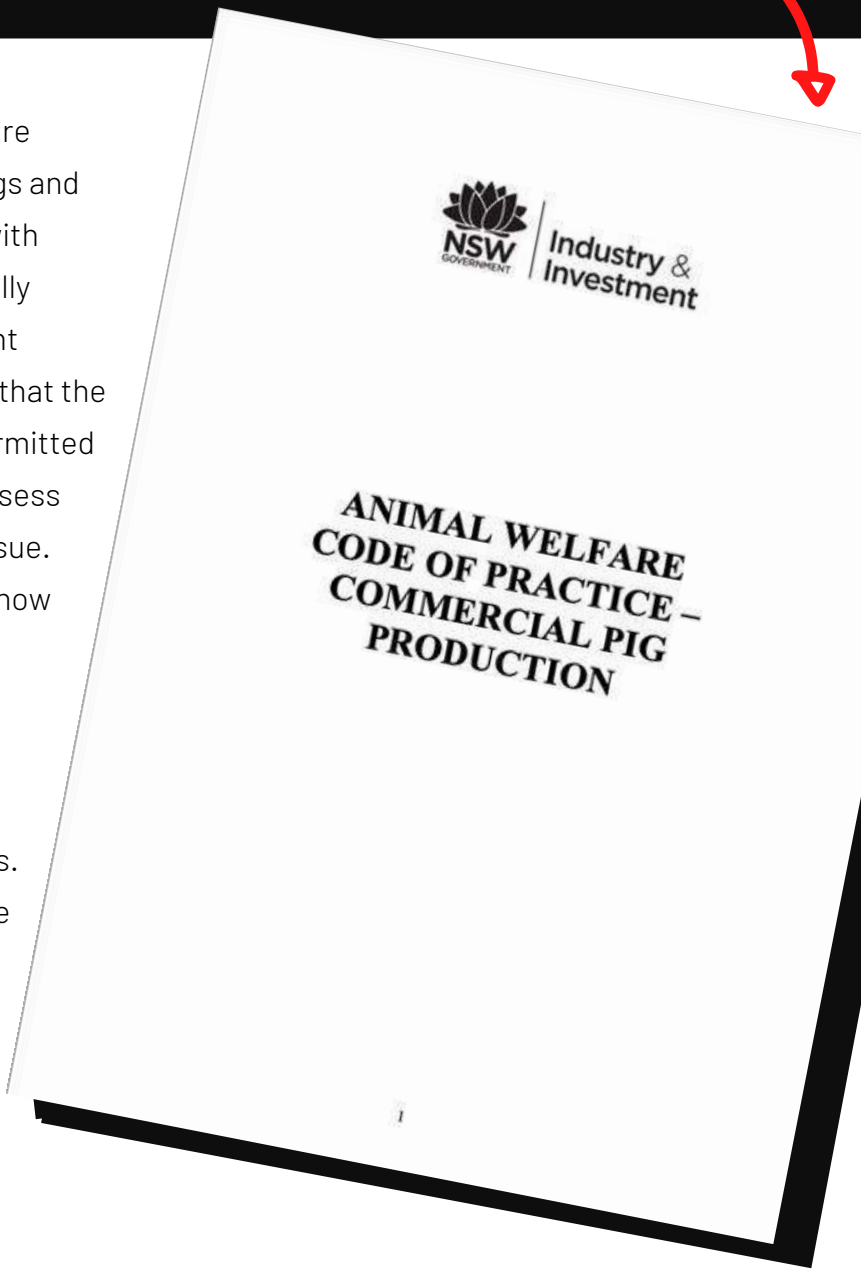
The "Five Freedoms"

These needs are in line with the concept of behavioural needs and the 'Five Freedoms' , first proposed in 1965. It has since become an operational component in welfare assessment regimes since the early 1990s (Marchant-Forde 2009: 121; Mellor 2016; RSPCA 2019a). They have since been adopted by the RSPCAs "Approved Farming Scheme" (RSPCA 2018). Since inception, the Freedoms "have come to be represented as absolute or fundamental freedoms" or a "tool to evaluate and represent nonhuman animal welfare" more generally (Mellor 2016; Anil et al. 2009: 144). See the appendices for an outline of the Five Freedoms which have since been described as "rights" (McCausland 2014).

WHY CODES & GUIDES DON'T CUT IT

CLAIM THREE

"[Standards of operation are proposed to be maintained in the Project with the]:
[c] the NSW Animal Welfare code of practice [for] pig production in NSW - specifically, 'minimum space allowance for adult pigs and growing pigs"



Self-regulation

Misleading terminology

As outlined above, there are considerable shortcomings and deficiencies associated with piggeries practicing socially unacceptable confinement systems. We have shown that the industry should not be permitted to self-regulate or self-assess any potential impact or issue. Similarly, we have shown how the industry relies on misleading concepts to assuage consumers discomfort in financially supporting cruel practices. A similar sentiment can be seen in social attitudes to the continued use of battery cages in the Australian hen-egg industry (Hunt 2018).

The Applicants have therefore bargained on Council and consumers alike to be misled by the use of such terminology. A significant associated concern is the nature of the phase-out; the industry is practically permitted to self-report and self-regulate.

WHY CODES & GUIDES DON'T CUT IT

CLAIM FIVE

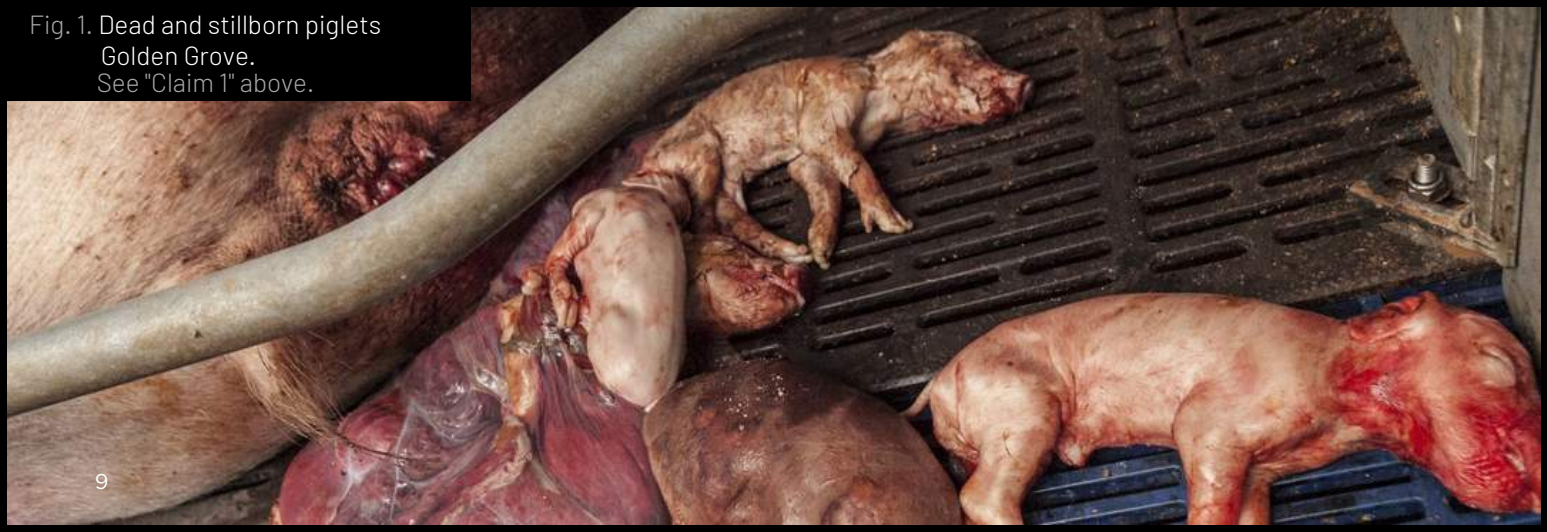
"[Standards of operation are proposed to be maintained in the Project with the]: ***[d] ongoing Quality Assurance (QA) from the industry's official QA system: APIQ".***

The references made to APIQ are not a acceptable proxy for an independent and mandatory risk management plan.

We hold that the inclusion of this Quality Assurance (QA) plan is an attempt by the Applicants to create a facade of independent audits. This is amply evidenced by APIQs ownership and management by APL.

Self-regulation systems or audits by industry bodies are insufficient, especially as it pertains to abiding by the already very lax standards discussed above.

Fig. 1. Dead and stillborn piglets Golden Grove.
See "Claim 1" above.



PHOTOS COURTESY OF AUSSIE FARMS

Considerations for Specific Euthanasia Methods for Swine

	Risk to Human Safety	Skill Required	Aesthetics	Limitations
Blunt trauma	Low	Moderate	Some blood discharge; objectionable for some	Only applicable to small pigs (up to 15 kg)

Fig. 1. Dead piglet in aisle of farrowing crates, Golden Grove.

Insert. **On-farm "euthanasia" methods include blunt force trauma (APL 2011).**

PHOTOS COURTESY OF AUSSIE FARMS

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TWO PEOPLE

"I think I'm entitled to clear air"
- Nebraskan landholder speaking about lost amenities after an intensive piggery was constructed in her hometown (Johnsen 2003).

Rural communities, impact of industrial agriculture

The agricultural and rural sectors of society have historically faced a range of "inter-related social and economic stressors" (Lockie 2015: v). Industrialised animal production operations compromise not only animal welfare and the environment, but public health, independent farmers livelihood and general amenity of life in rural communities (HSUS nd). Facilities of the kind proposed by the Applicant may lead to "the reduced enjoyment of property and the deterioration of the surrounding landscape" (Andrews and Kautza nd: 21).

Public health

Impact on local amenity and economics

These impacts can thereby become economic insofar as "declining home values" follow factory farming. In some American states pig production facilities "have an overall statistically significant effect on property values" (Herriges et al. 2003). As such, life in communities in proximity to CAFOs may be "significantly affected by their presence" (Andrews and Kautza nd: 24).

This section of the submission will outline threats to human health. The third and final section will outline threats to ecosystem health.

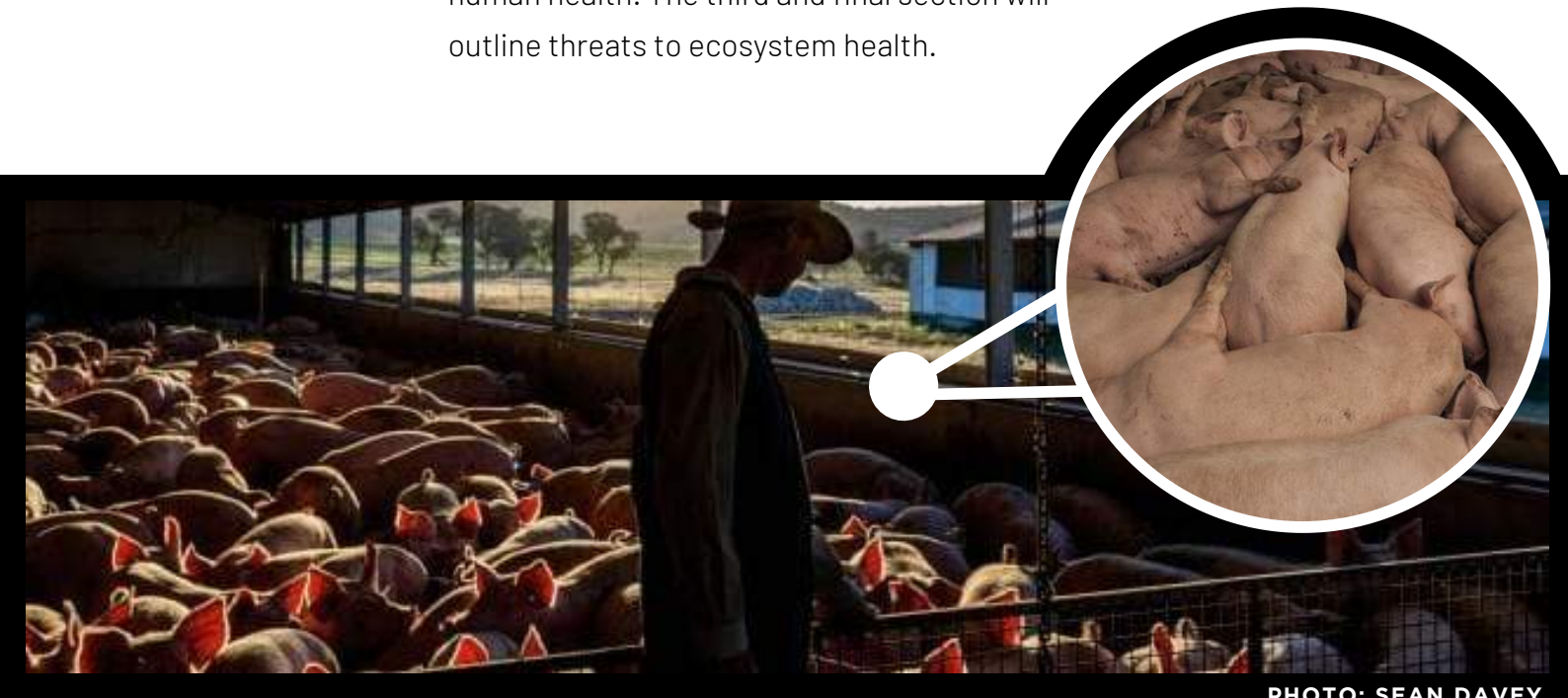

PHOTO: SEAN DAVEY

PEOPLE

Inter-locking social and economic stressors

The agricultural and rural sectors of society have historically faced a range of "inter-related social and economic stressors" (Lockie 2015: v). Industrialised animal production operations compromise not only animal welfare and the environment, but public health, independent farmers livelihood and general amenity of life in often rural communities (HSUS nd). Facilities of the kind proposed by the Applicant may lead to "the reduced enjoyment of property and the deterioration of the surrounding landscape" (Andrews and Kautza nd: 21).

Healthy rural communities

A study assessing community health and socioeconomic issues stemming from the presence of facilities of the kind proposed found that "improving and sustaining healthy rural communities depends on integrating socioeconomic development and environmental protection" (Donham et al. 2006).

Defining community health

Following the World Health Organisation's (WHO) definition of "health" as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity", the following section will outline the impacts the Project will have upon amenity and human health, including physical, mental and social well-being (WHO 2020).

PHOTO COURTESY OF AUSSIE FARMS

Healthy communities five (5) key assurances:

1) the physical and mental health of individuals.
2) financial security for individuals and the greater community;
3) social well-being;
4) social and environmental justice and
5) political equity and access.

Donham (2007)

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PHOTO COURTESY OF AUSSIE FARMS

THREE PLANET

"I think I'm entitled to clear air"
- landholder on lost amenities after an intensive piggery was constructed in her hometown (Johnsen 2003).

Site specifics

Many industries may currently claim that they contribute to society through the production of goods, items and services (Halden and Schwab nd). However, as global population grows goods once taken for granted will become scarce. In 1994, the total population exceeded 5.6 billion (Pimental et al. 1994: 347). It is expected to surpass 10 billion by 2050 (UNFAO 2017). Thus, scarcity has become a central policy concern across the globe (Scoones et al. 2014).

Inter-connected ecosystem

Environmentally, each component of an ecosystem functions in a network of interconnected organisms. Soils, for instance, are associated with broader ecosystem health.

The Precautionary Principle and piggeries

We believe that Council is obliged to apply the "precautionary principle", especially insofar as it provides for the conservation of ecological communities and ecosystem integrity.

Fig. 1. Farrowing crates at Golden Grove.
Insert. Piglets in a farrowing crate at Golden Grove.

PHOTO COURTESY OF AUSSIE FARMS

PLANET
WATER

Prior refusals

In 2017, the NSW Environment Protection Authority ('EPA') rejected the Applicants $12m intensive piggery prior proposal "on most counts" (Ellicott 2017a; Ellicott 2017b).

General water usage

If approved, the facility will require an astonishing amount of clean water. “Approximately 60 megalitres", or 60 million litres, will be required each year. This water will be used for “livestock feeding”, “cooling” and “general cleaning and washdown [sic] purposes”. The Applicant proposes to source clean water from "both the fractured rock groundwater resource and harvesting from stormwater management dams”, the latter to be constructed at each site.

Water usage per site

The “breeding unit” sheds in the “breeder site” are referred to as two (2) “dry sow sheds”, two (2) “farrowing sheds” and one (1) “gilt developer shed”. Across these, boars, gilts, gestating or dry sows, farrowing sows, lactating sows and sucker pigs will be confined (EIS 2020: 20). Of these, boars and dry sows require approximately 12-15 litres of water per day.

Water, effluent and manure

The EIS states that consent is sought for a range of activities. These include water licenses for usage and extraction from a groundwater source, effluent application at a scale of over 128ha or 150 tonnes per year and the export of remaining manure. It also acknowledges that “the majority of manure produced will need to be exported to other farms” (Urbis 2020: xvii).

Fig. 1. Aerial image of Golden Grove.

Insert. A sow in a farrowing crate at Golden Grove.

In a “farrow-to-finish” piggery, approximately 75 litres per sow per day is required (APL 2016.

Images courtesy of Aussie Farms

PLANET
WATER

Proposed effluent control and dispersal

Many large-scale operations store waste in "lagoons". These often contain pathogens. If approved, the operation will use a Sedimentation Evaporation System (SEPS) and a Covered Anaerobic Pond (CAP). These are two components of the Effluent Reuse Scheme (ERS). Effluent reuse is the practice of "spreading or irrigating manure or effluent" to utilise nutrients and water for pasture growth (Urbis 2020: iii). CAPs are described as "pond[s] that use anaerobic micro-organisms to treat the effluent" produced (Urbis 2020: ii).

LEPs and laws

The site selected for the Project is upon groundwater vulnerable areas, The Harden Local Environmental Plan (LEP) 2011 (*Groundwater vulnerability*) is explicitly crafted to "protect vulnerable groundwater resources from contamination as a result of inappropriate development". We hold that Section 6.4(1) of the LEP must apply, noting also that the LEP contains a range of fundamental objectives, including the prevention of development that may harm water ways. Similarly, we hold that the Water Management Act 2000 contains provisions developed in association with the concept of "ecologically sustainable development" (ESD).

Vulnerable groundwater

The Applicant proposes the use of significant volumes of water. When combined with inappropriate site selection, especially insofar as it is upon a declared groundwater vulnerability zone, it is incumbent upon authorities and Council alike recognise this proposal as unsustainable. We hold that, therefore, the proposed Project fails to follow the objective(s) of local and state legislation.

Absence of vital information

Similarly, the absence of a comprehensive and independent audit of potential groundwater contamination places the local community, ecosystem and economics at substantial and avoidable risk.

PLANET
WATER

The Murrumbidgee

The primary drinking water source for Harden-Murrumburrah is the Murrumbidgee River. Many communities rely on it as their source of water and have done so for decades (Icon Water Ltd 2020). The Wagga-Wagga based Riverina Water County Council cites the Murrumbigee as a "major surface water source" (RWCC 2006).

Vulnerable groundwater

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Absence of vital information

Similarly, the absence of a comprehensive and independent audit of potential groundwater contamination places the local community, ecosystem and economics at substantial and avoidable risk.

The Murrumbidgee

PLANET

AIR & ODOUR

The selection of a site for an operation of this kind is paramount.

Industry Guidelines

The 2004 APL Guidelines for Establishment of Intensive Piggeries (NEGIP) cites odour, dust, noise and traffic as particular concerns (APL 2004: 20). The 2018 APL *National Environmental Guidelines for Indoor Piggeries* also cites impacts on community amenity, including odour, dust, traffic and visual (APL 2018: 18).

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Insufficient information

Topography is similarly important, especially insofar as it impacts upon watercourses, drainage and flood lines, protected land and nearby residences (APL 2004: 21). We do not believe that the Applicants have sufficiently addressed these impacts, particularly how these may interact and negatively effect sensitive receivers, such as the Harden Murrumburrah township approximately 5km away.

Fig. 2. Effluent pond
Australian Pork Ltd (APL)

Images courtesy of Aussie Farms

WASTE

Large operations mean large manure and effluent

In early November 2019, the American Public Health Association (APHA) published a policy statement concerning "new and expanding concentrated animal feeding operations [CAFOs]". It explained that animal protein production practices and systems have dramatically changed over time, particularly insofar as once small to medium-sized farms are now characterised by far larger operations that "concentrate large numbers of animals and their manure in relatively small geographic areas" (APHA 2019).

If approved, the proposed intensive facility will produce vast amounts of effluent, defined in the EIS as "liquid wastewater, including manure, waste feed and cleaning water" (Urbis 2020: iii). The "Effluent Reuse System" cited in the EIS includes the use of CAPs (see above). The design of the sheds allows effluent to be collected in pits or channels under the slatted flooring (Urbis 2020: iii).

WHAT IS BIOGAS TECHNOLOGY?

Natural degradation of organic matter enables the production of biogas by microorganisms under anaerobic conditions (Scarlat et al. 2018). It is a system that has been adopted elsewhere in world, including American meat-processors (Smithfield 2018). Yet the social embrace of biogas is "often hampered by environmental and health concerns" (Paolini et al. 2018: 899).

Figure 31 – Indicative photograph - methane flare

Source: Blantyre Farms Pty Ltd

DISEASE

Emerging zoonotics

Most pandemics, including HIV/AIDS and Covid-19 (SARS-CoV-2), are caused by viruses that originate in animals and are "driven to emerge by ecological, behavioural or socioeconomic changes" (Morse et al. 2012: 1956). An estimated 60% of human infectious diseases are caused by pathogens shared with wild or domestic animals (Karesh et al. 2012: 1936). "Coronaviruses" cause respiratory infections in animals and humans, though they were not considered to be significantly pathogenic until the outbreak of Severe Acute Respiratory Syndrome (SARS) in 2002 (Cui et al. 2019). Zoonotic diseases are infections that naturally transmit from vertebrate animals to humans, and/or vice versa (Wang and Crameri 2014: 569). Bats have been shown to be natural reservoirs of many viruses (Hu et al. 2015). Covid-19, for example, has a controversial origin (Beaumont 2020). Pangolin-CoV is over 90% identical to SARS-CoV-2 at the whole-genome level (Zhang et al. 2020).

Australia on high alert

In 2005, the World Health Organisation's (WHO) Western Pacific Region and the South-East Asia Region created the Asia Pacific Strategy for Emerging Diseases (APSED) (WHO 2008). Though apparent in pigs as early as 2016, African Swine Fever (ASF) has entered Western Europe and Asia (AHA 2020b). It has been labeled a "realistic" possibility in Australia by the pig meat industry (APL 2020). By March and early May 2020, the threat had put "Australian biosecurity on high alert" (Honan et al. 2020). At the same time, Federal Minister for Agriculture David Littleproud issued a media release stating that the Australian Government's $66.6 million ASF response package was entirely earmarked for the Australian pig meat industry, as it "is not a public health concern" (Littleproud 2020).

CONCLUSION

We believe that the arguments above provide Council with a necessary alternative opinion.

We believe that, in addition to the threats and impacts outlined above, when considered collectively present strong cumulative impacts.

We believe that Council is obliged to apply the "precautionary principle", especially insofar as it provides for the conservation of ecological communities and ecosystem integrity.

The EIS states that consent is sought for a range of activities, including water licensing for usage and extraction. We encourage relevant government agencies and departments that provide General Terms of Approval, such as the EPA, to refuse to grant all licences sought by the Applicant.

We believe that the Project as submitted is an inappropriate development as per the Harden Local Environment Plan.

We request Hilltops Council, as consent authority, to refuse Blantyre Farms application for an intensive factory farm piggery in Harden, NSW.

We strongly believe that DA2020/0005 must not be approved.

We thank Hilltops for the opportunity to provide this objection to DA 2020/0005. We trust that this document will be thoroughly and transparently considered.

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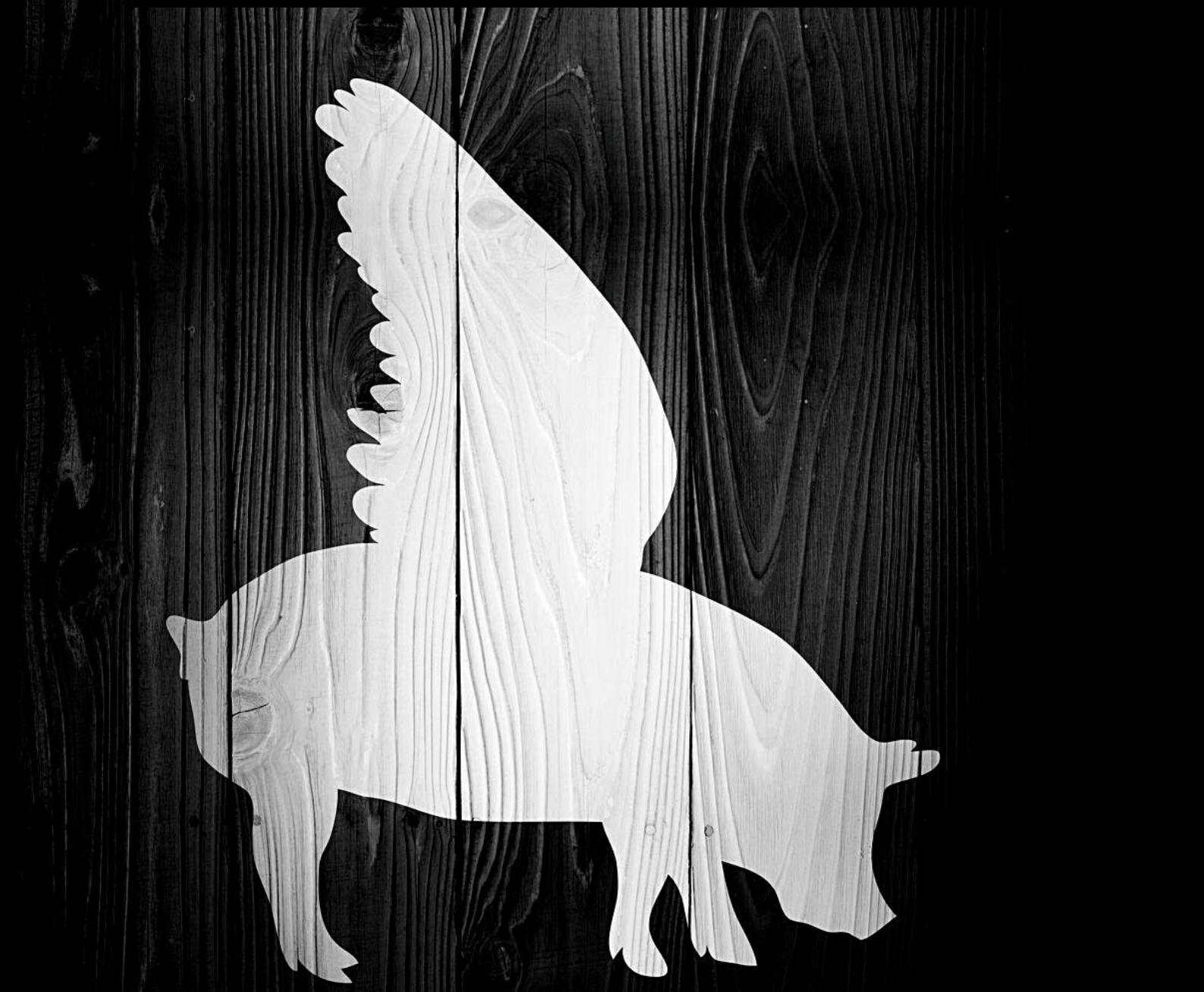


APPENDIX 1

"THE FIVE FREEDOMS"

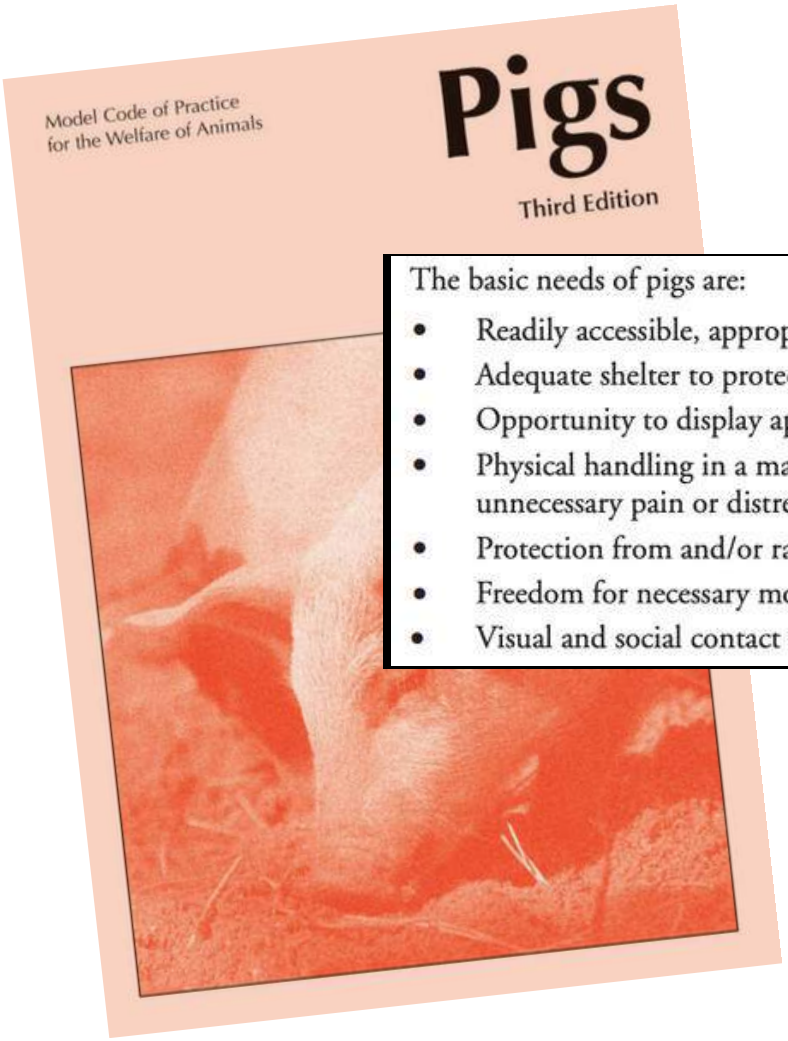
THE FIVE FREEDOMS

ADAPTED FROM WADIWEL (2015)

1. FREEDOM FROM HUNGER AND THIRST
2. FREEDOM FROM DISCOMFORT
3. FREEDOM FROM PAIN, INJURY AND DISEASE
4. FREEDOM TO EXPRESS NORMAL BEHAVIOURS
5. FREEDOM FROM FEAR AND DISTRESS

APPENDIX 2

MCOP, PIGS & FIVE FREEDOMS



The basic needs of pigs are:

- Readily accessible, appropriate and sufficient food and water;
- Adequate shelter to protect from climatic extremes;
- Opportunity to display appropriate patterns of behaviour;
- Physical handling in a manner which minimises the likelihood of unreasonable or unnecessary pain or distress;
- Protection from and/or rapid diagnosis and correct treatment of injury or disease;
- Freedom for necessary movement including to stand, stretch and lie down;
- Visual and social contact with other pigs.

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