

ESSENTIAL SERVICES FOR THE DAIRY SECTOR

To guide state and federal governments in establishing essential services lists, Dairy Australia has developed this **list of associated services and industries which dairy farmers rely upon** to produce safe food, to ensure the welfare of their cattle and ensure business continuity. Also in this document, is a similar list of **associated services and industries which milk processors rely upon** in their role in transporting, processing, packaging and delivering safe dairy products.

These lists have been contributed to by dairy farmers and milk processors through Australian Dairy Farmers, State Dairy Farmer Organisations, Australian Dairy Products Federation and the regional farmer boards of Dairy Australia.

The lists are as comprehensive as possible in developing in a short time frame, though is evolving as additional information is provided. This list is current as of **3 August 2020**.

On-farm essential services

Please note – this is guide to what is deemed as essential services, and not a definitive list.

Service	Frequency of visit	Description	Alternative	Possible ramifications
Farm workers	Daily	<p>86% dairy farms rely on staff, many of which do not live on the farm. Dairy farms typically range in size from ~100 cows to 2000 cows, with the typical cow:person ratio of 1 person to 100/150 cows. Some businesses may have over 15 000 cows over multiple locations.</p> <p>Due to the hours required by dairy farm workers (milking regularly starts at 5-6 am, and afternoon milking finishing around 6 pm), staff mostly choose to live close to minimise commute time. For border regions, this may be in another state.</p>	Staff living on farm required to do all work.	<p>This is not sustainable beyond a week, especially for larger farms.</p> <p>Fatigued staff are more likely to have accidents, and less able to provide the care required for cattle and calves</p>
Milk processors/ tanker access	2 x day / every 2 days	<p>Pick up of milk via milk tanker, operated by tanker driver.</p> <p>Mostly employed by milk processor, some by third-party transporters</p> <p>Contact milk vat and surrounds</p>	Dumping of milk. Environmental issues if done for more than 2 milkings	<p>Loss of milk supply and important food source for population</p> <p>Welfare implications for cattle not milked</p> <p>Environmental issues of dumped milk</p>
Veterinary services	Time critical when required	<p>Vital for treatment of sick or injured animals</p> <p>Preventative treatment/access to medications</p>	Euthanasia of cattle Animals untreated for minor illnesses (mastitis)	Poor welfare outcomes for animals, and associated community trust issues

<p>Mechanical support: Milking machine technicians/ refrigeration technicians/ plumbers/ electricians/ mechanics</p>	<p>Time critical when required</p>	<p>Specialised machine technicians required to fix plant breakdown</p>	<p>Milking unable to occur or occurs to sub-optimum standards</p>	<p>Low risk but potentially large ramifications ⑦ see milk tanker ramifications</p>
<p>Fuel delivery</p>	<p>Weekly – Monthly</p>	<p>Most farms have fuel tanks on farm for generators, tractors, pumps, other machinery</p>	<p>Do not use the machinery</p>	<p>Some dairies in more remote regions are run from generators - no fuel would prevent cows from being milked. Other machinery is required for feeding cattle and other essential on-farm tasks, especially if contractor access is limited</p>

<p>Stockfeed supplier –</p> <p>Grain merchant, stockfeed mills, other farmers selling fodder</p>	<p>Weekly – Monthly</p>	<p>Delivery of grain, fodder, calf milk powder to farm</p> <p>Most farms (90%+) require external stockfeed supplies to maintain production</p>	<p>Rely on grass/stored feed only</p>	<p>Large drop in production as grass is low-density feed</p> <p>Use of stored feed supplied required for future, leading to longer-term issues</p> <p>Potential welfare implications (metabolic disease, starvation etc)</p>
<p>Essential consumables:</p> <p>Chemical + milking equipment sales/delivery</p> <p>Access to rural supplier</p>	<p>Weekly – Monthly</p>	<p>Cleaning and sanitising chemicals for vats and milking plant - essential for food safety</p> <p>Gloves, teat dip, other personal protection equipment – required for hygienic milking and preventing the spread of mastitis</p>	<p>Reduce or dilute chemicals to make stretch</p> <p>Wash with water only</p>	<p>Implications for food safety of milk produced</p> <p>welfare implications – reduced or improper use of teat dip can lead to increased rates of mastitis.</p> <p>Ineffectual plant cleaning will also lead to the spread of mastitis</p>
<p>AI Technicians, access to genetic/semen supplies</p>	<p>Daily in joining periods</p>	<p>Artificial insemination is used by 87% of farms, breeding most of the replacement cows</p> <p>Some farmers are trained, but others rely on external services</p> <p>AI techs provide skilled services, and may also transport semen to the farm</p> <p>18h period to inseminate cow once she comes on heat. If missed, will only return on heat in 3 weeks</p>	<p>Use herd bulls if available</p> <p>Farmer AI if have equipment and trained</p>	<p>Missing joining will lead to late calving cows, which may lead to an increase cows being induced. Farms match calving period to peak feed availability. Missing this will have long term production impacts.</p> <p>Access to enough herd bulls to complete entire herd will be limited (3 bulls per 100 cows required)</p> <p>Herd bulls limit the genetic gain of the herd, and are a safety risk to staff</p> <p>Inexperienced farmer AI may lead to low pregnancy rate, and a potential risk of increased request for routine calving induction</p>
<p>Farm contractors – Seeding/ silage/ hay/</p>	<p>Time critical when required</p>	<p>Provide contracting services for essential tasks on farm often requiring specialised equipment</p>	<p>Delay task – which may lead to missing short</p>	<p>Severe longer-term production loss, reduced or inability to preserve stockfeed.</p>

effluent spraying/ fencing/ fertiliser			window for seeding/harvesting/etc	<p>Low risk activities as limited need for contractor to exit the vehicle, except for opening gates</p> <p>Fire affected regions may still be refencing, reseeding property</p>
Knackery services	Varies as needed	<p>Remove carcasses of animals unsuitable for abattoir</p> <p>Often provide euthanasia services for farmers unable or unwilling to do so themselves (est. 16% nationally, 20% in Vic)</p>	Carcasses disposed of on farm	<p>Environmental issues with disposal of stock and water table</p> <p>Managed at a council level</p> <p>Issue for farms euthanasing calves at birth (calf bins supplied by knackery)</p> <p>Potential for euthanasia to be delayed or not performed where required – serious welfare implications.</p> <p>Potential for dangerous levels of overstocking if bobby calves retained in numbers beyond farm's rearing capacity</p>
Direct consign animals to abattoir – Bobby calves	Twice weekly if needed	<p>Many farms (especially in more intensive dairy regions) do not have the infrastructure capacity to house all calves born on farm, relying on regular pick up of 5-day old bobby calves.</p> <p>Calves are picked up from designated pens and loaded onto trailers or trucks by truck driver/stockperson</p>	<p>Growing out/holding back calves until service resumes</p> <p>Euthanasia on farm</p>	<p>Potential for dangerous levels of overstocking if bobby calves retained in numbers beyond farm's rearing capacity</p> <p>Ethical/community trust issue</p> <p>Emotional/mental health risk for some farmers</p> <p>Environmental issues with disposal of stock and water table</p>
Direct consign animals to abattoir – Adult animals	As needed	Cull cows may have health issues which are still fit to transport to abattoir but may deteriorate if not sent or treated (withholds would then need to be applied).	<p>Prolonged treatment/keeping animals on farm/Euthanasia</p> <p>(poor cases animals may not be treated and left in poor welfare state)</p>	<p>Potential for dangerous levels of overstocking if cull cows are retained once replacement stock come into milk</p> <p>Animals may not be treated for illness/injury</p> <p>Ethical/community trust issue</p>

		Stocking rates/feed supply may also be an issue if prolonged interruption to services		Environmental issues with disposal of stock and water table
Stock transporter		Stock transporters move cattle from farm to farm or to stockyards. Farmers rely on transporters to move animals from outblocks/agistment back to main farm, or to move dry or young stock off farm Transporters may also transport herd bulls to farm	Animals remain in location	Potential welfare implications (metabolic disease, starvation etc) of overgrazing and reduced access to feed Access to herd bulls – and joining at the correct time – may be limited
Non-veterinary disbudding contractors	limited time frame when required	Provide skilled contracting services to cauterise horn buds to prevent horns from growing Time sensitive as must be performed under 2 months of age Service also provided by veterinarians but would not have enough capacity to cover all dairy farms	Remove horns as older animals Leave horns	Removing horns from older animals is a welfare concern, as it is significantly more invasive and painful. Leaving horns on the animals is a health and safety concern for staff and other animals.
Non-veterinary animal husbandry services – pregnancy testing, hoof trimming	As required	Provide skilled contracting services to perform animal husbandry tasks	Use veterinary services, which may not be available in that region, and vets may only be performing emergency tasks	Missing time brackets for essential husbandry tasks Reduced welfare if hoof trimming and lameness mitigation not able to be performed
Technical Support Agronomists		Provide technical support to farmers, often requiring physically looking at part of the farm Should be able to physically separate from other staff on farm	Online/phone communication	Challenges will arise for more technical issues that arise that are hard to understand remotely. This may lead to ongoing plant pest and weed issues

Farm essential services which can be delivered remotely or contact-free

Service	Frequency of visit	Description	Alternative	Possible ramifications
Technical Support Milk processor field officers/ Nutritionists/ stock agents/ extension officers		Provide technical support to farmers, often requiring physically looking at part of the farm/animals.	Online/phone communication	Challenges will arise for more technical issues that arise that are hard to understand remotely. This may lead to ongoing milk quality, nutritional, and pest issues.
Farm business consultants/ bank staff/ rural financial counsellors / health and wellbeing counsellors Accountants/ bookkeepers	Varies	Provide technical support to farmers, requiring access to paperwork/office	Online/phone communication May need paperwork sent/dropped	Production and decision making support may be less detailed/tailored Tax and reporting requirements may be delayed
Herd testing	Monthly – quarterly (51% farms herd test)	Test milk to assess quality and production from individual cows to assist in treatment and production decisions Farmers can be provided the equipment, or a technician assists on farm	Either not occur, or the equipment could be dropped off and picked up later	Production information and culling decisions are less precise

Off-farm essential services

Service	Frequency of requirement	Description	Alternative	Possible ramifications
Milk processor, including factory staff	Daily	Process milk post-delivery from farm	Dumping of milk. Environmental issues id done for more than 2 milkings	Loss of milk supply and ability to produce safe dairy products (milk, cheese, yoghurt, butter etc) for consumption. Important food source for population. Welfare implications for cattle not milked Environmental issues of dumped milk
Abattoir	Weekly in calving periods	Process animals (bobby calves, cull cows and dairy beef)		
Rural resellers	Weekly – monthly	Provide essential equipment and supplies, including cleaning chemicals for the dairy, calf milk powder, dog food, some grain supplies (eg. for calf grain)		
Grain/stockfeed supplier	Weekly – monthly	Store, mill, blend or process grain for animal feed Most farms (90%+) require external stockfeed supplies to maintain production		
Semen/Genetics suppliers	Joining periods	Breed, collect and store, or import and store genetics Supply genetics/semen through to famers and techs to artificially inseminate cows		See “AI Technicians”

Liquid nitrogen
supply

Joining
periods

Required for storing semen

See "AI Technicians"

Rural telecommunications networks (4G, NBN)	Constant	Telecommunications networks required for accessing information, contacting staff and for farmers to communicate expectations for on-farm biosecurity and human health		Loss of access to information will lead to more farmers visiting others to seek information. Spread of disease on farm will stop food supply and lead to potential animal welfare implications.
Seed suppliers		Access to seed is important for maintaining feed supply for cattle, especially in regions using multiple crop rotations eg. maize, summer crops, annual ryegrass, etc. Regeneration of permanent species (ryegrass, Lucerne)	n/a	
Calf scales/saleyards		Many farms (especially in more intensive dairy regions) do not have the infrastructure capacity to house all calves born on farm, relying on regular sale of calves through calf scales or sale yards	Growing out/holding back calves until service resumes Euthanasia on farm	Potential for dangerous levels of overstocking if bobby calves retained in numbers beyond farm's rearing capacity Ethical/community trust issue Emotional/mental health risk for some farmers Environmental issues with disposal of stock and water table

Processor Site essential services

Please note – this is guide to what is deemed as essential services, and not a definitive list.

Service	Frequency of visit	Description	Alternative	Possible ramifications
Milk processor, including factory staff	Daily	Process milk post-delivery from farm	Dumping of milk. Environmental issues id done for more than 2 milkings	Loss of milk supply and ability to produce safe dairy products (milk, cheese, yoghurt, butter etc) for consumption. Important food source for population. Welfare implications for cattle not milked Environmental issues of dumped milk
Milk Freight	Continuous	Delivery of fresh milk off farm to the factory. This includes services (mechanical, testing) and fuel	Milk dumped on farm.	Disastrous environmental and economic implications.
Finished Goods Freight	Daily	Collection of finished goods for distribution to market and external warehouses	None	<ol style="list-style-type: none"> 1. Unable to process milk 2. Product dumping/ environmental impact. 3. Economic – no product clearance / storage full
Stock food Freight	Daily	Third party cartage of by-products as liquid stock food to farmers/farms.	Use internal fleet	Unable to process milk

Couriers – Sample Collection	Daily	Samples are collected from processors and taken to laboratories within 12 hours of milk collection for analysis	<ol style="list-style-type: none"> 1. No sample testing 2. Set up internal laboratories 	<ol style="list-style-type: none"> 1. Unsafe food products 2. Cost and time (6 -10 weeks) to set up and train people
Couriers – General Parcels	Daily	Documents and small parcels for continuity of operations and supply chains	Reduce frequency	Delayed supply chain and product availability
Hard Waste Collection	Weekly or more	Rubbish collections to landfill	Stockpile bins until they reach capacity	Hygiene risk of uncollected waste
Organic Waste Collection	Weekly or more	Dairy sludges associated with WWTP.	Dump to TW or lagoon systems	<ol style="list-style-type: none"> 1. Unable to process milk. 2. Licence breach and odours.

Packaging	Daily/weekly	Delivery of product packaging elements - including labels, closures, secondary packaging etc.	<ol style="list-style-type: none"> 1. Stockpile packaging needs for next six months. 2. Make product to suit available packaging. 3. Stop production & dump milk 	<ol style="list-style-type: none"> 1. High upfront costs, reduced warehouse storage and reduced packaging flexibility. 2. Grow inventories of products that market does not have a home for. De-valuing of product mix. 3. Disastrous environmental and economic implications.
Ingredient Freight	Weekly	Delivery of ingredients required for making food products	Make food stuffs that do not meet market requirements	Grow inventories of products that market does not have a home for. De-valuing of product mix.
Ingredients Suppliers	Daily/Weekly	Suppliers of ingredients (salt, sugars, macro ingredients)	None	Unable to process milk and/or deliver customer orders
Technicians & Service Contractors	Multi Weekly	Maintain continuity of operations	Plant failure & milk losses	Environmental and product supply
Chemical & detergents Deliveries	Weekly	Chemicals and detergents to clean plants at required 24-hour intervals or more frequent	Build stockpiles of packaged chemicals, still require same frequency of bulk deliveries	Safe chemical storage and Dangerous Goods Food Safety pre-requisite
Laundry services	Daily	Need clean uniforms every day to operate	Establish means of cleaning uniforms onsite	Space availability onsite will likely limit this option and require time and investment to build and implement uniform cleaning facilities. No uniform cleaning will result in unacceptable food safety risk and halt of production.
PPE supply	Weekly	Cannot operate without relevant PPE (hair nets, overalls, earplugs)	None	Unacceptable food and personal safety risks. Stop in production

Contract cleaners	Daily	Food safety	Train staff in commercial cleaning practices	1. Unsafe food products Cost and time (6 -10 weeks) to set up and train people
Casual labour hire	Daily	Labour Hire Services for Casuals employees	Use only existing part/full-time contracted personnel to fulfill all site labour needs	<ol style="list-style-type: none"> 1. Burn out of staff through excessive overtime. 2. Increased COVID-19 transmission risk through shift overlap. 3. Skilled staff diverted to unskilled tasks. 4. Inefficient production. 5. Increased food and personal safety risk through staff diversion and exhaustion.
Pest Control	Weekly	Pest control specialists supply & handle poisons and assess hundreds of bait stations	Bring in-house and train	OH&S issues and Pest outbreak if not addressed
Yard Maintenance (Gardeners)	Weekly	For pest control	Bring in house & Train people	People still required to do the service
Specialists & Consultants	Infrequent but important if needed	Trouble shooting difficult situations	Internal knowledge base	Sub optimal performance
Recycling Collection	Weekly can delay	Recycling collection	Stockpile	OK until not enough space

Processor Off-Site

Service	Frequency of requirement	Description	Alternative	Possible ramifications
Laboratories – Milk & finished products	Daily	Test dairy products for safe release to market	None	Unsafe food stuffs for consumption
Laboratories – Environmental Testing	Daily	Test water (GW, SW, raw water), wastewater, soil, etc for environmental quality purposes.	None	EPA regulatory non-compliance
Stockfood Receivers	Daily or weekly	Receive stock food/by-product materials from sites	Dump to lagoon or TW	<ol style="list-style-type: none"> 1. Unable to process milk 2. Licence breach and odour
External Warehouse facilities	Daily	Off site warehousing for storage of products often run by third parties	Dump milk	Disastrous environmental and economic implications.
Third Party supply chain to port	Daily	Move products form distribution centre to the market domestic and export	Build inventory	Inventory grows to unmanageable levels and cease of cash flow
Port	Daily	Port operation essential	Build inventory	Inventory grows to unmanageable levels and cease of cash flow
Spare Parts Suppliers	As required	Maintenance hungry assets must have available parts	Run plants to failure or buy massive stock of parts	Plant failure
Liquid waste	As required	Factories cannot operate without supporting services to dispose of waste from washing of plant and equipment.	Unable to make products fit for human consumption	Hygiene failure EPA non-compliance

Personal hygiene	As required	Supply of toilet paper, sanitisers, paper towel, tissue (across the board)	Meeting hygiene and safety standards.	Hygiene and safety risk Minimise COVID – 19 spread
Chemical & Detergent Supply Companies	As required	Chemical delivery to site as per schedules	Dump milk	Plants cannot operate without cleaning chemicals. Significant environmental and economic implications.

Processor essential services which can be delivered remotely or contact-free

Service	Frequency of requirement	Description	Alternative	Possible ramifications
Equipment Service Suppliers	As required	Skilled people required to be available to maintain plants	Run plants to failure	Plant failure
Manufacturing consumables	As required	Supply and laundry of protective clothing, hair/beard nets, protective glasses, ear plugs	Meeting hygiene and safety standards.	Hygiene and safety risk
Head office staff, consultants and contractors		Responsible for day-day business operations (Includes; sales, R&D, packaging/ logistics, marketing, finance, nutrition, legal, strategy, IT)	Online/ phone communication Reduce staff numbers	All elements of business operations, ultimately impacting production.