

Reason for Standard

Meat provides an important nutrition source for many people and cultures, but as industrial livestock production has grown over the past several decades, so have the animal welfare, climate, and human health impacts of raising animals for food.^{i,ii,iii}

Most animal welfare concerns stem from large-scale, industrial livestock operations. Within these operations, large quantities of animals are housed and fed in crowded conditions usually without access to pasture or the outdoors. Animals in these operations frequently face abuse and psychological stress brought on by overcrowding and confinement.^{iv,v,vi} Industrial livestock operations often use synthetic growth hormones and antibiotics to speed growth rates and combat illness brought on by confinement and overcrowding. Some research suggests that residues of growth hormones or steroids can remain in the meat after slaughter, thus exposing consumers to synthetic hormones or steroids.^{vii} Livestock raised in confined and crowded industrial operations also increase the spread of zoonotic diseases, with pathogens more likely to spread between animals and humans,^{viii} and perpetuate antibiotic resistance, as 80% of all antibiotics sold in the United States are for use in animal agriculture.^{ix,x}

Beyond animal welfare and human health concerns, industrial livestock production poses significant environmental threats. Livestock production is responsible for approximately 12-18% of global greenhouse gas (GHG) emissions, as a source of not only CO₂, but also methane (CH₄) and nitrous oxide (N₂O).^{xi,xii} Most emissions come from a combination of animal waste, conversion of ecosystems (grasslands and forests) to intensive livestock operations, and enteric fermentation (see glossary).^{xiii} While pigs and hogs don't contribute methane from enteric fermentation like ruminant livestock, they do produce large quantities of waste containing nitrogen and phosphorous (along with drugs and heavy metal residues, such as copper), which contribute to water, air, and soil pollution.^{xiv,xv} Water and air pollution from large-scale, industrial operations can be significant.^{xvi} Compounding this issue, disparate impacts of this pollution are often experienced by underserved and marginalized communities.^{xvii,xviii}

Hogs or pigs raised in conventional operations are kept in confined indoor spaces throughout their lives, which do not allow them to express their natural behaviors. While banned in a few states (and some countries), the use of small enclosures known as gestation and farrowing crates, which severely restrict movement of pregnant or nursing sows, is still a common practice in the industry. Male pigs are almost always castrated, often without any sort of pain relief, because males can release chemicals as they go into puberty, which imparts an undesirable odor and flavor to their meat.^{xix} Pigs are often given growth promoting drugs, like ractopamine, which are associated with aggression, higher incidence of injury, death, and illness. Some consumer advocacy groups have also raised concerns that meat from animals given these drugs could pose a health risk to humans.^{xx}

While there are many concerns associated with the industrialized approach to raising animals, there are alternative production methods that can greatly reduce or eliminate many associated harms and negative impacts. For example, livestock that is certified organic must meet specific United States Department of Agriculture (USDA) regulations that are backed by a federal law known as the Organic Foods Production Act (OFPA). Under this certification program, meat, pork, poultry, and dairy producers must meet organic production requirements that often result in improved animal welfare, enhanced biodiversity, lower greenhouse gas emissions, and healthier soils that sequester more carbon.^{xxi} Organic certification also prohibits added growth hormones, antibiotics, animal byproducts in feed, and genetically engineered feed ingredients.^{xxii,xxiii}

Often building on the foundational standards of organic but many times lacking verification or a consistent definition, regenerative agriculture^{xxiv} also takes a more holistic approach to livestock production, crop cultivation, and land management. For most regenerative practitioners, animal health and wellbeing are key components of this holistic approach. Outdoor access is a foundational method for raising livestock and farmers are encouraged to incorporate animals into native ecosystems through managed or rotational grazing of ruminants, such as cows and bison, on grasslands or incorporating animals, like chickens or pigs, into forests or tree crops, a practice known as agroforestry or silvopasture.^{xxv,xxvi,xxvii}

Whether organic or verified regenerative, these practices offer alternative frameworks to conventional agriculture, which have less impact on the climate and better animal welfare outcomes.^{xxviii,xxix,xxx}

As a retailer that prioritizes the welfare of people, animals, and the planet, PCC sets high standards for the pork products sold in our stores, so that we can provide the most humane and sustainable choices for omnivorous shoppers.

Scope

This is a product-specific standard that applies to fresh hog or pig meat, including any chef-inspired raw offerings and fresh PCC Private Label sausages.

Standard

1. Products

- 1.1. All meat products sold at PCC under the scope of this standard must come from animals raised in accordance with the animal welfare requirements set forth in section 2.
 - 1.1.1. PCC encourages producers not within the scope of this standard to source meat raised from animals in compliance with the criteria outlined below in section 2.
- 1.2. All meat products within the scope of the standard must be certified organic or verified as non-GMO by the Non-GMO Project or another approved certification.
- 1.3. PCC does not accept any meat products from cloned animals or their offspring.
- 1.4. Meats should not contain any artificial colors or flavors, protein binders, preservatives, or chemicals that increase weight, water retention, or mask potential food safety indicators such as color or odor changes.
- 1.5. PCC encourages vendors to pursue third-party certification programs to verify and add credibility to sustainability and animal welfare claims (e.g., organic, non-GMO, and Animal Welfare Approved).
- 1.6. PCC encourages vendors to be honest and transparent regarding the origin of their stock and whether they maintain a closed drift/drove.

2. Animal Welfare

2.1. Habitat & Housing

- 2.1.1. Animals must not be confined to individual cages, crates, or stalls that severely limit their movement, unless health circumstances require temporary limitations of full mobility.
- 2.1.2. Animal density, both indoors and out, must allow for expression of natural behaviors, both physical and social.
 - 2.1.2.1. Pigs should be able to maintain stable social groups and engage in normal social behaviors.
- 2.1.3. Pigs should have access to outdoor spaces with direct sunlight and shaded areas, mud, and water to cool themselves in warm weather.
- 2.1.4. Outdoor access areas must not be exclusively concrete and should be covered vegetation, straw, or mulch as appropriate.

2.1.4.1. PCC encourages producers to allow pigs access to pasture or forested areas, depending on the health needs of the animals.

2.1.5. Shelters and housing must be well ventilated and allow fresh air to enter.

2.1.6. Indoor housing must have dry, mold-free bedding that is replenished, as necessary.

2.1.7. Manure should be removed from housing or shelters on a regular basis.

2.1.8. Animals must have access to housing or shelter that protects them from weather or climate extremes.

2.1.9. Predator protection measures should be in place, utilizing non-lethal predator control methods first.

2.1.10. Ammonia levels must be monitored in any indoor facilities and steps should be taken to ensure those levels remain low enough that they are not irritating to pigs or workers.

2.2. Nutrition

2.2.1. Feed must not contain genetically engineered ingredients.

2.2.2. Feed must not contain animal byproducts.

2.2.3. Feed must be distributed in a method that minimizes competition among animals.

2.2.4. Animals must have unrestricted access to clean, fresh water at all times.

2.3. Health & Handling

2.3.1. No sub-therapeutic or non-therapeutic antibiotics, hormones, or growth promotors¹ may be used in any form to control or prevent disease, or to promote growth or feed efficiency.

2.3.2. Animals must receive preventative health care for disease and/or parasites.

2.3.3. Ill animals must be provided immediate and necessary care.

2.3.4. Low-stress handling practices must be used before, during, and after transport to slaughter facilities.

2.3.5. Electric prods must not be used routine handling and used only as a last resort in emergency situations where the safety of animals or workers is at risk.

2.3.6. Any physical alterations to animals must be done by a veterinarian or trained professional and employ pain management during and after procedure to minimize stress and pain to animals.

2.3.6.1. PCC prohibits tail docking unless absolutely necessary and even then, it is recommended to remove only a minimal portion of the tail.

2.3.6.2. PCC prohibits ear notching and use of nose rings.

2.3.6.3. Castration is permitted if necessary but should be done before piglets are 7 days old.

2.3.6.4. Teeth clipping and teeth filing are discouraged but permitted if necessary.

2.3.6.5. PCC recommends seeking livestock management practices that eliminate or reduce the need for physical alterations that are used to reduce injuries among animals, such as maintaining adequate stocking densities to reduce stress and aggression in animals.

2.4. Offspring & Weaning

2.4.1. Traditional gestation and farrowing crates are prohibited; farrowing quarters must have enough space for sows to move, turn around, lie down, and nurse freely.

2.4.1.1. Farrowing bedding materials must be provided to sow in sufficient quantities and be of a type which allows sows to carry out their natural nesting behaviors. Sawdust and sand are not acceptable.

¹ Including ractopamine.

2.4.1.2. Farrowing quarters must have some form of protection for piglets from being crushed by the sow. During farrowing, sows should be able to care for and nurture their young until fully weaned.

2.4.2. Weaning must not occur until at least 28 days or at another time approved by a licensed veterinarian.

2.4.3. Piglets must not be fed milk replacer containing antibiotics, growth promoters, or animal byproducts.

2.5. Transportation

2.5.1. Transportation times (including loading times) should not exceed 10 hours.

2.6. Mortality

2.6.1. Animals must be rendered unconscious before slaughter in commercial facilities, except where smallholder farms utilize on-farm, humane slaughter practices.

2.6.2. Slaughter facilities must be regularly audited by a third party.

Standard-Specific Glossary

Agroforestry is the intentional integration of trees or shrubs with crop and animal production systems to create environmental, economic, and social benefits.

Animal Byproducts include cooking oil from restaurants and food processors, blood and blood products, pork and horse protein, feather meal, manure, and hatchery waste.

Concentrated Animal Feeding Operations (CAFO) can be defined and understood in multiple ways. The regulatory definition from the Environmental Protection Agency (EPA) simply identifies CAFOs as large-scale meat, dairy, and egg facilities (Animal Feeding Operations (AFO)) that raise animals in confinement for at least 45 days per year. However, any AFO that discharges manure or wastewater into a natural or human-made ditch or waterway can be classified as a CAFO, regardless of its size. These facilities are regulated under the Clean Water Act.^{xxxii} Regulatory definitions aside, CAFOs are commonly understood as factory farms that house large numbers of animals in inhumane conditions, relying heavily on antibiotics and growth hormones, and are major sources of air and water pollution. They contribute most significantly to climate change compared to other animal production systems, such as pasture raised animals or regenerative farms that incorporate livestock into land management.^{xxxiii}

A **drift** or a **drove** is a group of pigs or hogs.

Enteric fermentation is the digestive process in ruminant animals, including cattle, sheep, goats, and bison, which produces methane. The gas is a byproduct of digestion and is produced by microorganisms breaking down plant material.

Farrowing crates are used for sows that have recently given birth. They are similar to gestation crates but are designed for pigs to lie down on their sides for nursing. In these crates, there are metal slates through which piglets, kept in a separate enclosure, can nurse.

Fresh meats include any and all meat, poultry, and game products sold without preservatives in the refrigerated meat section of PCC.

Genetically Engineered (GE)/Genetically Modified Organism (GMO) does not have a standardized definition. (In part, this has created some of the problems for achieving GE transparency and reaching consensus on how best to identify and communicate this with consumers.) But on the whole, most would define GE food or GMOs as a living organism whose genetic material (otherwise known as DNA) has been artificially manipulated in a laboratory through genetic engineering. Genetic engineering creates combinations of plant, animal, bacteria, and virus genes that do not occur in nature or through traditional crossbreeding methods.

Gestation crates, or sow stalls, are small pens that pregnant hogs are kept in to maximize the number of animals in a barn. These crates do not allow animals to turn around or lie down with fully extended legs. Sows often remain in these stalls during their entire reproductive life, which can have significant negative welfare outcomes both physically and mentally for pigs, which are naturally intelligent, curious, and social creatures. Due to animal welfare concerns, gestation crates have been banned in a number of states in the US, including California, Colorado, Florida, Main, Massachusetts, Michigan, Ohio, Oregon, and Rhode Island.

Greenhouse gases (GHG) are those that trap heat in the atmosphere and contribute to climate change. Carbon dioxide (CO₂) is one of the most well-known GHGs, as its emissions are the largest in quantity and it remains in the atmosphere for a long time. Other GHGs include methane (CH₄), nitrous oxide (N₂O), and fluorinated gases (most commonly associated with refrigerants).

National Organic Program (NOP) was established in 2000 under the Organic Foods Production Act of 1990 to regulate the production, processing, and sale of certified organic foods in the United States. The NOP resides within the USDA and manages organic certification standards, enforcement, and accreditation of independent certifying bodies. The National Organic Standards Board (NOSB), a federal advisory committee, provides recommendations and guidance to the NOP on developing new rules and regulations related to organics certification.

Organic refers to the practices associated with organic food production and processing that prohibit the use of most synthetic inputs and pesticides and require other environmental and animal-friendly agricultural and food handling practices. Established by the Organic Foods Production Act (a federal law), the **National Organic Program** (NOP) within the U.S. Department of Agriculture manages the organic certification standards, enforcement, and accreditation of independent certifying bodies. Many other countries also have organic certification programs.

“Pasture raised” does not have a standardized definition but most definitions require animals spend significant portions of their life on vegetated, open pasture where they can graze freely. Most of the animal’s diet comes from the pastureland but are often given supplemental feed to ensure all of their nutritional needs are met. Some producers limit the definition to “seasonal pasture raised,” depending on climate conditions and the needs of the animals.

Regenerative agriculture is a holistic land management and farming methodology that focuses on increasing and enhancing soil organic matter to improve nutrient content, water retention, and carbon sequestration. Unless certified by a third party with established regenerative standards, regenerative does not have an agreed upon definition or guarantee associated with the terms use.

Ractopamine is a feed additive used in industrial factory farms to speed up weight gain and promote feed efficiency and leanness in animals. While it can be used in cattle and turkeys, it’s most commonly associated with the hog industry. It belongs to a class of drugs called beta-agonists, mimicking stress hormones and increasing the rate of converting feed to muscle; at the same time, however, it increases stress in animals, leading to behavior issues, aggression, and other health problems. Ractopamine is permitted under the FDA because it is not classified as a growth hormone, which are prohibited in pig farming. There is significant controversy around the safety and potential risks of the drug to the health of animals receiving it and the humans consuming their meat. While allowed in the United States, ractopamine is prohibited in many countries including Russia, China, and those in the European Union.

Silvopasture is a type of agroforestry that combines trees with foraging land for livestock production.

Smallholder Farms are defined as independently owned farms whose principal operator(s) owns the farm business and demonstrates a strong commitment to sustainable farm practices and animal welfare. The principal operator is the person who is responsible for the on-site, day-to-day decisions of the farm or ranch business. Any slaughter of animals on smallholder farms must take place on farm property with attention to humane slaughter practices where reasonable given farm size and scale. Gross sales of a smallholder farm must fall under \$250,000.

Sows are mother pigs who have given birth to one or more litters.

Sub-Therapeutic/Non-Therapeutic refers to a dose or concentration of a drug that is lower than usually prescribed to treat a disease effectively. For example, it can be common practice to add subtherapeutic doses of antibiotics to livestock feed to improve productivity.

Zoonotic diseases are infectious diseases that can be passed between animals and humans through direct contact or contact with contaminated vectors such as food or water. Common zoonotic diseases include the plague, salmonella, West Nile virus, rabies, and zoonotic influenza. Confinements of animals, or even people, increases the risk of spreading infectious diseases and there is growing concern that CAFOs are hotbeds for the spread of zoonotic diseases because of the close quarters, weakened immune systems of animals, excessive use of antibiotics, and improper waste management.^{xxxiii}

ⁱ EPA, “Sources of Greenhouse Gas Emissions: Agriculture Sector Emissions,” Overviews and Factsheets, United States Environmental Protection Agency, 2019, <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>.

ⁱⁱ Neus González et al., “Meat Consumption: Which Are the Current Global Risks? A Review of Recent (2010–2020) Evidences,” *Food Research International (Ottawa, Ont.)* 137 (November 2020): 109341, <https://doi.org/10.1016/j.foodres.2020.109341>.

ⁱⁱⁱ Courtney Lindwall, “Industrial Agricultural Pollution 101,” *NRDC* (blog), July 31, 2019, <https://www.nrdc.org/stories/industrial-agricultural-pollution-101>.

^{iv} “The Welfare of Intensively Confined Animals in Battery Cages, Gestation Crates, and Veal Crates” (The Humane Society of the United States, July 2012), <https://www.humanesociety.org/sites/default/files/docs/hsus-report-animal-welfare-of-intensively-confined-animals.pdf>.

^v “Animal Welfare,” *A Greener World* (blog), accessed July 12, 2021, <https://agreenerworld.org/challenges-and-opportunities/animal-welfare/>.

^{vi} The Humane Society of the United States, “An HSUS Report: Welfare Issues with the Use of Hormones and Antibiotics in Animal Agriculture,” January 2016, <https://www.humanesociety.org/sites/default/files/docs/hsus-report-issues-with-hormones-welfare.pdf>.

^{vii} Senthil Venkatraman et al., “Adverse Effects on Consumer’s Health Caused by Hormones Administered in Cattle,” *International Food Research Journal* 25 (February 1, 2018): 1–10. <https://www.proquest.com/openview/b2eb062a6ce426cffb8e6e53a84e316a/1?pq-origsite=gscholar&cbl=816390>.

^{viii} Bryony A. Jones et al., “Zoonosis Emergence Linked to Agricultural Intensification and Environmental Change,” *Proceedings of the National Academy of Sciences of the United States of America* 110, no. 21 (May 21, 2013): 8399–8404, <https://doi.org/10.1073/pnas.1208059110>.

^{ix} Jeff Moyer et al., “The Power of the Plate: The Case for Regenerative Organic Agriculture in Improving Human Health,” White Paper (Rodale Institute, 2020), <https://rodaleinstitute.org/wp-content/uploads/Rodale-Institute-The-Power-of-the-Plate-The-Case-for-Regenerative-Organic-Agriculture-in-Improving-Human-Health.pdf>.

^x “10 Things You Should Know about Industrial Farming,” United Nations Environmental Program, July 20, 2020, <http://www.unep.org/news-and-stories/story/10-things-you-should-know-about-industrial-farming>.

^{xi} Neus González et al., “Meat Consumption: Which Are the Current Global Risks? A Review of Recent (2010–2020) Evidences,” *Food Research International (Ottawa, Ont.)* 137 (November 2020): 109341, <https://doi.org/10.1016/j.foodres.2020.109341>.

^{xii} P.R. Shukla et al., “Climate Change and Land: An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems” (Intergovernmental Panel on Climate Change, 2019), <https://www.ipcc.ch/site/assets/uploads/2019/11/SRCCL-Full-Report-Compiled-191128.pdf>.

^{xiii} Giampiero Grossi et al., “Livestock and Climate Change: Impact of Livestock on Climate and Mitigation Strategies,” *Animal Frontiers* 9, no. 1 (January 3, 2019): 69–76, <https://doi.org/10.1093/af/vfy034>.

^{xiv} “FAO’s Animal Production and Health Division: Pigs and Environment,” Food and Agriculture Organization of the United Nations, November 28, 2014, <https://www.fao.org/ag/againfo/themes/en/pigs/Environment.html>.

^{xv} Paloma Sisneros-Lobato, “Industrial Farming Is Not As You’ve Pictured,” *NRDC*, August 24, 2020, <https://www.nrdc.org/experts/paloma-sisneros-lobato/industrial-farming-not-youve-pictured>.

^{xvi} JoAnn Burkholder et al., “Impacts of Waste from Concentrated Animal Feeding Operations on Water Quality,” *Environmental Health Perspectives* 115, no. 2 (February 1, 2007): 308–12, <https://doi.org/10.1289/ehp.8839>.

^{xvii} Wendee Nicole, “CAFOs and Environmental Justice: The Case of North Carolina,” *Environmental Health Perspectives* 121, no. 6 (June 2013): a182–89, <https://doi.org/10.1289/ehp.121-a182>.

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