
BACKGROUND INFORMATION REGARDING ABATTOIR PLANNING:

During abattoir planning the layout and design of an abattoir as well as the quality and design of the equipment is of utmost importance to ensure efficient and hygienic slaughter operations. Abattoirs have its own specific design that will enable the workers to slaughter and dress the carcass hygienically and that will promote easy working conditions to reduce stressful working conditions that will result in unacceptable practices in the work place.

Regulations have been promulgated to ensure that the layout of the building will enhance the easy handling of carcasses and that acceptable practices are adhered to.

The layout of the premises and the buildings must be designed so that the production moves in one direction without any crossflow of products, which may adversely affect the hygiene of the product. Carcasses are received at the “dirty or unclean” end of the abattoir and meat is out loaded from the clean side of the abattoir.

To achieve these goals it is highly recommended to employ competent persons to design and build the abattoir and to consult experts who have had first-hand experience in abattoir construction.

The first important step to consider when planning an abattoir is to determine the maximum daily throughput of each species of animal to be slaughtered. Consider next, whether sufficient number of livestock/birds can be produced on the farm to sustain the abattoir and to ensure it is a viable proposition or if livestock or birds are available in the immediate vicinity to support the envisaged daily throughput, the costs involved to transport livestock/birds to the abattoir and meat from the abattoir to the end consumer and the availability of infrastructure such as access roads, a potable and sufficient water source and a reliable electricity supply.

The second important consideration is the efficient and safe treatment and disposal of abattoir effluent, inedible and condemned material. In the past they built abattoirs on the bank of rivers to dispose of abattoir effluent and other waste. New legislation today prohibits pollution of the environment, rivers, dams and sub-surface water sources and this must be borne in mind when considering a site to construct a new abattoir. The abattoir owner must therefore consider and comply with all other national, provincial and local municipal regulatory requirements regarding these issues before commencing construction of an abattoir.

The third most important consideration is that the meat industry is a very competitive business and the cost of providing and maintaining an abattoir is very high and it is therefore essential from the planning stage to ensure if there is indeed a need for a new abattoir and that it will operate every working day of the week at maximum capacity. Prospective abattoir owners might think they can compete on the same level as existing abattoirs but they should first consider the costs involved in building an abattoir because they may face serious financial losses due to inadequate business opportunities.

If the prospective abattoir owner can positively answer these and the numerous other important factors he\she can consider building and operating an abattoir.

Factors to be considered when selecting a suitable site:

An abattoir is classified as an “offensive trade”, but the product produced is edible, highly perishable and easily contaminated! The ideal abattoir layout provides for a linear pattern of flow from the lairage right through to the dispatch door or from receiving area to dispatch door in case of poultry abattoirs.

1. Environment - pollution of the air, water and soil from the abattoir and the effect on nearby residential areas. Dust, chemicals and heavy-metal pollution from factories that could pollute the abattoir and the edible products.
2. Geological properties of the soil for construction work, the height of the underground water level and the natural slope of the land for controlled storm-water run-off.
3. Availability of services, water, power, sewerage, road and rail connections, labour and the economics involved in creating the necessary services.
4. Size and shape of the site to accommodate all facilities. Future expansions or links with processing plant must be considered.
5. The prevailing wind must blow from “clean” to “dirty”.

Before an abattoir is erected, the design drawings of such proposed construction must be submitted to the Provincial Executive Officer for evaluation and approval. A properly completed application form must also be submitted to the Provincial Executive Officer.