

Environmental impact of how carcasses from turkey's production industry are eliminated: a case study

Ricardo M. Cruz¹; Carla E.T. Ritter¹; Nelson Lima²

¹Centro Universitário UniFtec, Caxias do Sul, RS, Brazil; ²Biological Engineering Centre, Minho University, Braga, Portugal

Contact E-mail: ricameirellesc@gmail.com

Key-words: Aquifer; Composting; Dead turkey; Landfill; Soil waterproof

ABSTRACT:

The Americas is the largest turkey region in the world producing over 60% of the world total. After US, Brazil is the second largest producer in the region with more than 500,000 tons per year and, after European Union, the third producer in the world. For several reasons turkey production is prone to lost high number of effective, particularly the young poults are vulnerable to respiratory disease, outbreaks, including salmonellosis, which they become listless and, eventually, died. The production plants eliminate the turkey carcasses by composting them however when the compost facility is full, or many turkey poults died, the elimination can be done by burying them. The main aim of this work is study the practical conditions used by the production plants to landfill turkey carcasses. To perform the study a qualitative methodology was used combining the documentation analysis, including the legal framework and the company's records, and field work to make observations and interview the owner. The company chosen for this case study operated in Carlos Barbosa municipality (RS) with 5 collaborators and 12 years of uninterrupted activity, and capacity for 8,580 turkeys. In average the company lose by dead or illness around 1,500 turkeys per month and use 3 composting facilities each one with 2x1.5x1 m to disposal carcasses. Nevertheless, the company landfill nearby of its facilities dead turkeys without any control of aquifer or soil waterproof capacity. In conclusion, burying turkey carcasses needs an environmental impact assessment put in place and the incineration is not an economical viable treatment for this activity.