World Academy of Science, Engineering and Technology International Journal of Energy and Environmental Engineering Vol:14, No:02, 2020

Management Methods of Food Losses in Polish Processing Plants

Authors: Beata Bilska, Marzena Tomaszewska, Danuta Kolozyn-Krajewska

Abstract: Food loss and food waste are a global problem of the modern economy. The research undertaken aimed to analyze how food is handled in catering establishments when it comes to food waste and to demonstrate the main ways of management with foods/dishes not served to consumers. A survey study was conducted from January to June 2019. The selection of catering establishments participating in the study was deliberate. The study included establishments located only in Mazowieckie Voivodeship (Poland). Forty-two completed questionnaires were collected. In some questions, answers were based on a 5-point scale of 1 to 5 (from "always" / "every day" to "never"). The survey also included closed questions with a suggested cafeteria of answers. The respondents stated that in their workplaces, dishes served cold and hot ready meals are discarded every day or almost every day (23.7% and 20.5% of answers respectively). A procedure most frequently used for dealing with dishes not served to consumers on a given day is their storage at a cool temperature until the following day. In the research, 1/5 of respondents admitted that consumers "always" or "usually" leave uneaten meals on their plates, and over 41% "sometimes" do so. It was found additionally that food not used in the foodservice sector is most often thrown into a public container for rubbish. Most often thrown into the public container (with communal trash) were: expired products (80.0%), plate waste (80.0%) and inedible products (fruit and vegetable peels, eggshells) (77.5%). Most frequently into the container dedicated only to food waste were thrown out used deep-frying oil (62.5%). 10% of respondents indicated that inedible products in their workplaces are allocated for animal feeds. Food waste in the foodservice sector remains an insufficiently studied issue, as owners of these objects are often unwilling to disclose data about the subject. Incorrect ways of management with foods not served to consumers were observed. There is a need to develop educational activities for employees and management in the context of food waste management in the foodservice sector.

Keywords: food waste, inedible products, plate waste, used deep-frying oil

Conference Title: ICEEWM 2020: International Conference on Environment, Energy and Waste Management

Conference Location : Amsterdam, Netherlands **Conference Dates :** February 06-07, 2020