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Application of Loss Rates for Petroleum Products Due to Natural Wastage in Customs Procedures

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Abstract

Due to its geographical location Latvia has always been a noteworthy transit country. Liquid petroleum products are transported through the country on a regular basis mainly by rail or pipelines. The customs authorities should be aware of the main principles of estimation of loss to prevent avoidance of duty payment in case of unauthorized loss during customs transit procedures, therefore this study more focus on correct implementation of loss of petroleum products. The authors of the research have designed design an algorithm how customs authorities accept loss of petroleum products due to natural wastage. The customs authorities in Latvia should introduce a uniform practice regarding loss rates. Namely, for the quantities missing wherever it can be shown that the loss observed result solely from the nature of the goods, no customs debt shall be deemed to be incurred. The customs authorities have the rights to consult independent experts to determine whether losses have occurred due to the nature of goods. If it cannot be proved by an independent expert, customs authority shall only apply the standard rate of loss.

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1. Introduction

Latvia is a typical transit country. Liquid petroleum products are transported through the country on a regular basis mainly by rail or pipelines. It is important to understand and correctly apply loss rates that occur due to natural wastage and also prevent any negligence or manipulation, such as theft. Natural wastage of products depends on

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physical and chemical characteristic of petroleum products. The customs authorities should be aware of the main principles of estimation of loss to prevent avoidance of duty payment in case of unauthorized loss during customs transit procedures, therefore this study more focus on correct implementation of loss but not on losses itself.

Therefore the main problem is that currently customs legislation in Latvia does not establish standard procedure how to implement loss rates for petroleum products.

The aim of the research is design an algorithm how customs authorities shall accept loss of petroleum products due to natural wastage.

The objectives of the research are:

1. Overview of literature and regulations;
2. Analyse experience of other countries, including the regulations about estimation of loss of petroleum products due to natural wastage and its application in customs administration,
3. Analyse typical losses in practice by observation data and measurements on loss of petroleum products during receiving, loading, storage and transit using currently available technologies.

As research methodology was used qualitative analysis of scientific researches and regulations, interviews of government officials and business representatives, as well as quantitative data analysis of results from observations and measurements on loss of petroleum products during different stage of transportation and storage.

2. Overview of literature, regulations and practical experience in some countries

Losses may be caused by different factors: physical and chemical characteristics of the products, method of loading and unloading product, operations to transport the carrier to a loading terminal, characteristics of transportation equipment and others factors (Ministry of Fuel and Energy, 1998; Pellegrino *et al.*, 2004; Bhatia and Dinwoodie, 2004; Brooke and Crookes, 2007; Ramazanov, 2008; Hernández *et al.*, 2016).

These factors at different proportions may affect the total loss. Usually these factors can be evaluated after having significant practical experience in the field of transportation and storage of specific products. It is considered that the main losses are usually caused by evaporation. Special methods have been developed to estimate losses caused by evaporation under various circumstances. However, methods of calculation usually include some parameters that are hard or impossible to estimate. Therefore, the results cannot be viewed as absolute (Ministry of Fuel and Energy, 1998; Pellegrino *et al.*, 2004; Bhatia and Dinwoodie, 2004; Brooke and Crookes, 2007; Ramazanov, 2008, Hernández *et al.*, 2016).

The overall loss of petroleum products due to natural wastage is affected by the following factors:

- losses occur during loading, transit, ballasting and unloading rail tank cars, tank vehicles and marine vessels, as well as transportation of products via pipelines;
- loading, breathing, working, storage and unloading losses;
- losses that occur through sealing of technological equipment, as well as maintenance and repair work of technological equipment (Ministry of Fuel and Energy, 1998, Pellegrino *et al.*, 2004; Bhatia and Dinwoodie, 2004; Brooke and Crookes, 2007; Ramazanov, 2008; Hernández *et al.*, 2016).

Article 124 of the REGULATION (EU) No 952/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 9 October 2013 laying down the Union Customs Code (hereinafter – UCC) provides that no customs debt on importation shall be deemed to be incurred in respect of specific goods where the disappearance of the goods or the non-fulfilment of obligations arising from the customs legislation results from the total destruction or irretrievable loss of those goods as a result of the actual nature of the goods or unforeseeable circumstances or force majeure, or as a consequence of instruction by the customs authorities. For the purpose of this point, goods shall be considered as irretrievably lost when they have been rendered unusable by any person. The provisions in force pertaining to standard rates for irretrievable loss due to the nature of goods shall apply where the person concerned fails to show that the real loss exceeds that calculated by applying the standard rate for the goods in question (EU 2013).

UCC makes distinctions between losses that result solely from the nature of the goods or are due to other reasons, for instance, theft, etc. The customs authorities may waive the obligation for the person concerned to show that the

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