

LEGAL MEASURES ON SANITARY FOOD TRANSPORTATION*

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ABSTRACT

At present, Thailand has not yet regulated specific law respecting the issue on food transportation sanitation control. Although we have ministerial regulations to control the standard of some food products, and preventive measures for food quality control, there is none of regulations specifies the general rules of sanitary food transportation, liabilities of persons engaged in food transportation, and also other rules that the food transport business should follow, e.g. the temperature control, the hygiene control, and the control of vehicles used in food transportation.

Due to the fact that food is one of the four significant factors of life, it is greatly important that the food is safe when we consume. Many fresh foods are deemed perishable foods or foods that easily spoiled when being kept in improper manner. Therefore, food safety control is necessary, and transportation is one step of the food chain that takes an important role since the food comes out from the slaughterhouse, to the manufacturers, then comes to the distributors, to the markets, or to the restaurants, and finally on our plates. The consumers will never know whether the food they eat is safe along the way, the regulations for controlling the transportation of food is necessary therefor.

In this article, the author presents and compares the regulations of United States, United Kingdom, and Australia concerning sanitation control during food transport in order to apply with the problems in Thailand. The author wishes that this article will be useful for the government to adapt the foreign regulations with the problems in Thailand, which will benefit the consumers' health and protection, and will decrease the problems of food spoilage.

Keywords: carrier, clean, compensation, consumer, contaminate, contamination, control, damage, food, food chain, food safety, health, hygiene, operator, operation, perishable, product, protection, receiver, remedy, safety, sanitary, shipper, spoil, temperature, time, transport, transportation, vehicle

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บทคัดย่อ

ในปัจจุบัน ประเทศไทยยังไม่มีกฎระเบียบเกี่ยวกับการควบคุมสุขอนามัยในการขนส่งอาหาร แม้ว่าประเทศไทยจะมีกฎกระทรวงและประกาศกระทรวงที่บัญญัติควบคุมมาตรฐานของผลิตภัณฑ์อาหารแล้ว อย่างไรก็ตาม ยังไม่มีกฎระเบียบที่ระบุถึงข้อกำหนดทั่วไปในการขนส่งอาหาร หน้าทีความรับผิดชอบของผู้ที่มีส่วนเกี่ยวข้องในการขนส่งอาหาร และกฎระเบียบอื่น ๆ ที่ธุรกิจขนส่งอาหารควรปฏิบัติตาม เช่น การควบคุมอุณหภูมิระหว่างขนส่ง การควบคุมความสะอาด หรือการควบคุมยานพาหนะที่ใช้ในการขนส่งอาหาร

จากข้อเท็จจริงที่ว่าอาหารเป็นหนึ่งในปัจจัยสี่ที่สำคัญในการดำรงชีวิต การที่อาหารจะต้องมีความปลอดภัยเมื่อรับประทานจึงมีความสำคัญเป็นอย่างมาก และเป็นที่ทราบคืออยู่แล้วว่าอาหารสดเป็นอาหารที่เน่าเสียได้ง่ายหากจัดเก็บไม่ดี ดังนั้นการควบคุมด้านความปลอดภัยอาหารจึงเป็นสิ่งสำคัญ และการขนส่งก็เป็นหนึ่งในกระบวนการของห่วงโซ่อาหาร ที่มีบทบาทสำคัญนับแต่อาหารออกมาจากโรงฆ่าสัตว์ ไปยังโรงงานผลิต ศูนย์กระจายสินค้า ตลาดหรือร้านอาหาร และสุดท้าย อยู่บนจานอาหารของผู้บริโภค ซึ่งผู้บริโภคจะไม่สามารถทราบได้เลยว่า อาหารที่พวกเขาได้รับประทานนั้น มีความปลอดภัยหรือไม่ ดังนั้น การมีกฎระเบียบในการควบคุมการขนส่งของอาหารจึงเป็นสิ่งจำเป็นอย่างยิ่งขาด

ในบทความฉบับนี้ ผู้เขียนได้นำเสนอและเปรียบเทียบกฎระเบียบข้อบังคับของประเทศสหรัฐอเมริกา สหราชอาณาจักร และออสเตรเลีย ที่เกี่ยวข้องกับการควบคุมสุขอนามัยของอาหารในระหว่างการขนส่ง เพื่อประโยชน์ในการนำมาปรับใช้กับปัญหาในประเทศไทย โดยผู้เขียนหวังว่า กฎระเบียบของทั้ง 3 ประเทศ จะเป็นตัวอย่างและเป็นกรณีศึกษาให้หน่วยงานของรัฐนำมาพิจารณา เพื่อดูแลสุขภาพของประชาชนให้ดียิ่งขึ้น และส่งผลดีในการลดปัญหาการปนเปื้อนและการเน่าเสียของอาหารในระหว่างการขนส่ง ซึ่งจะเป็นประโยชน์ต่อการคุ้มครองผู้บริโภคต่อไป

คำสำคัญ: ผู้ขนส่ง, ความสะอาด, ค่าเสียหาย, ผู้บริโภค, การปนเปื้อน, การควบคุม, ความเสียหาย, อาหาร, ห่วงโซ่อาหาร, ความปลอดภัยอาหาร, สุขภาพ, อนามัย, ผู้ประกอบการ, การดำเนินการ, เน่าเสียง่าย, ผลิตภัณฑ์, การคุ้มครอง, ผู้รับ, ความปลอดภัย, สุขอนามัย, ผู้ส่ง, ทำให้เน่าเสีย, อุณหภูมิ, เวลา, ขนส่ง, การขนส่ง, ยานพาหนะ

Introduction

According to section 4 of Food Act B.E. 2522, “food” means things to eat or life preserved things i.e.

(1) Every kind of objects that humans eat, drink, keep in the mouth, or bring into the body no matter how or what factor it is, excluding drugs, psychotropic substances, or narcotic according to laws regarding such matters as the case may be.

(2) Objects that are intended to be used, or used as ingredients, in food production including food additives, color, and seasoning.

Over the past half century, the process by which food gets from the farm to the plate has changed drastically. Food contamination that occurs in one place may affect the health of consumers living on the other side of the planet. This means that everyone along the production chain, from producer to consumer, must observe safe food handling practices.¹

¹ 10 facts on food safety, World Health Organization, http://www.who.int/features/factfiles/food_safety/en (last visited July 26, 2015).

Land transportation is the greatest mode of all transportation that the food businesses use to transport goods domestically. From the 2014 domestic goods transport statistic of Ministry of Transport, 82.67 percent of all transportation is land transportation – road and rail, while other transportation mode takes only 17.33 percent², as of the following table.

Unit: Thousand Ton

Transportation Mode	2010	2011	2012	2013	2014	2014 % of total
Road	423,677	420,449	406,538	425,804	426,086	80.44%
Rail	11,517	11,288	10,667	11,849	11,817	2.23%
Inland Waterways	41,561	48,185	46,932	47,423	47,422	8.95%
Coastal Shipping	35,692	36,731	41,273	34,968	44,261	8.36%
Air Transport	104	121	131	130	122	0.02%
Total	512,551	516,774	505,541	520,174	529,708	100.00%

Source: Office of the Permanent Secretary, Ministry of Transport

Considering land transportation, road and rail, road is the greatest mode which takes 80.44 percent of all transportation, while rail takes only 2.23 percent from the statistic of 2014.

In 1991, Thailand started performing food safety program and continued developing until 2003, the “Framework on Monitoring and Control of the Quality of Agricultural Commodity and Food” was created. Then the government announced that 2004 is the year of “Food Safety” of Thailand. There are two main authority agencies designated by laws in charge of agricultural produces and food products for human consumption; Ministry of Agriculture and Cooperatives oversees the safety and quality of agricultural produces and foods produced from farm for domestic and export market, and Ministry of Public Health is responsible for safety and quality of imported food, processed food, as well as prevention and control of foodborne illnesses and outbreaks, including risk communication for consumers’ health at national and international levels. In addition, there are other support agencies such as Ministry of Interior who supervises all local administration organizations to control domestic food facilities such as supermarkets, fresh food markets, restaurants, street vendors, etc.

² การขนส่งสินค้าภายในประเทศ, สำนักงานปลัดกระทรวงคมนาคม กระทรวงคมนาคม

<http://vigportal.mot.go.th/portal/site/PortalMOT/stat/indexURL> (Domestic Transportation of Goods, Office of the Permanent Secretary, Ministry of Transport) last visited Aug. 5, 2015.

Law concerning food and people's health issues includes:

- Food Act B.E.2520
- Public Health Act B.E.2535
- National Food Committee Act B.E. 2551
- Consumer Protection Act B.E. 2522
- Land Transportation Act B.E. 2522
- The Civil and Commercial Code B.E. 2522
- The Criminal Code B.E. 2556
- Ministerial Regulations concerning food products under the Ministry of Public Health

Moreover, Thailand already has enforceable laws to remedy the injured persons in general tort cases, since the injured persons in cases regarding food poisoning or illness caused by contaminated or spoiled food are protected under Consumer Protection Act B.E. 2522 and Liability for Damages arising from Unsafe Products Act B.E. 2551.

However, there is no law directly regulating on how food should be stored and treated during transportation, the person who has the responsibility for food sanitation control, or what kind of proper vehicle for food transport is. Thailand has only sanitation guidance for practitioner and whoever involved in food transport.

Due to the difficulties of how to define what the real cause of food spoilage is, we therefore need to ensure that the food is safe from its origin until it comes to the table.

I. Rules and Laws of Other Countries regarding Sanitary Food Transportation

United States

On August 10, 2005, President Bush signed into law the Sanitary Food Transportation Act of 2005 (2005 SFTA). The 2005 SFTA amends the Federal Food, Drug, and Cosmetic Act (FDCA) to reallocate responsibilities for the transportation of food products among the U.S. Department of Health and Human Services (HHS), the U.S. Department of Transportation (DOT), and the U.S. Department of Agriculture (USDA). The new law requires the Secretary of HHS to promulgate regulations establishing sanitary food transportation practice. Such regulations will apply to shippers, motor vehicle and rail carriers, receivers, and any other persons engaged in the transportation of food. Failure to comply with these regulatory requirements would render the food adulterated and constitute a "prohibited act" under the FDCA. The 2005 SFTA went into effect on October 1, 2005.

The 2005 SFTA shifted authority for the regulation of sanitary food transportation practice from DOT to FDA. It amended FDCA Section 402 so as to render unsanitary transport adulteration, and added a new FDCA Section 416 concerning "sanitary transportation practices." Section 416(b) requires FDA to develop and implement regulations governing the safe transportation of food and food products. The new FDA regulations will apply to any "shipper, carrier by motor vehicle or rail vehicle, receiver or any other person

engaged in the transportation of food.” “Transportation” is defined in the 2005 SFTA as “any movement in commerce by motor vehicle or rail vehicle.” Thus, interstate and intrastate rail carriers and truckers, as well as shippers and receivers must comply with the forthcoming FDA regulations.

Then, the congress of United States passed Food Safety Modernization Act (FSMA) in 2011, which focuses on preventing illness from unintentional food contamination. FSMA requires U.S. Food and Drug Administration (FDA) to enact the regulations concerning transportation including air, waterways, rail and road. But currently FDA is proposing new rule - Sanitary Transportation of Human and Animal Food - which covers only rail and road transportation, not air and waterways. However, this proposed rule is likely to be the most advance food transportation implementation among other countries since it is the world’s initially developed rule with properly studies and has clear requirements for each person involved in the food transportation. Currently, the proposed rule covers meanings, responsibilities, and liabilities of shipper, carrier, and receiver on land transportation.

With some exceptions, this proposed rule would apply to shippers, receivers, and carriers who transport food in the United States by motor or rail vehicle, whether or not the food is offered for or enters interstate commerce. It would also apply to a person outside of the United States, such as an exporter, who ships food to the United States in an international freight container by oceangoing vessel or in an air freight container, and arranges for the transfer of the intact container in the United States onto a motor vehicle or rail vehicle for transportation in U.S. commerce, if that food will be consumed or distributed in the United States. The FDA would consider this person to be a shipper under this proposed rule because the person would be initiating a shipment of food by motor vehicle or rail vehicle, even if doing so from abroad, that would be entering U.S. commerce.³

Highlights of the Proposed Rule

Specifically, the proposed rule would establish requirements for:

- Vehicles and transportation equipment: The design and maintenance of vehicles and transportation equipment to ensure that it does not cause the food that it transports to become contaminated.
- Transportation operations: The measures taken during transportation to ensure food is not contaminated, such as adequate temperature controls and separation of food from non-food items in the same load.
- Information exchange: Procedures for exchange of information about prior cargos, cleaning of transportation equipment, and temperature control between the shipper, carrier, and receiver, as appropriate to the situation. For example, a carrier transporting bulk liquid non-dairy foods would want to ensure that vehicles that have previously hauled milk will not introduce allergens into non-dairy foods through cross contact.

³ *FSMA Proposed Rule on Sanitary Transportation of Human and Animal Food*, U.S. Food and Drug Administration, <http://www.fda.gov/Food/GuidanceRegulation/FSMA/ucm383763.htm> (last visited July 26, 2015).

- **Training:** Training of carrier personnel in sanitary transportation practices and documentation of the training.
- **Records:** Maintenance of written procedures and records by carriers and shippers related to transportation equipment cleaning, prior cargos, and temperature control.
- **Waivers:** Procedures by which the FDA will waive any of these requirements if it determines that the waiver will not result in the transportation of food under conditions that would be unsafe for human or animal health and that it is in the public interest.

United Kingdom

The regulations regarding hygienic food transportation of the United Kingdom are stated in the Food Safety (General Food Hygiene) Regulations 1995.

“Food business” is defined as “any undertaking, whether carried on for profit or not and whether public or private, carrying out any or all of the following operations, namely, preparation, processing, manufacturing, packaging, storing, transportation, distribution, handling or offering for sale or supply, of food”; while “hygiene” means “all measures necessary to ensure the safety and wholesomeness of food during preparation, processing, manufacturing, packaging, storing, transportation, distribution, handling and offering for sale or supply to the consumer”, and “hygienic” shall be construed accordingly.

Moreover, one of the obligations of a proprietor of a food business is to ensure that transportation of food is carried out in a hygienic way.

In Chapter IV, there states the regulations regarding transport that the vehicles and/or containers used for transporting foodstuffs must be kept clean and maintained in good repair and condition in order to protect foodstuffs from contaminations, and must, where necessary, be designed and constructed to permit adequate cleaning and/or disinfection. And where the vehicles and/or containers have been used for transporting anything other than foodstuffs or for transporting different foodstuffs, there must be effective cleaning between loads to avoid the risk of contamination.

Chapter X also states about training that the proprietor of a food business shall ensure that food handlers engaged in the food business are supervised and instructed and/or trained in food hygiene matters commensurate with their work activities.

In addition, there is guidance on Temperature Control Legislation in the United Kingdom (EC Regulation 853/2004 The Food Hygiene Regulations 2006 (as amended))⁴ which concerns ‘Foods Subject to Temperature Control’

⁴ **Guidance On Temperature Control Legislation In The United Kingdom**, Food Standards Agency, 2007, *available at* <http://www.food.gov.uk/sites/default/files/multimedia/pdfs/tempcontrolguiduk.pdf> (last visited July 26, 2015).

Australia

The Australia New Zealand Food Authority (ANZFA) developed four national standards, contained in Chapter 3 of the Australia New Zealand Food Standards Code, in consultation with State and Territory health authorities, the food industry, and other interested organizations and individuals. But three standards are applied only in Australia, which are stated in Chapter 3 of the Australia New Zealand Food Standards Code as follows:

- 3.1.1 Interpretation and Application
- 3.2.2 Food Safety Practices and General Requirements
- 3.2.3 Food Premises and Equipment

The food standards were developed in order to:

- provide more effective food safety regulations and reduce the level of food - borne illness in Australia;
- provide nationally uniform food safety standards for Australia so businesses operating in more than one State or Territory have only one set of requirements;
- replace existing food hygiene regulations that were sometimes significantly out-of-date;
- introduce less prescriptive regulations, that are simpler to comply with and give business more flexibility to determine the best way for them to comply with the requirements – providing food safety is not compromised.

Regulations on food transportation are stated in Standard 3.2.2 (10).

A food business must, when transporting food:

- (a) protect all food from the likelihood of contamination;
- (b) transport potentially hazardous food under temperature control; and
- (c) ensure that potentially hazardous food which is intended to be transported frozen remains frozen during transportation.

For the purposes of Standard 3.2.2, food that meets both of the following criteria is considered potentially hazardous;

- the food that may contain a pathogen that needs to multiply in order to cause illness; and
- the food that will support the growth of this pathogen

Food that must be stored under adequate and proper temperature control in order to prevent toxins forming as a result of bacterial decomposition is also considered potentially hazardous.

In addition, temperature control means maintaining food at a temperature of:

- (a) 5 degrees Celsius, or below if necessary to minimize the growth of infectious or toxigenic micro - organisms in the food so that the microbiological safety of the food will not be adversely affected for the time the food is at that temperature; or
- (b) 60 degrees Celsius or above; or

(c) another temperature – if the food businesses demonstrate that if the food is maintained at this temperature for the period of time, it will not adversely affect the microbiological of the food.

II. Applicable Legal Measures of Thailand

National Regulations Concerning Matters between Government and Food Providers

a. Food Act B.E. 2522

In Chapter 4 Food Control, section 25 prohibits manufacturing, importing for sale, distributing the following foods:

- (1) contaminated food;
- (2) fake food;
- (3) under - standard food;
- (4) other foods as the Minister shall determine

The authorities of the officers are defined in Chapter 6 The Officers; section 43 (4) empowers the officers to seize or freeze food or containers suspected to cause harm to public health in order to examine, and Section 43 (5) empowers the officers to seize or freeze fake food, under – standard food, or containers that may pose a danger to health of citizens. Moreover, the criminal punishments are stated in Chapter 8 from section 47 to section 75.

b. National Food Committee Act B.E. 2551

Section 3 states that “food safety” means the safety management and assurance of food and agricultural products which are consumed by humans to be safe and clean without characteristics of contaminated food according to the food law and other relating laws, including food as of the followings:

- (1) food that is contaminated with pathogens or harmful substance for health or can be stored in the body and cause the diseases or impacts on health;
- (2) food that contain chemical substances in ratio that might decrease the food quality other than such contamination is necessary for manufacturing process, production, and is permitted by the officer;
- (3) food that is unhygienically produced, cooked, baked, packed, transported, or stored;
- (4) food that is produced from animals or products from animals with diseases that may be transmitted to humans;
- (5) food that is produced, cooked, or baked from animals and vegetables or the produces containing harmful chemical substances or remaining antibiotics in ratio that might be harmful for health;
- (6) food with containers containing objects that could be dangerous for humans’ health.

c. Land Transportation Act B.E. 2522

Section 4 (1) of this Act describes “transportation” as carriage of people, animals, and goods by land, by motor vehicles. And in Section 4 (9), “motor vehicles” means every kind of vehicles used in land transportation, which operate by motor, or other sources of power, including the trailer of such vehicles, excluding trains.

Thus, this Act only applies with common goods transportation, while food is a product that requires special supervising as it tends to be spoiled easily, and should not be under conditions that can lead to contamination, otherwise the result of contaminated food may seriously impact people’s health.

National Regulations Concerning Matters between Consumers and Food Providers

a. Civil and Commercial Code B.E. 2535

In Section 608 of the Civil and Commercial Code states that a carrier, within the meaning of this title, is a person who in the usual course of business undertakes to transport goods or passengers for remuneration. And Section 616 states that the carrier is liable for any loss, damage, or delay in delivery of the goods entrusted to him, unless he proves that the loss, damage or delay is caused by force majeure or by the nature of the goods, or by the fault of the sender or consignor.

Applying with food transportation, the carrier shall be liable for the damage occurring to food if the food is contaminated, deteriorated, or rotten due to such transportation, but the carrier might defend that it is caused by nature of the food, such as rotten vegetables by the hot weather, if there is no measure or rule to control the method of good sanitary transport. However, most practitioners shall already have their own settled regulations in order to protect their business interest. Although, the regulations’ strictness may vary depending on each practitioner; some may be strict, whereas some may be loose. Therefore, there should be the standard regulations for applying to all food business in order to protect the public’s interest - people’s health.

b. Consumer Protection Act B.E. 2522

Section 4 (3) states the consumers’ right protection that they receive safety while using the products or services. For example, if the consumers get ill from consuming food, they can claim that their rights are protected under this Act.

Moreover, section 36 paragraph 2 and paragraph 3 of Consumer Protection Act B.E. 2522 also empowers the consumer protection committee to prohibit the distribution of the unsafe products or destroy if it is suspicious that the enterprises will continue selling the products.

c. Liability for Damages arising from Unsafe Products Act B.E. 2551

Section 5 describes the liability of the practitioners or operators to be jointly liable to the injured party for the damage caused by unsafe products, which has been sold to the consumer, whether the damage has been caused by willful act or negligence of the

operator or not. For example, if the consumers get damaged from food bought from a food retailer, all the operators involving in such food business are jointly liable for such damage.

Consequently, the consumers' rights are protected by Consumer Protection Act and Liability for Damages arising from Unsafe Products Act. Therefore when the consumers get damaged from food products, they have rights to ask for compensation.

Remedial Regulations

Considering applicable laws for the remedy of problems arisen from food transportation, there are section 420 of Civil and Commercial Code, section 4(3) of Consumer Protection Act B.E. 2522, and section 5 of Liability for Damages arising from Unsafe Products Act B.E. 2551 that are enforceable to compensate the injured consumers who suffer from eating spoiled food caused by improper transportation methods, which is only civil remedy.

Section 11 of Liability for Damages arising from Unsafe Products Act B.E. 2551 also empowers the court to determine the additional compensation for (1) psychiatric injury or (2) in case that the practitioners knowingly produce, import, or distribute the unsafe products, or do not know that such products are unsafe by serious negligence, depending on the situations.

Conclusions and Recommendations

To control the sanitation and standard of food transportation, the author suggests that the state agency which is accountable for sanitary food transport, in the author's opinion, the Ministry of Public Health, which is responsible for people's health, issues regulations to specify the liabilities of the food transport businesses when perform food transportation.

The specific functions of the shipper, carrier, and receiver should be regulated in new specific terms to apply particularly with food transportation operations in order to stipulate duties and responsibilities of such personnel. The regulations should be specified regarding temperature control, sanitation control, and also the category of products that can be hauled immediately before or concurrently with food products. For example, pesticides or hazardous chemical substances should not be hauled with food products even the packages are separated, because the chemical substance can leak and cause the food contaminated.

The temperature control during transportation should also be enacted in accordance with the regulation in Standard 3.2.2 of the Australia New Zealand Food Standards Code. The time control is also important if the food transportation operators cannot control the temperature during transport, the 4-hour/2-hour rule shall be applied.

Therefore, the three solutions the author suggested in Chapter 4 should be considered as ways to develop sanitary food transportation operation in Thailand. It can be concluded as follows:

Solution 1: the Ministry of Public Health shall issue a regulation that requires the food transport business to register for a license before transporting food, and also the regulations regarding requirements needed for licensing and licensing renewal method. In addition, the state agency shall legislate a regulation to control the standard of licensing and to reduce loopholes.

Solution 2: the Ministry of Public Health shall develop an enforceable rule to control the standard of sanitary food transport practices. For examples, temperature control, contamination prevention, hygiene control, time control, and specific requirements for food transportation units. At present, the ministry already has the guidelines regarding good sanitation but they are not legally enforceable, therefore, some businesses will follow in order to protect their benefits, but some might not.

Solution 3: the Ministry of Public Health shall legislate new regulations regarding the responsibilities, liabilities of the shipper, carrier, and receiver engaged in food transportation operation, which will result in more diligence while performing food transportation which will benefits the food safety standard of Thailand, and consumer's protection law, and benefits the restaurant because it can request exhaustively for compensation if the food is found spoiled or contaminated during transport.

The Ministry of Public Health should provide training for food transport enterprises, or publish the regulations and guidelines regarding sanitation in food transport and distribute to the food transport enterprises, and also to the restaurant and consumers, as a result, they can learn about their protected rights in the food case.

When the responsibilities of the shippers, carriers, and receivers engaged in food transportation are specifically regulated, the burdens of proof shall fall on the person who has such responsibility as the case may be. The benefit would be an increase of effectiveness of consumer protection law and more reliability of food transport business of Thailand.

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