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# Formal and Legal Conditions of Municipal Waste Transport Planning

Uwarunkowania formalnoprawne planowania procesu przewozowego odpadów komunalnych

The article presents the planning stage of municipal waste transport and collection, described from legal, technical and economic points of view. The paper outlines legal background of road transport, as well as requirements that a service company needs to meet, in order to perform transport. Moreover, patterns of selective waste collection are described, along with rules of waste storage and packaging used in waste management. The aim of the article is to present the rules of documentation preparing, related to waste transfer and collection that is compatible with law.

Keywords: road transport, municipal waste, provisions of law, transport centre, legislative directive, transport operation

## Introduction

Connection to nature has been an inherent part of human life for centuries. As we know, scientists scrutinize an impact that humans exercise on the environment, which became known as anthropic pressure. Interestingly, most of current ecological problems stem from anthropogenic factors. Contemporary rules of waste management are based on quite restrictive laws, however result in relatively high safety standards, and solutions directed at reducing the amount of waste. Most waste transport undertakers perform services largely for communes. Legal acts concerning waste management introduced in Poland initiated this course of events. Adjustment of legal regulations to European standards was vital, and as a result, municipal undertakings need to meet additional requirements concerning waste sorting and transport.

### 1. Legal requirements

### 1.1. Waste treatment undertaking - legal characteristics

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, is the main Community legislative act that regulates issues related to waste management. Article 23 of the mentioned act, presents subject areas in a precise way. The aim of the directive is to protect human health, and environment from the negative impact of waste. It defines requirements that need to be fulfilled to make the handling of waste more effective, and safe for the environment. It also determines the hierarchy of waste handling, and ways its of disposal [1]. This legal act aims at limiting the amount of waste, and proper labelling of hazardous waste. Moreover, it outlines ways of hazardous waste record keeping, and presents management plans that are required. Further, it establishes solutions connected with waste reduction, and identification of new waste recovery methods. Development of recycling, has an impact on a better standing of the natural environment, and in turn, better and healthier human lives. The rules of directive determine the hierarchy of waste dealing, which promotes the re-use of energy. An important principle set forth in this matter says, that the costs of waste management shall be borne by waste producer, who is obliged to take the products that were not disposed of. The process of hazardous waste management should be carried out on terms providing protection for soil, water and air [2]. The handling process should not produce noise or unpleasant smell, that can be troublesome for people living in the neighbourhood. Furthermore, authorized bodies of the European Union drew up plans, that are supposed to reduce the amount of waste. Suggested standards that countries should follow, are supposed to reduce household waste by 50%, and construction waste by 70% [1].

Directive 2006/123/WE of the European Parliament and of the Council of 12 December 2006 is yet another significant Community act, that pertains to services. It stipulates that providing services in the European Union should be partly liberalized. Free movement of services consists in temporary providing services in another Member State, without entry into the records, business register or special permission. The assumptions formulated in Article 10 of the Directive define [3]: Supervision and simplification of administrative procedures, related to service activity pursued by Member States [3]:

- 1. Creating single points of contact that handle service suppliers.
- 2. Providing suppliers and recipients with an easy access to information, that refer to:
  - requirements, procedures and formalities to be followed in order to provide services,
  - o contact details of competent authorities that regulate service activities,
  - criteria and conditions for the access to public registers, and databases on providers and services,
  - the means of redress in the event of dispute between competent authorities and the service provider, and the recipient or providers,

- contact details of the associations or organizations (other than competent authorities), from which providers or recipients may obtain practical assistance.
- 3. The use of procedures by electronic means [4].

In order to conduct a selective waste collection, the following rules should be taken into consideration [5]:

- sorted waste should not be contaminated (see example in box),
- plastic bottle caps should be removed and placed in suitable containers,
- waste should occupy as little space as possible e.g. bottles/plastic containers need to be crushed by bottle compactors,
- if waste qualification is unclear, it is advisable to place it in mixed waste container, rather than improper, sorted waste bin.

Currently the communes are solely responsible for waste collection from property owners. As an option, waste collected from uninhabited properties may be managed by a commune. Choosing an operator that would provide waste collection services is done through tender. As far as waste management fees are concerned, they are set individually by local government authorities, depending on a type of properties. In case of owners of inhabited properties, the following factors influence the fee [2]:

- number of property residents,
- consumption of water from a property,
- estimated surface area of the premises.

A commune chooses one or more of the above mentioned criteria that influence a fee. The final fee is a multiplication of a chosen factor and waste management rate, determined by the commune. In turn, fee for uninhabited properties comprises a multiplication of declared waste containers and rate fixed by the commune [6].

Determining waste management rate depends on the following aspects:

- population of the commune,
- amount of waste produced in the commune area,
- waste management costs.

Fees charged for waste management are commune's income and cover the costs of:

- reception, transport, collection, recovery and waste disposal,
- creation and activity of separate waste collection points,
- administrative support of the system,
- raising public awareness of proper waste treatment.

Payment of fees is a guarantee that all types of municipal waste will be taken from the property.

## 1.2. Rules of waste transfer and collection

Third part of the article outlined requirements related to keeping waste management inventories, and proper storing at the moment of its generation. One can find waste distribution to the recipient, another intrinsic element of a logistic supply chain. Moreover, there are certain rules that specify conditions of a proper waste reception. In accordance with the provisions of the Act on Waste of 2013, waste producer may transfer waste only to an authorized entity, and the term 'waste management' covers its collection and recovery [1]. An undertaking that handles waste has an authorization to collect, recover (process waste), or both collect and recover waste, issued by the environmental protection body. A service company that intends to transfer waste, needs to look for a company that is authorized to perform waste collection and treatment [7].

An entity that collects waste should be authorized to:

- transport waste (from the place of its production to the place of reception, confirmed on waste transfer note, that should contain waste code and expiration date of the license)
- license to collect/process waste (our waste code needs to be included in the decision).

One should remember that waste is transmitted with waste transfer card, drawn up by waste producer, given to waste receiver. The transfer card is issued one for each party: waste holder, receiver, and carrier. To the moment of waste transfer to a receiver (confirmed with a stamp and a signature in third column of a transfer card), the responsibility for produced waste rests upon a producer. A copy which goes to the carrier is a document that relates to simplified waste record. Further, waste producer is obliged to keep waste records, take care of annual submission of the statements on types, amount of produced waste, manners of waste management and present it to the Marshal's Office. Relevant Province Marshal requires that data on types, amount of waste, methods of treatment, installations and equipment used for waste recovery and disposal is to be transferred up to 15 March of the following year for the previous calendar year (so-called reporting year) [7]. These requirements result from the Article 75 (1) of the Act on Waste: "Waste holder keeping waste record is obliged to draw up comprehensive information on type, amount and manner of waste treatment, installations and equipment used to recover and dispose of waste (...)", and also transfer it to "(...) relevant Province Marshal in terms of place of waste production, collection, recovery or disposal up to 15 March for the previous calendar year" [4].

The standard form was determined by the legislator, in order to unify the data transferred to the Marshal. It is specified by the ordinance of the Minister of the Environment of 8 December 2010 on Scope of information and form specimen used for drawing up annual statements on waste (Journal of Laws of 2010, No 249, item 1674) - Appendix No. 3 to the Regulation. In most cases, transport companies are obliged to fill in Section 1 "Information on waste holder" and Section 2 "Summary on type and amount of produced waste". In Section 1 an entity required to submit a yearly summary, fills in "Information waste holder" (Table 1A) and "Information on place of establishment and authorizations" (Table 2B) [Regulation of the Minister of the Environment of 11 January 2013]. In Section 2 "Summary on type and amount of produced waste" waste producer makes an entry on all types of waste produced in a year (waste code written in every column) and its quantity in Mg. Amount and type of waste is specified on the basis of waste transfer sheets.

### Table 1A. Waste holder

|   | Waste holde                                     | er                                      |      |       |                                    |                    |                         | I    | Rej | porting | g year  |                           |
|---|---|---|------|-------|------------------------------------|--------------------|-------------------------|------|-----|---------|---------|---------------------------|
| Waste holder  |   |   |      |       |                                    | Register number    |                         |      |     |         |         |                           |
|   |   |   |      | Was   | te holder                          | ad                 | dress                   |      |     |         |         |                           |
| Voivodeshi  | p City  |   |      | We    | ork numb                           | er                 |                         |      |     |         | Fax     |                           |
| Postcode  | Street  |   |      | Bı    | uilding N                          | 0.                 |                         |      |     | Apa     | artamen | t No.                     |
| Tax Identification Number   |   | statistical identification number REGON |      |       |                                    |                    |                         |      |     |         |         |                           |
|   | Type of activity                                | acc                                     | ordi | ng to | Polish C                           | las                | sification              | of A | cti | vities  | (PKD)   |                           |
| Tables and<br>sections<br>filled in and<br>attached<br>Total<br>number of<br>Appendices | 1<br>Table A<br>Table B                         | 2                                       | 3    | 4     | 5<br>Table A<br>Table I<br>Table ( | <b>\</b><br>3<br>2 | 6<br>Table A<br>Table E | 3    | 7   | 8       | 9       | 10a<br>Table A<br>Table B |
|   |   | Pe                                      | rson | draw  | ving up ar                         | nnu                | al stateme              | ents |     |         |         |                           |
|   | Name  |   |      |       |                                    |                    | Sur                     | name | )   |         |         |                           |
| Work<br>number  | Fax   |   |      |       |                                    |                    | E-:                     | mail |     |         |         |                           |
| Data  | Signature of<br>a person drawing<br>up a report |   |      |       | Sign                               | atu                | re and sta              | mp o | fv  | waste l | nolder  |                           |

### Table 1B. Place of establishment and authorizations

|  |                                    |                       | Plac            | e of estab            | olishment            |                           |  |  |
|--|------------------------------------|-----------------------|-----------------|-----------------------|----------------------|---------------------------|--|--|
| Voivodeship  |                                    | Commune               | e               | City                  |                      |                           |  |  |
| Street   |                                    | Building N            | 0.              | Apartament No.        |                      |                           |  |  |
|  |                                    |                       | 1               | Authoriza             | ations               |                           |  |  |
| Authorization<br>in the scope of<br>waste management |                                    | Authorization<br>mark | Autho<br>issuar | orization<br>nce date | Decision<br>validity | Body issuing the document |  |  |
| Waste generation                                     |                                    |                       |                 |                       |                      |                           |  |  |
| Waste collection                                     |                                    |                       |                 |                       |                      |                           |  |  |
| Recovery   |                                    |                       |                 |                       |                      |                           |  |  |
| Waste disposal                                       |                                    |                       |                 |                       |                      |                           |  |  |
| Waste reception                                      |                                    |                       |                 |                       |                      |                           |  |  |
|  |                                    |                       | Т               | ype of a              | ctivity              |                           |  |  |
| G C D  |                                    | R<br>□                | D               |                       | С                    |                           |  |  |
| Date of commencement of activity                     |                                    |                       |                 | •                     |                      |                           |  |  |
| Date of  | Date of end of activity if applies |                       |                 |                       |                      |                           |  |  |

Appendix No. 1 (Section 1 and 2) to the mentioned Regulation is presented in Table 2.

Standard form used for submission of annual statements on type, quantity, manner of waste treatment, installations and equipment used to waste recovery or disposal.

| No   | Wasta aada | Weste type | Weight of generated waste, Mg |            |  |  |  |
|------|------------|------------|-------------------------------|------------|--|--|--|
| INU. | waste eoue | waste type | Waste weight                  | Dry matter |  |  |  |
|      |            |            |                               |            |  |  |  |
|      |            |            |                               |            |  |  |  |
|      |            |            |                               |            |  |  |  |

Table 2. Annual statements on waste type and quantity

Dealing with waste reception from households demands complying with are various rules and requirements. Some time ago, the communes have become responsible for providing detailed conditions of waste reception. As for an undertaking, it should have a warehouse - transport depots in the premises of the commune, or not more than 60 kilometers from its border. Such a warehouse depot needs equipped with parking areas for commercial vehicles. Parking area cannot be situated off the premises, due to possible soil pollutant emission, which is defined by a specification on warehouse depots. The mentioned facility should be equipped with [7, 8]:

- parking areas,
- social rooms,
- selective waste storage sites,
- weighing facilities if waste is stored in the premises,
- maintenance and repair stations,
- vehicle washing and disinfection points.

Transport-warehouse depots should be equipment with selective storage installations, for waste, which is transported to treatment facilities [7]. As for vehicles, it is significant to maintain their appropriate sanitary level and prevent leaking or uncontrolled waste release during collection, storage, reload or transport. Although there are no regulations concerning frequency of cleaning and disinfection of vehicles, it shouldn't take place less than once a month and once every two weeks during summer. All these sanitary activities have to be documented in a proper way. Moreover, vehicles need to be emptied at the end of the day and parked only in the premises of the facility. As for the technical requirements, vehicles should be equipped in a way that would prevent waste from falling out during transport and reduce the influence of atmospheric agents [9].

Every vehicle should be fitted with global positioning system that enables permanent recording, collection and storage of data concerning current vehicle position and stops. Moreover, in order to document the place of unloading, sensor system should be provided. All these factors allow to verify the quality of provided services. Furthermore, it is required that a vehicle has terrain cleaning devices, in case of uncontrolled waste spill out. As for weighing devices, it's not obligatory to equip a vehicle with such facilities [7].

### 1.3. Waste management authorizations

Pursuant to Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on Waste and repealing certain Directives (Journal of Laws UE.L.08.312.3), Member States may take legislative, or non-legislative measures to ensure that any natural or legal person who professionally develops, manufactures, processes, treats, sells or imports products, does in a way suitable for proper and safe recovery, and environmentally compatible disposal. Every activity based on waste collection or processing shall be undertaken only on the basis of relevant authorization [1]. The document is issued only by the Province Marshal or District Governor. Waste transport has to be accompanied by special documents, and an undertaker authorized to transport waste domestically is obliged to gain a special permission. Pursuant to Article 3 Paragraph 2 of an Act of 14 December 2012 on Waste, waste transport is one of forms of waste management: "waste treatment is understood as collection, transport, processing including oversight of such activities and further dealing with disposal facilities, acting as was seller or intermediary in waste sales." [10]. Another definition connected with waste transport present in the said Act is waste collection, understood as - "waste storage prior to its transport to processing sites, preliminary sorting not leading to change of waste character and composition, unchanging its classification and temporary storage". The definition indicates that waste has to be transported from the place of collection to processing sites. Requirements laid down for waste management authorization, are included in Act on waste. In order to be granted an authorization to transport waste (which is issued for no longer than 10 years), one should lodge a proper application to a relevant body (with stamp duty), which in this case would be either the city mayor or poviat governor, depending on a place of activity performance [11].

Waste transport permit includes:

- tax identification number (NIP) and statistical information number REGON of waste holder, if it was assigned,
- types of waste to be collected,
- marking of storage sites,
- indicating place and manner of waste storage and types of waste,
- methods of waste collection,
- additional conditions for waste collection if waste specificity demands it, particularly hazardous waste, or a need to take measures in order to protect human life or the environment,
- requirements resulting from separate provisions, authorization validity.

At the moment of being granted an authorization, an undertaking is enrolled into the register the Marshal of the Province [7]. Moreover, waste carriers need to obtain additional authorization to discharge non-effluent cisterns. Requirements concerning this document are specified by the Commune Council, issued on entrepreneur's application by a head of the commune, mayor of municipality or city president [12]. Waste transport permit should give information related to:

- name and surname or company's name, place of residence address or company's seat,
- subject and activities covered by the permit,
- date of commencing the activity,
- requirements concerning services covered by the permit,
- obligatory environmental measures and sanitary protection measures required after activity covered by the permit,
- other requirements resulting from separate regulations, including sanitary standards and keeping records of services.

As it was mentioned before, an authorization is valid for no longer than ten years and may be withdrawn if an undertaking fails to meet its duties. Moreover, an entrepreneur that collects waste from property owners is entered into the commune register [12]. Waste transport permit lists types of waste, the area of transport activity (usually an area of entire country) manner and means of transport and additional conditions of conducting transport. (Fig. 1) [13]. Moreover, the decision contains period when the permit remains in force, waste codes compliant with waste catalogue (in section "types of waste to be transported"). Further, the point "Manner and means of transport" contains conditions that the carrier has to meet during transport process, which are mainly references to legal provisions related to Traffic Law Act.

One can list the following duties concerning waste transport: selective transport of waste, stored in separate, leak proof containers, loading, transport, unloading performed in a way that prevents waste spreading and release into the environment. Additional requirements concerning waste transport are: transport duration, a driver is held responsible for waste and should produce waste transport permit, which contains the permit number and name of the body issuing the document. Furthermore, waste transfer to authorized entities should be confirmed through a transfer card, and all waste treatment activities should be performed with observance of sanitary, environmental, health, safety and fire safety measures [6]. The above mentioned obligations imposed by the relevant, illustrate the situation of an undertaker who applies for a permit. It is also worth noting, that due to a new Act of 14 December 2013 (Journal of Laws of 2013 item. 21 as amended) and transitional arrangements (Article 233 of the said Act) from 23 January 2013 a permit decision is binding until an entry into a register, run by the relevant Province Marshal is made. 23 January 2016 is a due date until which the register should be created (36 months are devoted to create a register) and undertakers should observe the deadline (either entry date or application filing date).

Municipal company has to be competent in order to carry out collection and waste transport. The following documents present:

- decision of a district chief administrative officer enabling production, recovery, collection and transport of waste (Fig. 1) [13],
- certificate of road haulage operations for own account (Fig. 2) [13].

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Poznań 14.06.2013r.

| Starosta | Poznański |  |
|----------|-----------|--|

ul. Jackowskiego 18

60-509 Poznań W/S 6233 61 2013 VII

I. Zezwala

### DECYZIA

.

Na podstawie art. 28 ust. 1 i 2 pkt 2 i ust. 3 pkt 2 ustawy z 27 kwietnia 2001 r. o odpadach (Dz.U.z2010r. Nr 185, poz. 1243 ze zm.) w związku z art. 233 ust. 3 ustawy z 14.12.2012r. o odpadach (Dz. U. 2013.21),

na wniosek Zbigniewa zam. w Bogucinie, prowadzącego działalność pod nazwą Firma Transportowao-Spedycyjna Zbigniew I , ul. <u>Bogucio 62,000 kr. kr.</u>

Starosta

### Zbigniewowi ! prowadzącemu działalność pod nazwą Firma Transportowao-Spedycyina Zbigniew

Bogucin, 62-006 Kobylnica 3, REGON ul.J. NIP -

na transport odpadów na warunkach określonych poniżej.

### 1. Rodzaje odpadów przewidzianych do transportu

| lp. | rodzaje odpadów przewidzianych do transportu  | kod      |
|-----|---|----------|
| 1   | Opakowania z papieru i tektury  | 15 01 01 |
| 2   | Opakowania z tworzyw sztucznych   | 15 01 02 |
| 3   | Opakowania z drewna   | 15 01 03 |
| 4   | Opakowania z metali   | 15 01 04 |
| 5   | Opakowania wielomateriałowe   | 15 01 05 |
| 6   | Zużyte opony  | 16 01 03 |
| 7   | Zużyte lub nienadające się do użytkowania pojazdy niezawierające cieczy i innych<br>niebezpiecznych elementów | 16 01 06 |
| 8   | Metale żelazne  | 16 01 17 |
| 9   | Metale nieżelazne   | 16 01 18 |
| 10  | Tworzywa sztuczne   | 16 01 19 |
| 11  | Produkty spożywcze przeterminowane lub nieprzydatne do spożycia   | 16 03 80 |
| 12  | Magnetyczne i optyczne nośniki informacji   | 16 80 01 |

### 2. Obszar prowadzenia działalności w zakresie transportu odpadów – teren całego kraju.

Strony postępowania:

postępuwania Zbigniew / Firma Transportowao-Spedycyjna gucin, 62-006 Kobylnica,

ul. gucin, 62-006 Kobylnica, 2. aa. Do wiadomości: 1. Urząd Marszałkowski Województwa Wielkopolskiego al. Niepodległości 16/18, 61-713 Poznań 2. Burmistrz Miasta i Gminy Swarzędz ul. Rynek 1, 62-020 Swarzędz 3. Wojewódzki Inspektor Ochrony Środowiska ul. Czarna Rola 4, 61-625 Poznań

Sprawę prowadzi: Anna Orczewska kierownik referatu tel. 61 8410-578

Opłatę skarbową za zezwolenie na transport odpodów w wysokości 616 zł wniesiono 03.06.2013 r. na rachunek bankowy Urzędu Miasta Poznania nr 20 1050 1520 1000 0023 4950 2845

zezworenia. - Prowadzący działalność usługową w zakresie transportu odpadów jest obowiązany dostarczyć te odpady do posiadacza odpadów, który został mu wskazany przez zlecającego usługę.

Niniejsze zezwolenie na transport odpadów nie określa warunków funkcjonowania bazy transportowej i nie stanowi uregulowana dotyczącego lokalizacji bazy transportowej.

Informacja: Zdniem 23 stycznia 2013 r. weszła w życie ustawa z 14 grudnia 2012 r. o odpadach (Dz.U z 2013r. poz. 21) – dalej nazywana "nową ustawą o odpadach". Zgodnie z zapisem art. 233. nowej ustawy o odpadach - <u>zezwolenia na transport odpadów</u> wydane na podstawie przepisów dotychczasowych zachowują ważność na zejsza na jaki ostały wydane, in<u>ie dłużej ledak niż do crzssi</u> upływa terminat. 49 aut. 21 nowej ustawy o odpadach - <u>zejsztra</u> prowadonego przez Marszałka Wejewódstwa na prze waż na zejszem za za zejszem za za zejsze za za zejsze do za za zejsze za zejszem zejsze zejszem zejsze zejszem zejsze zejszem zejsze ze

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Sposób i środki transportu:

- transport odpadów będzie odbywał się zgodnie z przepisami o transporcie drogowym;
- transport odpadów odbywać się będzie sprawnym technicznie pojazdem, do którego Zbigniew Ratajczak posiada tytuł prawny, będzie to samochód ciężarowy z plandeką;
- odpady będą przewożone selektywnie w opisanych kodem odpadu pojemnikach/ opakowaniach; odpady i pojemniki w czasie transportu będą zabezpieczone przed przesuwaniem;
- załadunek, transport i wyładunek będzie prowadzony w sposób zapobiegający rozprzestrzenianiu się odpadów, przedostawaniu się składników odpadów do środowiska oraz w sposób nie powodujący zagrożeń ani uciążliwości dla środowiska.

4. Dodatkowe warunki prowadzenia działalności w zakresie transportu odpadów:

- transportowane odpady będą przekazywane podmiotom uprawnionym do gospodarowania danymi odpadami, zgodnie z przepisami o odpadach;
  - przekazanie odpadów będzie potwierdzane na karcie przekazania odpadów;
- na czas transportu, kierowca będzie posiadał przy sobie dokument wskazujący podmiot posiadający zezwolenie na transport, w którego imieniu ten transport się odbywa; dokument będzie zawierał numer niniejszego zezwolenia oraz nazwę organu, który wydał to zezwolenie;
- wszelkie działania związane z gospodarowaniem odpadami będą prowadzone z zachowaniem obowiązujących zasad sanitarnych, bhp, bezpieczeństwa pożarowego oraz ochrony środowiska.

II. Ustala czas obowiązywania zezwolenia do 14 czerwca 2023r.

### Uzasadnienie

Pan Zbigniew zam. w Bogucinie, prowadzący działalność pod nazwą: Firma Transportowao-Spedycyjna Zbigniew i ul. , Bogucin, 62-006 Kobylnica, NIP REGON ( wnioskiem z 06.06.2013r., wystąpił o wydanie zezwolenia na transport odpadów innych niż niebezpieczne.

Z przedstawionego wniosku wynika, że sposób transportu odpadów będzie zgodny z zasadami określonymi w przepisach o odpadach. Odpady będą transportowane z uwzględnieniem przepisów o transporcie drogowym sprawnym technicznie pojazdem, do którego wnioskodawca ma tytuł prawny. Odpady będą przewożone selektywnie w opisanych kodem odpadu pojemnikach/ opakowaniach. W czasie transportu odpady i pojemniki będą zabezpieczone przed przesuwaniem.

Zezwolenie na transport odpadów zostało wydane na podstawie przeu przewalniem. Zezwolenie na transport odpadów zostało wydane na podstawie przepisów dotychczasowych, zgodnie z art. 233 ust. 3 ustawy z 14.12.2012r. o odpadach. Zgodnie z art. 28 ust. 2 oraz art. 3 pkt 2 ustawy z 27 kwietnia 2001 r. o odpadach Starosta Poznański jest właściwy do wydania zezwolenia na transport odpadów podmiotowi, którego miejsce zamieszkania znajduje się w Bogucinie gm. Śwarzędz.

We wniosku i zezwoleniu nadano odpadom kody zgodnie z katalogiem odpadów, opublikowanym w Rozporządzeniu Ministra Środowiska z dnia 27 września 2001 r. w sprawie katalogu odpadów (Dz. U. Nr 112 z 2001 r., poz. 1206). Niniejsze zezwolenie zostało wydane na okres 10 lat zgodnie z przepisami ustawy o odpadach.

Biorąc powyższe pod uwagę zdecydowano jak w osnowie

Pouczenie. Od niniejszej decyzji przysługuje stronie odwołanie do Samorządowego Kolegium Odwoławczego w Poznaniu za pośrednictwem Starosty Poznańskiego, w terminie 14 dni od daty jej otrzymania.



Fig. 1. Decision of Poznan district chief administrative officer granting an authorization to transport waste (pages 1-3)

Entry to the register presented above, has a function of a waste transport permit. In case of business activity that consists solely in waste transport, (without collection or waste processing) an entity is obliged to run a simplified register of waste, with the use of waste transfer cards. It should be recalled, that production of business operation waste entails full waste register (register card and waste transfer card). In relation to that, article 24 of the Act on waste specifies detailed regulations concerning waste transport: waste transport takes place with respect to human life, health and environmental safety rules, in particular with attention paid to chemical and physical properties of waste, physical state and threats that waste may create. Further, transport of hazardous waste takes place in accordance with relevant regulations. What is more, transport ordering party is obliged to indicate waste destination place and waste carrier shall deliver waste to the designated place. Waste carrier should put an individual registration number on proper documents and make sure that means of transport are properly labeled.

|   |  | RZECZPOSPOLITA PO  | LSKA (PL)  |  |  |
|---|--|--|--|--|--|
|   | Starosta Pilaki  |  |  |  |  |
|   | (oznaczenie<br>organi wydającego<br>zaświadczenie)   | ZAŚWIADCZENIE NR<br>na przewozy drogowe na pot   | 0370843<br>rzeby własne  |  |  |
|   | Na podstawie art. 33 ust. 8 ustawy<br>Dz. U. z 2013, poz.  | z dnia 6 września 2001 r. o transporcie drogow<br>1414, z późn. zm.  | ym (P) zaświadcza się, że:   |  |  |
|   |  | ALTVATER Pila Sp. z o.   | <b>ə</b> .   |  |  |
|   |  | Laczna 4a, 64-920 Piła<br>wajeszana 4a, 64-920 Piła<br>wajeszana 4a, 64-920 Piła<br>KRS - 0000097  | 680  |  |  |
|   | teinte e egete   | s prychiejine se Krajovy i Rajov se talevon (KF3) alb ma<br>krajowego  | <ul> <li>*) niezarobkowego przewożu</li> </ul>   |  |  |
|   | drogowego<br>Rodzaj i liczba pojazdów samocho  | dowych:  | **) na potrzeby własne   |  |  |
|   |  | Rodzaj   | Liczba   |  |  |
|   | Pojazd samochodowy przewożący  | v więcej niż 9 osób łącznie z kierówcą ***)  | 45   |  |  |
|   | Zaświadczenie jest wszec do 21<br>Data wystawienia<br><sup>1)</sup> wpłase miejsce publikacji usławy: tek<br><sup>2)</sup> Wpłase miejsce zanieszkania przedsie  | Sezere minious de parte<br>serectes moredues de parte<br>serectes moredues de parte<br>serectes de constructions de parte<br>serectes de la construction de la construction<br>serectes de la construction de la construction<br>serectes de la construction de la construction<br>barrer, o lite minipare to jos collame e miniparem proved | z up. ST AF OST<br>Elzbiela faminiska<br>Instektor<br>Wydziałe Koronnikacj<br>(odpis ogana<br>wydającega skawiadzania)<br>zania działalności gospodarczej. |  |  |
|   |  | OBJAŚNIENIA  |  |  |  |
| 1 | Zaświądczenie na przewoży drogowe na potrzeby własne uprawnia przedsięborcę do prowadzenia prze<br>wozów drogowych jako działalności gospodarczej w stosunku do jego podatawowej działalności gospodarczej   |  |  |  |  |
|   | W przypadku wykonywania krajowego niezarobkowego przewozu drogowego niezgodnie z wydanym<br>zaświaśczeniem właściwy organ, w drodze decyzji, stwierdza nieważność zaświadczenia. Wydanie nowego<br>zaświadczenia jest możliwe po upływie 3 lat od dnia stwierdzenia nieważności poprzedniego zaświadczenia   |  |  |  |  |
|   | Jeżzli unuowy międzynarodowe, którymi Rzeczpospolita Polska jest związana, wyinagają przy wykonywaniu<br>międzynarodowego przewozu drogowego na potrzeby własne uzyskania odpowiedniego zezwolenia<br>zagranicznego, przedsiębiorca obowiązany jest posladać takie zezwolenie.   |  |  |  |  |
| 0 | Zaświadczenie na przewozy drogowe na potrzeby wlasne na międzynarodowy niezarobkowy przewóż<br>drogowy uprawnia do wykonywania przewozów z przekroczeniem granicy Rzeczypospolitej Polskiej<br>z państwem leżącym poza terytorium Unii Europejskiej. Zaświadczenie to uprawnia również do<br>wykonywania niezarobkowego przewozu drogowego na terytorium Rzeczypospolitej Polskiej, zgodnie<br>z rodzalem przewozów w nim określonych. |  |  |  |  |
|   | W przypadku wykonywania<br>z wydanym zaświadczenien<br>zuświadczenia przez okres 3   | a międzynarodowego niezarobkowego<br>a Główny Inspektor Transportu Drog<br>lat od dnia upływu ważności posiadan  | przewozu drogowego nieżgodn<br>owego odmawia wydania noweg<br>ego zaświadczenia.   |  |  |
|   |  |  |  |  |  |
|   |  |  |  |  |  |
|   | 4  |  |  |  |  |
|   |  |  |  |  |  |
|   |  |  |  |  |  |

Fig. 2. Certificate of road haulage operations for own purpose of municipal company (pages 1 and 2)

The Minister of Environment and the Minister of Transport, laid down detailed requirements connected with waste transport, such as selection of means of transport, manner of transport, labeling compliant with type of waste and its influence on the environment and human life. So far, from 14 December 2012 (in reality from 23 January 2013) when a "new" Act on waste came into force, there have been no detailed provisions concerning the process of waste transport itself. Due to lack of appropriate regulation mentioned in Article 24 Paragraph 7 of the said Act: "The competent Minister in charge of the environment in consultation with transport minister, specifies by way of resolution detailed requirements for waste transport, including means of transport, manner of transport, vehicles labeling, in compliance with its specificity and its influence on human health, life and the environment" [4].

As for Polish waste vehicles, labeling introduced currently is compliant with the European Union standards, and the only document required from the driver is waste transfer card.

### 1.4. Legal characteristics of vehicles used in waste management

Performing waste collection services demands possession of at least two vehicles which are adjusted to mixed waste collection and at least the two ones, used for selective collection. There should also be at least one vehicle used for waste collection without compacting functions - such vehicles are used for bulky waste and glass collection (including so-called "dome" collection).

All vehicles need to be labeled in a clear and visible way - name, address and phone number of the company. Currently, the latest regulation of the Minister of the Environment specifies requirements for waste transport and means of transport labeling [11]. Accordingly, there are certain activities that should be undertaken in relation to waste transport. Means of transport and reusable waste containers are to be kept in a proper technical and sanitary state. In case of change in transported waste type, there should be no remains of previous waste in the vehicle. In addition, waste transport should be accompanied by documents confirming a code, name of waste, and documents confirming information referring to the ordering party. Regulation introduced on 24 January 2018, facilitates the work of control services, and simplifies identification of waste types. The labeling of containers and loading areas, cannot be easily removable during transport, should be resistant to atmospheric conditions and readable (Figs. 3 and 4) [11].



Fig. 3. Basic labeling of vehicles used for transboundary waste shipment



Fig. 4. Basic labeling of vehicles used for waste transport in Poland

In Germany vehicles used for waste transport are labeled in front, and at the back with reflective, white colored panels with letter A - 400 mm x 300 mm. (Fig. 5) [14]. Whereas, in Sweden vehicles collecting a specific stream of waste are equipped with vacuum pumps which allow to suck waste, right to the container placed on the vehicle [11].



Szerokość tablicy: 40 cm



Fig. 5. Panel with letter "A" used for labeling waste vehicles in Germany

Apart from requirements connected with outer labeling, there are also approval regulations that result from the Act on Traffic. As a result, vehicles used not only in waste transport but also renovation and upgrade services, are required to use yellow warning flashlights. If this rule is obeyed, with a great deal of caution, other regulations don't have to be treated so strictly, for example (Figs. 6 and 7) [12, 13]:

- obligation to drive on the road, or its right edge,
- regulations relating to stops and parking.

Driving on a pavement is accepted, only with observance of pedestrian safety rules [12].



Fig. 6. Headlamps emitting variable yellow light

Vehicles used for waste collection can be characterized on the basis of various parameters. Cargo box, where waste is stored, seems to be the most important part of the vehicle structure. All requirements connected with discarding waste from containers are specified in standard PN-EN 1501:2011. In turn, the mentioned standard is compliant with machine directive 2006/42/WE. Waste transport vehicles are built in diverse ways depending on their usage, with trucks occurring most often. Maximum dimensions of trucks is specified in relevant legal provisions (Fig. 8) [10]:

- length of vehicle: 12 meters,
- width of vehicle: 2,5 meters,
- height of vehicle: 4 meters.



Fig. 7. Equipment emitting variable yellow light - back of the vehicle



Fig. 8. Division of means of transport used for waste shipment (hook type vehicles - gantry vehicles)

Waste transport vehicle is assigned to machinery definition as a unit, fitted with or intended to be fitted with a drive system, not directly using human or animal effort. It consists of linked parts, or components at least one of which moves, and joined together for a specific application. An assembly referred to in (i), that is missing only the component to connect it on site, or to sources of energy and motion; ready to be installed, and function as it stands, only if mounted on a means of transport, building or a structure [3]. Technical characteristics of a vehicle on which the unit will be placed is defined by producers.

If it has to undergone necessary examination checking its compliance with the regulations, the structure gains CE label [10]. According to European standard PN-EN 1501:2011, the most popular function of such units is turning on steps. After device has opened, the vehicle can't go faster than 30 km/h (usually a driver's assistant stands on it) Figure 8 depicts the division of waste transport vehicles [15]. If the regulation was implemented, it would unify requirements for waste vehicles, which can contribute to significant progress in development of this transport branch. The regulation would positively supplement a new Act of 14 December 2012 on Waste. Another intrinsic problem that needs to be mentioned, is the problem of load securing, in a way that reduces negative, atmospheric influence. Moreover, containers used for waste transport should be kept in a good technical and sanitary condition. A new draft regulation relating to this field, presents types of documents that go with waste transport. Accordingly, it is a document containing waste code, status and data concerning information referring to the ordering party. The most important aspect of the regulation specifies vehicles labeling, which enables easier identification of waste, done by security services, which in turn affects safety of other road traffic participants [16].

## 2. Technology and transport system

### 2.1. Transport process

Conducting transport operation related to waste, demands using appropriate means of transport, organizational, executive measures and commercial services that take place consecutively (Fig. 9) [14].



Fig. 9. Transport process

The transported item undergoes successive phases of the complex, and multistage, transport technological process. The transport process (Fig. 9) can be defined as a sequence of specific, interwoven activities that result in a product delivery to the recipient [15]. The mentioned process consists of three basic activities: organizational, executive and commercial. Organizational activities cover routes planning and preparing transport documents. As for executive activities, one can list transport and transport related operations, such as loading, transport and unloadingall related to a vehicle. In turn, commercial activities refer to financial issues, namely transport of goods and persons fee [14].

The following transport process phases can be distinguished [10]:

- planning of load transfer,
- preparation of load,
- organization of load trasnfer,
- load transfer,
- legal-financial elements of transport operation,
- analysis of costs and quality of transport process.

### 2.2. Transport technologies

The decision to choose a proper transport technology should be based on transportability of cargo. Transportability is divided into transfer, loading and economic susceptibility. The former is related to damage resistance, which may occur during transportation. Factors that influence transfer susceptibility are: material transfer susceptibility that refers to physical, chemical and biological properties of a load. Then, technical transfer susceptibility, which depends on load's weight, shape and volume. Further, economic transfer susceptibility which derives from transport costs, and value of the load. Load ability defines stacking resistance, indicating usable area of means of transport and storage space. In relation to load ability, load may be divided into stack resistant and stack nonresistant [9]. Freedom to use transport technologies is limited by load weight, type and technical equipment of the carrier, goods consignors and receivers [15]. All in all, the objective to deliver goods timely and in a good condition is a shared purpose of a consignor and a receiver.

### 2.3. Characteristics of transport systems

Transport should be analyzed in terms of transport system, which has the aim of passengers' and goods' transfer. This transfer depends on type, amount, quality of transported goods, but also on transport routes that will be used. It is clear, that full completion of this task demands incorporation of various factors that are included in the transport system. One can say, that transport system (Fig. 10) [14] is a unit that consists of: means of transport, transport infrastructure, people that manage the system, and rules that moderate the transfer, from the point of origin, to the point of destination, through transshipment points, if needed [11]. Roads, engineering

structures and superstructure objects (road, rail, aviation, maritime transport) constitute basic elements of transport system. Air, road, train and sea connections form the system structure. The division of objects in the scope of transport system introduces one group - means of transport, creating road, rail, aviation and maritime transfer systems. The second group of objects is a transport network, which creates a class of road, rail, aviation and maritime transport systems. Each system has its aim, and what helps to evaluate the quality of operation, is the level of a goal achievement. For example, we can evaluate the quality of transfer of goods or people, on the basis of duration of the activity and its costs [11].



Fig. 10. Transport system

### 2.4. Technological project of planning process in municipal waste transport

Acceptance of shipping order is the first phase of transport operation, initiated by freight forwarder, who organizes the transfer, chooses and carrier (Fig. 10) [15]. Shipping order and transport order differ, as the first one refers to organization of transfer which covers: preparation of shipment, choice of a carrier, cargo loading, issuing CMR waybill, signing a contract with a carrier and shipment insurance. On the other hand, transport order is a civil agreement, which consists in transfer of goods from point A to point B in a given time, for an agreed remuneration [17].

- Qualities of a proper transport order [4]:
- it should be labelled as transport order or shipment order, order number and date of issue of the order is required as well,
- conditions and specification concerning execution of the order listed below,

- remuneration described as freight or terms of freight,
- defining a contractor as a carrier,
- defining type and range of services.

What seems to be significant for the carrier, is accepting the order, which amounts to accepting the terms of contract, and consequences that may occur, in case of failure to comply with these term. Shipment contract then is concluded with the acceptance of transport order, and the traffic right becomes applicable at this moment. In case of late loading, or failure to provide a vehicle, the contractor may impose contractual penalties, if the contract specified that [10]. The planning stage of preparation and transport of municipal waste is presented in (Fig. 11) [6].



Fig. 11. Waste preparation and transport scheme

### 3. Summary

Observance of regulations concerning waste transport will be obligatory for all undertakers, under provisions of Act on waste of 2012. The Act introduced unified requirements for all entities providing waste transport services. Reducing irregularities related to waste transport, and improving safety, should be the positive results of introducing the regulation, which indicates a great role of waste carrier in preventing waste spread from the vehicle. Furthermore, transported waste should not move inside the vehicle. Load securing that reduces the influence of atmospheric factors, is yet another issue outlined in the regulation. In turn, waste containers should be maintained in good technical and sanitary condition. Also, specific types of documents required during waste transport are presented in a draft regulation. The mentioned document should contain waste code and name, together with data related to the ordering party. However, vehicles labeling rules seem to be the most significant aspect of the draft, from the point of view of controlling services, and safety of road traffic participants. The sixth part of the article will present the process of waste transport technologies.

## Conclusions

Introducing executive documents into the Act on waste of 2012 aims at defining unified requirements for waste transport, obligatory for all carriers. The Regulation should contribute to reducing irregularities in waste transport, and improve transport's safety. Moreover, it indicates that great attention should be paid to prevent waste spread during transport. What is more, introducing the Regulation intends to standardize requirements for waste shipment vehicles and also focuses on the problem of waste securing, to minimize detrimental atmospheric influence. Good technical and sanitary condition of waste containers, used in transport is obligatory as well. The draft presents specific types of documents that go with the transport, which is a document containing waste code and type together with data referring to the ordering party. The most significant aspect of the Regulation is vehicle labeling, which facilitates identification of waste in case of traffic safety control, and assures safety for other traffic participants.

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### Streszczenie

Omówiono procedury planowania procesu przewozowego związanego z uwarunkowaniami prawnymi zbierania i segregacji odpadów komunalnych. Przedstawiono szczegółowo zasady gospodarki i organizacji zbiórki i segregacji zmieszanych odpadów komunalnych w planowaniu operacji w transporcie drogowym pod względem prawnym i technicznym. Podano wszelkie informacje prawne dotyczące przewozu drogowego rzeczy oraz warunki, jakie musi spełniać przedsiębiorstwo usługowe, wykonując tego rodzaju przewóz i działalność gospodarczą. Przedstawiono modele selektywnego zbierania odpadów komunalnych, zasady składowania i magazynowania oraz rodzaje opakowań stosowanych w gospodarce odpadami komunalnymi. Celem tego artykułu jest przedstawienie zasad ewidencji gospodarowania, składowania, segregacji oraz prowadzenia prawidlowej i zgodnej z obowiązujacym prawem dokumentacji ewidencji odpadów komunalnych w przedsiębiorstwie komunalnym.

Słowa kluczowe: transport drogowy, odpad komunalny, przepisy prawne, środek transportowy, dyrektywa, operacja transportowa