

MasP

**AN OVERVIEW OF THE
POSSIBILITY OF ESTABLISHING
OF A TRANSFER STATION IN THE
REGION OF SOUTH-ESTONIA**

1998

AS Epler & Lorenz Ltd.
Tartu, Ravila 75
Reg.nr. 24009862

Chemcontrol a/s
3 Lindholmvej 5800
Nyborg, Denmark
Phone: +45 6331 1150
Fax: +45 6531 7497
e-mail: chemwaste@kk-group.dk

SERVICE ORDER No. 19

***AN OVERVIEW OF THE POSSIBILITY OF ESTABLISHING OF
A TRANSFER STATION IN THE REGION OF SOUTH-ESTONIA***

Composed by: AS MASP
Laki 25, Tallinn,
Estonia
Phone. +372 639 3034
Fax: +372 639 3434
e-mail: masp@online.ee

Tallinn, November 1998

TABLE OF CONTENTS:

<u>1. HISTORICAL OVERVIEW OF THE REGIONAL HAZARDOUS WASTE TRANSFER STATION IN SOUTH-ESTONIA</u>	<u>1-1</u>
<u>2. OVERVIEW OF THE SERVICE AREA OF SOUTH-ESTONIAN HAZARDOUS WASTE TRANSFER STATION</u>	<u>2-1</u>
2.1 GENERAL CHARACTERISTICS	2-1
2.2 WASTE GENERATION	2-3
<u>3. THE DESCRIPTION OF ESTABLISHING THE REGIONAL HAZARDOUS WASTE TRANSFER STATION TO TIKSOJA</u>	<u>3-1</u>
3.1 LOCATION	3-1
3.1.1 TECHNICAL INFRASTRUCTURE	3-2
3.2 GEOLOGICAL STRUCTURE AND CHARACTERISTICS OF SOIL	3-3
3.2.1 SOILS	3-3
3.2.2 SOIL WATER	3-4
3.2.3 THE EVALUATION OF ENVIRONMENTAL CONDITIONS	3-4
<u>4. THE ALTERNATIVE LOCATIONS FOR ESTABLISHING A SOUTH-ESTONIAN HAZARDOUS WASTE TRANSFER STATION</u>	<u>4-1</u>
<u>5. PRESENT SITUATION WITH THE ESTABLISHMENT OF SOUTH-ESTONIAN TRANSFER STATION</u>	<u>5-1</u>
<u>6. THE LEGAL ASPECTS OF ESTABLISHING THE REGIONAL HAZARDOUS WASTE TRANSFER STATION TO SOUTH-ESTONIA</u>	<u>6-1</u>
6.1 LAND	6-1
6.1.1 LEAVING LAND TO THE OWNERSHIP OF STATE	6-1
6.2 DETAILED PLANNING	6-3
6.2.1 COMPOSING A DETAILED PLANNING	6-3
6.2.2 THE PUBLIC EXPOSITION OF PLANNING	6-4
6.2.3 THE SUPERVISION AND VALIDATION OF PLANNING COMPOSING	6-5
6.3 CONSTRUCTIONAL DESIGN	6-6
6.4 CONSTRUCTION	6-6
6.4.1 CONSTRUCTION PERMIT	6-7
6.4.2 ENVIRONMENTAL AND CONSTRUCTIONAL EXPERTISE	6-8
6.4.3 EXPLOITATION PERMIT OF THE FACILITY	6-8
6.4.4 OBLIGATIONS OF THE OWNER OF FACILITY AND CONTRACTOR	6-9

7. SUMMARY

7-1

8. LIST OF APPENDIXES

8-1

1. Historical overview of the Regional Hazardous Waste Transfer Station in South-Estonia

The feasibility study of "Hazardous Waste Management in Estonia" in 1994 year recommended, that for the effective operation of the system, four Regional Transfer Stations must be established to Estonia. As the result of the investigations of Danish and Estonian experts, the location of South-Estonian Hazardous Waste Transfer Station was proposed to Tartu.

During the last four years, the development of Estonian Hazardous Waste Management System (EHWMS) has made a considerable progress. The earlier prognoses and nowadays plans for establishing of EHWMS do not overlap in all aspects. The North-Estonian Transfer Station has been established near Tallinn, to Rae Parish; for the East and West Regions, the sites at Vaivara and Pärnu have been respectively chosen. The today's vision of South-Estonian TS site is the only one, remained similar to the prognoses.

The proposed site at Tartu Town, being more specific, at Tiksoja, was promising for many reasons. Being the industrial centre of specified area there are also the highest number of inhabitants and good possibilities for road and railway connections at Tartu. Even more, the planned site at Tiksoja situates in the close neighbourhood of Epler & Lorentz Oil Incineration Plant that was perfect solution for solving the matter of oil wastes final treatment.

The ideas of establishing the Regional Transfer Stations have not realised in the integral speed. Due to the regional differences in the enthusiasm of local authorities, environmental conditions at every specific site, financial possibilities etc., the establishment of Tartu TS has not obtained the necessary attention. Being part of the whole EHWMS, it is strongly influenced by the general policy of system establishment. There are two TS in the operation at present, and for the next the general attention as well as financial flows have been turned to the preparation of Hazardous Waste Landfill.

In general, the situation of establishing the Regional Hazardous Waste TS to South-Estonia is in majority identical to the conditions in 1995 year.

2. Overview of the service area of South-Estonian Hazardous Waste Transfer Station

2.1 General characteristics

The service area of South-Estonian Regional Hazardous Waste Transfer Station is composed by four following municipalities:

- Tartu Town
- Tartu County
- Põlva County
- Võru County
- Valga County

The basic administrative characteristics with the situation on the 1st of January 1997, are presented in the following table:

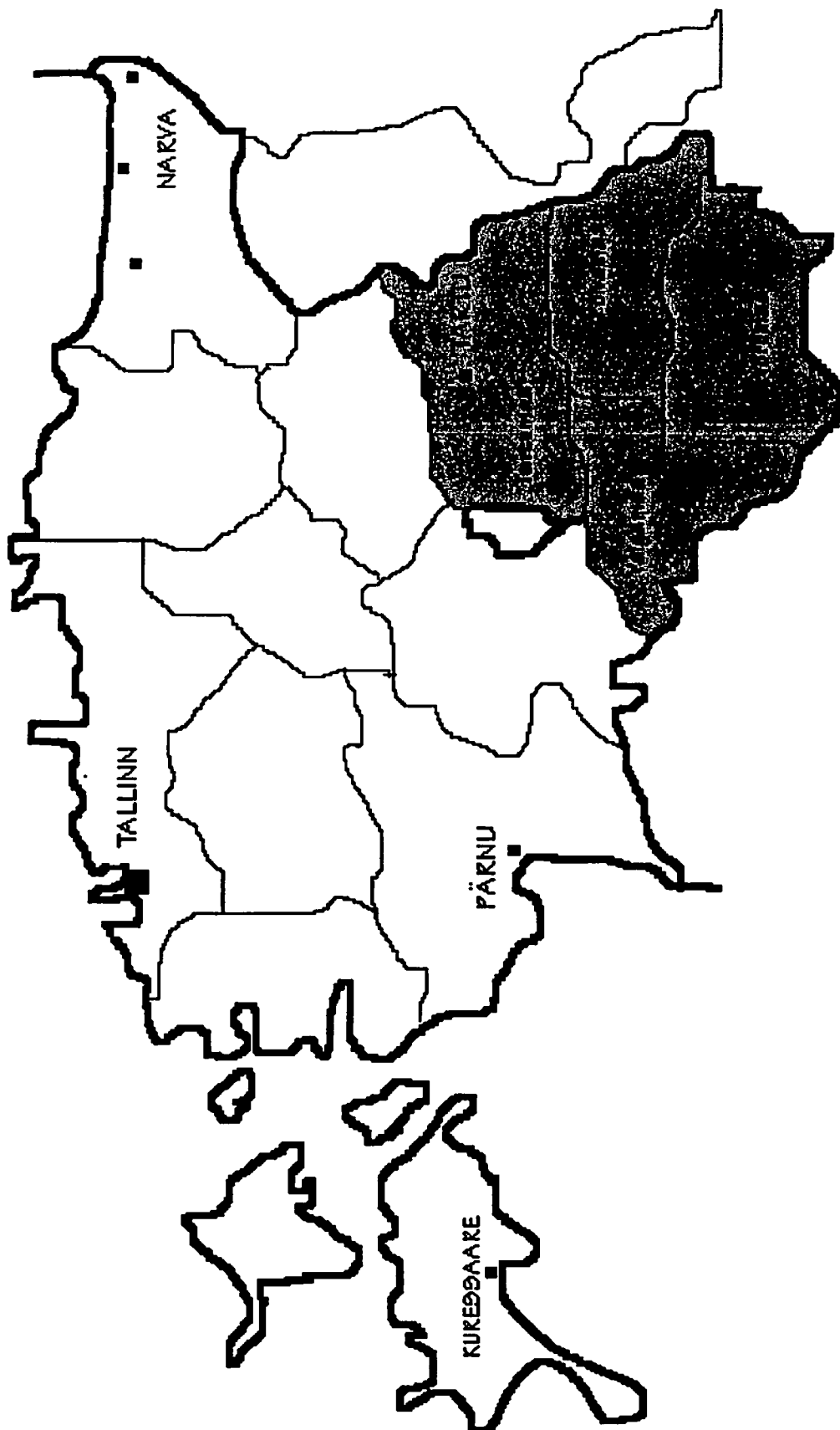
Table 2.1.1

Municipality	Area (km ²)	No. of inhabit.	No. of vehicles	Admin. Centre
Tartu County (incl. Tartu Town)	2992,74	152 046	50 179	Tartu Town
Tartu Town	38,8	101 901	ca. 35 000	Tartu Town
Põlva County	2164,88	36 163	11 895	Põlva Town
Võru County	2305,33	43 812	15 727	Võru Town
Valga County	2043,53	39 212	14 993	Valga Town
TOTAL	9506,48	271 233	92 794	

Based to the information presented in the table, there are several positive sides in establishing the South-Estonian Hazardous Waste Transfer Station to Tartu Town or to its close neighbourhood:

- Tartu is the Industrial Centre of South-Estonian Region;
- The majority of inhabitants in the Service Area of South-Estonian TS live in Tartu Town and County;
- Tartu Town and County have the highest number of vehicles generating specific hazardous waste items.

According to the information of Estonian Enterprise Register, there are 7991 firms registered in Tartu County (with the situation from 31.12.1997).



SCHEME OF SERVICE AREA OF THE SOUTH ESTONIAN TRANSFER STATION

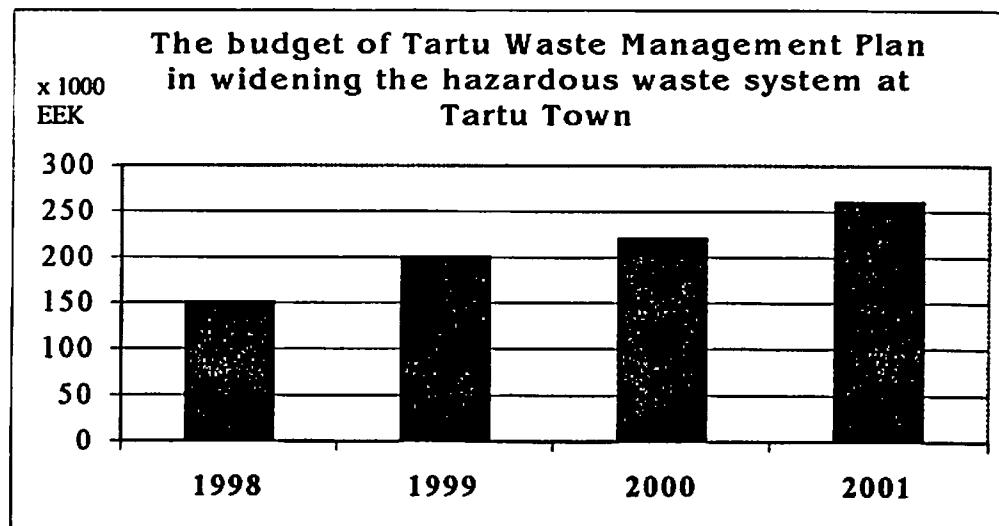
The ideas of establishing a South-Estonian Hazardous Waste Transfer Station to the Tartu area have interwoven to the visions of future management in the precise area.

The Tartu Town Government has been worked out the Development Plan of Waste Management at Tartu Town for the period of 1998-2002. Starting with describing the present situation of waste management in town, it is ending up with the operation plan for close years, where among other, the following tasks have been settled:

Table 2.1.2

Target:	Realisation
Start of operation in South-Estonian TS	1998...1999
Establishing of Hazardous Waste collection system for firms	1997...1999
Establishing the hazardous Waste collection points to firms	1998...1999
Widening the Hazardous Waste collection net to inhabitants	1997...1999

For widening the hazardous waste collection system, the need of finances was pointed out as following:



In sum, 830 000 EEK are foreseen for the improvement of hazardous waste system during the specified years. It is 3,6 % of the total financial budget of the Development Plan of Waste Management at Tartu Town for the period of 1998-2002.

2.2 Waste generation

Based to the annual waste declaration, the firms at South-Estonian region have generated 1875 tons of hazardous wastes in 1997 year.

It must be pointed out that the generated wastes contain different hazard risks as well as possibilities for future treatment. The declared wastes in 1997 (tons per year) are divided between the waste treatment methods in the following table:

Table 2.2.1

	TARTU	PÕLVA	VALGA	VÕRU	TOTAL
Incineration	511,992	7,904	44,866	20,112	584,874
Landfill	99,369	25,255	8,010	1,000	133,634
Phys-Chem.	0,459	1,710	0,100	2,900	5,169
Special	1132,981	8,680	4,347	5,353	1151,361
TOTAL	1744,801	43,549	57,323	29,365	1875,038

At the same time it is obvious that the realistic generation of hazardous wastes differs a lot from the official statistics. Based to the Estonian waste Law (§ 11, point 1), all enterprises are obligated to hand over their wastes to the licensed waste treatment company. As the costs of waste utilisation must be covered from the budget of waste generator, the amounts of generated waste have been often reduced in those declarations.

It is not a problem only in the counties of Tartu, Valga, Põlva and Võru, but a general weak point of Estonian waste statistic, been in detailed observed in the report of "An additional study on the total amount of hazardous waste generated in Estonia in 1997" prepared by MASP Ltd. in 1998.

For the specific characteristics of industrial field in the region of South-Estonia are activities connected to the wood industry. As a result, the waste flow from industry contains remarkable amount of contaminated left products: wood chips, solutions etc.

In planning the Regional TS to South-Estonia, it is important to calculate with the real situation in waste generation. In the lack of official statistics, the results from investigations should be used to estimate the composition and generation of hazardous wastes. Being in the above-specified situation, the estimated pattern of hazardous waste generation in the service area of South-Estonian Hazardous Waste Transfer Station is presented as in the "An additional study on the total amount of hazardous waste generated in Estonia in 1997" prepared by MASP Ltd. in 1998.:

Description of wastes	Waste Code	Declared in 1997	Prognosis (Tons / year)
Wastes for incineration		585	2000
Including:			
Wastes of treated wood	183	40	100
Contaminated paper, cardboard	19511	139	200
Oil wastes from gasoline and diesel engines	34101	11	400
	34102		
Motor, transmission, driving wheel oil wastes	34103	31	40
Hydraulic, circulation, turbine oil wastes	34104	29	75
Wastes of fuel and fuel tank sludge	34109	11	40
Fuel oil and oil storage tank sludges	34110	250	300
Wastes of soil, sorbent containing mineral oils	34408	3	10
Oil and fuel filters	34409	3	40
Package contaminated with paints, lacquers	36530	2	5
Outdated pesticides and biocides	39111	2	10
Wastes for physical-chemical treatment		5	20
Including:			
Sludges from surface treating and plating proc.	337	3	10
Wastes for landfilling		134	400
Including:			
Wastes from furnace emptying	21208	68	100
Moulding sand	21212	18	50
Ashes, slags and dust from power stations, boiler houses and incineration plants	213	10	30
Mineral construction wastes	215	3	10
Non-ferrous metal wastes	25501	8	20
Wastes from treatment of naphtha, coal, oil-shale	346	20	50
Wastes for special treatment		1151	800
Including:			
Mercury lamps	21415	9	10
	21416		
Lead accumulators	25626	52	450
Hospital waste, special waste	531	1083	200
Total for Southern Region		1875	3220

3. The description of establishing the Regional Hazardous Waste Transfer Station to Tiksoja

3.1 Location

The planned location of Transfer Station (TS) situates in Tartu Town, at Tiksoja. It is in the close neighbourhood of AS Epler & Lorenz Oil Incineration Plant, in the address Ravila Street 75.



Photo 1. View to the Tiksoja site and to its neighbourhood of Epler & Lorentz, November 1998

The following important reasons for the operation of Transfer Station have been strongly influenced the selection of site at Tiksoja:

- The site situates in the industrial area;
- The area has good infrastructure characteristics;
- Waste transport from areas outside Tartu can be organised without passing the Tartu Town;
- The requirements of safety zone distance can be fulfilled;
- Tiksoja is in the close neighbourhood of the largest waste producing area in the Service of South-Estonian Hazardous Waste Transfer Station.

The observed territory situates two kilometres outside Tartu, in the direction of Northwest. It is situating between Tallinn-Tartu road and AS Epler & Lorenz Oil Incineration Plant.

3.1.1 Technical Infrastructure

The observed territory suits well for the collection of hazardous wastes, as there are good conditions for road- and railway transport.

Tartu has the direct railway connections with Valga and Põlva Counties, via Valga railroad, the Võru County can also be connected. Beside the railway connection between all served counties in South-Estonia, it is even more important to have a connection with Narva, where the final treatment of various waste types will be carried through. The usage of railway instead of usual roads reduces risks in hazardous waste transport and has a positive influence to the transportation costs. By the usage of Taru ring road, the waste flow to TS can be leaded outside of town.



Photo 2. View to the possibilities of electrical connections at Tiksoja.

There is no water-, sewage- nor electricity connection is the observed site. The closest communication systems situate in the territory of AS Epler & Lorenz Oil Incineration Plant. Territory is in the service area of mobile net.

3.2 Geological structure and characteristics of soil

The investigated building site situates in the right side of Emajõe valley in the territory with smooth relief.

AS GIB carried through the geological investigations in the summer 1994 year. The three holes were made to take two samples for determination of the chemical composition of water. Nine samples form soil were taken for the spectral analyse.

3.2.1 Soils

The soil cover was permeated during the geological investigations and base bottom rocks opened. The upper part of soil cover is composed by clay-sand moraine with the depth of 2,4 to 3,6 m. The base is composed by middle-Devon sand stones and clays from Aruküla bed. The upper part of bottom layer situates in the interval of 46,2 to 48,0 m of absolute height.

- | | |
|-----------|--|
| Layer 1 - | Mould: mixture of sand and moraine. Depth: 0,1 ...0,5 m |
| Layer 2 - | Middle sand: thick to medium thick with the unstable distribution in the are. Depth: 0 ... 0.6 m |
| Layer 3 - | Clay-sand- moraine: grey-yellow, stick to hard plastic, consists of 10 ...15 % of coarse rubble. Depth: 0,3 ...0,7 m. |
| Layer 4 - | Clay-sand-moraine: read-brown, stick to soft plastic, content of coarse rubble 10...15 %. The characteristics of moraine differ in areas and cuttings. Depth: 1,7 ... 3 m. |
| Layer 5 - | Bottom sand: red-brown, thick, water surfeit. Depth: 0...1 m |
| Layer 6 - | Bottom clay: red to violet-brown, hard to hard plastic. Contains the sand lines and sand stone particles in some place. |
| Layer 7 - | Bottom sand: grey, thick, water surfeit. |

The geo-technical characteristics of inspected area are satisfying. The bottom sand and hard plastic clay situates at cutting in the depth of 2,5...3,5-m from ground. It is covered with stick to soft plastic clay-sand-moraine. The pattern of ground investigations in presented in Appendix 1.

3.2.2 Soil water

The unified free surface water horizon is composed by water spreading at base bottom rocks and at surface moraine. During the geodetic investigations at august 1994-year, the water level was in the depth of 1,6...1,8 m from ground. The soil water is drained by trunk line, which is surrounding the whole territory of TS. The chemical composition of soil water corresponds the valid normative.

3.2.3 The evaluation of environmental conditions

As a result of environmental investigation is can be said, that the concentration of naphtha products excel the natural background in soil and also in soil water. Up to the specific place, the pollution may exist even in the depth of two meters from ground. The results of spectral analyses show the higher concentrations of various metals (Ti, Cr, Co, Cu, Ba, B, Sc) that in spite of excelling the natural background do not excel the permitted limits of "Holländische Liste". It can be prognosticated that the pollution originates from the high traffic Tallinn-Tartu road at the close neighbourhood.

The establishment of Regional Hazardous Waste Transfer Station consists some risks to the local soil and soil water. The strict precautions should be made in the step of projecting to avoid and stop the spread of pollution.

4. The alternative locations for establishing a South-Estonian Hazardous Waste Transfer Station

There have been several alternative locations proposed for the site of South-Estonian TS during the development of Estonian Hazardous Waste Management System. In comparing the technical and administrative conditions as well as soil characteristics, the most realistic alternative building site has been proposed at Kärkna parish described detailed on the study of "Hazardous wastes Transfer Station at Tartu" by co-operation of MASP Ltd. and GIB Ltd. in 1994.

Kärkna is locating 11 km outside of Tartu Town in the north direction, in the administrative area of Tartu County. The territory situates in the neighbourhood of Tartu-Tapa railway, the local road for connection with the existing road transportation net must be established. There are no electricity, water- or sewage systems present at the site.

The environmental situation of proposed site is satisfying. No considerable pollution was detected from the analyses of soil and soil water. It must be pointed out that the soil conditions of area are sensitive to pollution, as the soil layers do not reject water and there are many hydraulic connections between upper and lower water levels inside the ground.

For the result of comparison the Tiksoja and Kärkna sites the Tiksoja has been chosen for following reasons:

- Tiksoja is closer to Tartu Town, where the majority of hazardous wastes are generated;
- The road net around Tiksoja is in the better condition for the transport of hazardous wastes;
- The local authorities at Tartu Town Government support the establishment of South-Estonian Hazardous Waste Transfer Station to Tiksoja;
- The complicated ownership questions of land usage and privatisation in Estonia are clarified at Tiksoja site.

The Tiksoja site have suitable characteristics and as the local authorities in the government of Tartu Town have approved the location of Regional Hazardous Waste Transfer Station in South-Estonia to Tiksoja, there is no considerable reasons for searching the additional alternatives.

5. Present situation with the establishment of South-Estonian Transfer Station

The local initiative of establishing a Regional Hazardous Waste Transfer Station at South-Estonia has not being specifically deep. It is strongly influenced by the general politics of EHWMS establishment, where the specific TS have not gained the top priorities. There have never been doubts, if the South-Estonian TS will be established at all, but the lack of concrete decisions have diluted the responsibilities and created the atmosphere of one-day-in-future.

To break the ice, a consulting company Keskkonnakonsult has made the letter to Tartu Town Government Dept. of Municipal Services asking about the technical and administrative details of Tiksoja building site as well as the opinion of authorities about the site suitability for South-Estonian Hazardous Waste Transfer Station. A proposal of organising a united meeting about the matter was also made (Look at App. 2).

As the answer, the Town Planing Department, Development and Planning Service informed (look at the App. 3):

1. The specified location suits well for the site of Hazardous Waste in the level of general planning, if the borders of sanitary zone and transportation scheme in the town level have in advance been specified.
2. The land use at the planned site is not determinable by neither general nor detailed planning but with the contract between the present owner of the site and applicant.
3. For the establishment of Hazardous Waste Transfer Station the detailed planning is required. With the detailed planing, the area borders for Hazardous Waste Transfer Station and surrounding building sites, the safety zone (that specifies the possibilities of using the surrounding building sites) and transportation scheme of close area must be determined.
4. The possibilities for technological network supplies will be specified during the detailed planning.
5. The settled detailed planing is a base for completing the project conditions.

It was also declared, that the Town Planing Department, Development and Planning Service supports the idea of organising the united meeting by all means.

The questions of land usage at Tiksoja were postponed to Tartu Town Planning Dept., who provided the following information (Look at App. 4):

1. The area of planned Transfer Station is still in the usage of Estonian Republic.
2. The owner of the buildings at Ravila 75 has a pre-emption in privatising the mentioned tract of land.

The above mentioned documents correspond to the "Development Plan of Waste Management at Tartu Town for the period of 1998-2002", which is validated by the Tartu Town Council on the 5th of March 1998 with the regulation No 38 (look at the Appendix 5).

The named development plan specifies and accepts the location of South-Estonian Regional Hazardous Waste Transfer Station at Tiksoja, Ravila Street 75. It is said:

"...The start of the South Estonian Hazardous Waste Transfer Station

The final treatment of hazardous wastes - deposition to landfill, neutralisation, rendering innocuous etc. will be organised centrally. Tartu is not going to handle it.

Based to the feasibility study "The development of Hazardous Waste Management System in Estonia" ordered by the Ministry of Environment, the four Transfer Stations and one Central Landfill will be established to Estonia. The location of South-Estonian Transfer Station is planned to Tartu, to Tiksoja. The task of the TS is to organise the collection, systematisation, packing and transportation to the final deposition of hazardous wastes.

Every type of hazardous wastes will be collected from small Collection Points to Transfer Station. The licensed company can only carry out the transportation of hazardous wastes. The delivery will be organised by South-Estonian Transfer Station or by a local enterprise.

Some types of wastes can be deposited to the closeness of Tartu (for ex. The agricultural chemicals to the bomb store at Maramaa), or used at the licensed firms for the production of energy.

The works of establishing the Transfer Station have been started, the detailed projecting and general building works are planned to start in the year 1998. The Transfer Station must start the operation in year 2000.

According to the plans, the Transfer Station should serve the Tartu Town and Tartu, Jõgeva, Põlva, Võru, Valga, Viljandi and Järva Counties. By Prognoses, there will be 6600 tons of hazardous wastes generated in the specified area. With the start of instate management system, the problems should be solved with those wastes, that can not be treated at the present (chemicals, left products of galvanic processes and hospital wastes)"...

Look at the Appendix 5, item 2.3.3. page 15/28.

6. The legal aspects of establishing the Regional Hazardous Waste Transfer Station to South-Estonia

6.1 Land

The start of the projecting work at planned Hazardous Waste Transfer Station is not possible before the conditions of land usage have been specified.

In the letter, composed by Mr. Urms Ahven, the Head of Tartu Town Government Land Management Dept. on the 9th of October 1998 it is said, that the area of planned Transfer Station at Tartu Town, at Tiksoja is still in the ownership of Estonian Republic.

Based to the regulation of Estonian Government on the 3rd of September 1996, in the accepted "The order of leaving land to the ownership of state" *the land specified in the Land Reform Law §31, item 1 will be left to the ownership of state.*

The referenced Land Reform Law §31, item 1 point 1 declares: *The land under state owned buildings, facilities and the land for their servicing will be left to the ownership of state.*

6.1.1 Leaving land to the ownership of state

The ministries and county governments (at the present, the Estonian Ministry of Environment and Tartu County Government) can apply for leaving the land site of Transfer Station to the ownership of state. Minister of Environment or Tartu Governor will make the decision over application.

To discuss the item of leaving land site of the planned South-Estonian Hazardous Waste Transfer Station to the ownership of state, the applicant (the Estonian Ministry of Environment) or its representative must compose a folder.

The folder, composed assumedly by the under company of Estonian Ministry of Environment, Info and Technology Centre/ Hazardous Waste Bureau (OJB), must contain the following:

1. The application of leaving land to the ownership of state specifying the base normative act, the approximate area of the land site and endeavoured designation;
2. Documents about the ownership of buildings in the territory that will be left to the ownership of state;
3. Documents about the so far land usage in the territory, which will be left to the ownership of state;
4. The location plan of the land or a plan of Cadastre Unite in the areas of dense colonisation at towns and out of towns in the scale of 1:500 to 1:2000.

The Hazardous Waste Bureau should present such a folder to Tartu Town Government.

Starting from the day of delivery, the Tartu Town Government must make their decision of leaving the land to the ownership of state during 15 days. Counting with the rules of land management, the town government will settle the necessary borders and size of the building service area on the state left land. If the purpose of the state left land has not been determined before, it will be also fixed in this stadium.

If the Tartu Town Government does not proceed those operations in time, the land site may be left to the ownership of state within the borders, size and purpose specified by applicant (OBJ). If the opinion of local government in leaving the land to the ownership of state has not been made in time, it does not obstacle the decision making.

The applicant (OBJ) must present a folder, documents expressing the opinion and decision of local authorities, draft of law of decision and explanatory letter to the Minister of Environment to make decision of the land leaving to the ownership of state.

Based to the existing order, the Minister of Environment makes decision over leaving land to the ownership of state in one (1) month. After the positive decision, the decision-maker or its representative registers the territory in the state Land Cadastre.

The decision of leaving land to the ownership of state validates after it has been published in the "State Gazette" or the note has been published in the appendixes of "State Gazette" and the land has been registered in the state Land Cadastre and in the Register of State Property.

6.2 Detailed Planning

After solving the questions of land usage, the detailed planning must be composed. The detailed planning is a base for projecting the building, completing the new immovable and change of existing borders.

By the "Planning and Building Law" (accepted at Estonian Republic on the 14th of June, 1995) §9 item 1:

Detailed planning is planning that is composed for the smaller territory of a parish or a town and that is a base of building activity for the close years.

6.2.1 Composing a detailed planning

Tartu Town Government must compose the detailed planning for the Hazardous Waste Transfer Station at Tiksoja. For the other solution, the Tartu Town Government must make a contract for composing of detailed planning with the persons, that are interested in composing the detailed planning.

Detailed Planning fixes:

- 1.) The division of planned territory to building sites;
- 2.) The building right of sites;
- 3.) The areas of streets and principles of transportation management;
- 4.) Green Areas and order regulations;
- 5.) Lains between buildings;
- 6.) The location of the technological net and buildings;
- 7.) Environmental resorts;
- 8.) Main architectural requirements for the buildings;
- 9.) Need of servitude.

The building rights of the site must contain the purpose, number of buildings, maximum allowed building area and allowed building height of the site. Depending on the Detailed Planning of Transfer Station, the proposals may be done for the change of presently valid General Planning.

The borders of neighbour sites can be changed without composing the Detailed Planning, if it does not bring any changes in the building rights and purpose of the site and is carried through under the agreement with neighbours.

In completing the Detailed Planning, the presently valid state defence, health-, environment- and fire safety as well as other laws and normative acts in Estonian Republic must be followed.

6.2.2 The public exposition of planning

One month after the decision of starting the Detailed Planning, the Tartu Town Government must inform public about the planned General and Detailed Planning. The informing can be carried out by the usage of local and county mass media.

The county government must inform the owner of specific immovable in two weeks, if the started Detailed Planning might result to the need of land expropriation, changes in the land usage or building right.

The owners of immovable in the area of planned Transfer Station, inhabitants of Tartu County and other persons interested are included to the composing of General and Detailed Planning. During the public exposition, they have the rights to propose improvements and inclusions and debate the planning.

The decision over accepting the planning as well as organising work of the public exposition at Tartu Town, Tähtvere quarter, will be carried out by local authority. The information of the dates and duration of the public exposition must be presented by county government at local and county mass media for one week before the exposition.

Before the public exposition, the Tartu County Government or the Minister of Environment will decide over the need of the other co-ordinations in elaborating planning.

If the started Detailed Planning might result to the need of land expropriation, changes in the land usage or building right, the Tartu Town Government must send a registered letter to the owner of specific immovable to inform about public exposition within two weeks before it will be held.

The interested persons must have an access to all materials and information that are in the hands of the organisers (county government or local authorities) of planning. The information on planning which is considered to be a state secret is not available.

The duration of public exposition of Detailed Planning is two weeks. During this time, the owners of immovable in the area, inhabitants and other persons have rights to propose improvements and debate the planning.

Tartu County Government of Tartu Town Government is obligated to announce the results of public exposition in the local mass media and organise the public discussion for the analyse of the results.

Based to the results of public exposition and discussion, the Tartu Town Government is obligated to make the needed improvements and inclusions in the planning and present it to the supervisor. The information of the unsolved items of planning debate must be included.

6.2.3 The supervision and validation of planning composing

The supervision over the General and Detailed Planning of South-Estonian Hazardous Waste Transfer Station will be carried through Tartu County Government.

The supervisor has the following competency:

- 1.) Check that the planning corresponds with the laws and regulations;
- 2.) Check that the planning corresponds with the valid generic planning;
- 3.) Issue a permit to change the valid generic planning with the validation of planning presented to the supervisor;
- 4.) Listen the opinions of persons, who have made the written proposals on the public exposition of planning and the other side of the debate, local authority. Present the opinion of the debate, if the settled proposals were not counted with.

In the need, the county government may demand for the environmental expertise of planning. The Minister of Environment will solve the disputes between supervisor and town government in the questions of supervisor competency. Governor will solve the disputes between local authorities

Town government, who will announce the decision in the local and county mass media, will validate the general and Detailed Planning. The decision of validation will be send to the supervising county government and to the holder of state Land Cadastre.

Everyone has a right to become acquainted with the validated Detailed Planning in the local authority of planned area.

6.3 Constructional design

In towns and other heavily populated areas the constructional design of buildings and facilities must be based on officially approved Detail Planning of the area.

The town government may issue an additional design specifications that are specifying the demands of existing Detail Planning. This document specifies architectural, constructional and other basic data and also persons, whose approval is needed on the completed design.

The person who orders the constructional design (Bureau of Hazardous Wastes) must in writing inform the Tartu Town Government about the beginning of design works and specify the need for design specifications.

The person who orders the design (Bureau of Hazardous Wastes) and designer will make an agreement, which specifies the following:

- the rights and obligations of designer and ordering person;
- volume of investigations necessary for performing the constructional design;
- the deadline of design complement;
- the procedure of acceptance of the design by the ordering person;
- persons responsible for the design.

The constructional design must be completed in the volume that enables the evaluation of the projected facility, construction and control over the construction works.

The permit to perform the necessary geotechnical-constructional investigations will be issued by Tartu Town Government.

6.4 Construction

The design and construction of Hazardous Waste Transfer Station must be performed by the following overall constructional demands and normative documents in force and has to fulfil the following conditions:

- fit in with the surroundings;
- must not create harm for human life, health, property nor environment;
- must enable economical usage of energy and materials;

- have sufficient carrying capacity, stability and permanence;
- must be sufficiently protected against fire and other accidents;
- the access to all parts of the object must be guaranteed;
- expenses for the repair, maintenance and exploitation of the object must be minimal.

The demands on constructional materials, products and constructions as well as on safety of the facilities are established with norms and standards. The rules of using norms and standards of foreign countries are validated by the Estonian Government.

6.4.1 Construction permit

In accordance with the Detailed Planning, the Tartu Town Government must guarantee the establishment of roads and technological nets to the territory of established Transfer Station, if the applicant of the construction permit and local municipality have not agreed otherwise. Those items must be completed before issuing the object's building permit.

Starting from the day of presentation, the local municipality (Tartu Town Government) must answer the application of building right in 14 days. With the positive answer, the owner of the immovable or to the person, who has the right of building on the site will receive a permit of construction, issued by Tartu Town Government.

The town government has a right to cancel the permit in case the construction has not started within one year or if the application contains false data.

The construction permit specifies the order and conditions of constructional supervision and the final deadline of construction works in co-ordination with the owner of the object.

Town government will not issue the construction permit, if the design does not follow the conditions of Detail Planning, design specifications, constructional norms or normative documents.

6.4.2 Environmental and constructional expertise

Depending on the nature of the facility, it could be necessary to perform environmental and constructional expertise on the project.

It is obligatory to perform the environmental expertise for the Hazardous Waste Transfer Station, as the facility contains potential hazards to the environment.

Performance of expertise is also obligatory when the project is financed from the state budget. The owner of the facility and local municipality must retain the design and other documentation concerning the facility during all the period of its existence.

6.4.3 Exploitation permit of the facility

Exploitation permit is issued by local government for the facility, which is constructed according to the construction permit and design documents.

Exploitation permit is issued by local municipality (Tartu Town Government) after the inspection of the facility, fulfilment of prescriptions of constructional supervision and delivery of the documentation concerning the facility.

The exploitation of the facility can be started after the permit has been issued for the purposes specified on the exploitation permit.

The exploitation of the facility can be started partly, if it is necessary and bases to the exploitation permit.

After the exploitation permit has been issued by the town government, the object will be included into according registry of facilities.

6.4.4 Obligations of the owner of facility and contractor

The owner of the facility is obligated:

1. to guarantee the keeping in order and safety on the territory during construction, exploitation and demolition of the facility;
2. to supply the building during the constructional stage with placate specifying the owner, contractor and building permit of the facility as well as the deadline and duration of construction works;
3. to guarantee access of supervision engineer and supervising personnel of other spheres to the facility and to the relevant documents for supervision of the construction works;
4. to perform the owner supervision of the construction works;
5. to guarantee that the facility is used in accordance with the exploitation permit.

The contractor is obligated to guarantee:

- 1) the documentation of the construction works;
- 2) performance of the construction in accordance with design documents;
- 3) usage of construction materials and products, that correspond standards and technical demands;
- 4) quality of construction works;
- 5) The order and safety of the facility under construction and surrounding area

7. Summary

In accordance with the practical experiences of the programme "Hazardous Waste Management in Estonia" (gained at Tallinn Transfer Station, Vaivara Transfer Station and Final Deposit), the main task of the present study was to re-investigate the possibilities of establishing the South- Estonian Regional Hazardous Waste Transfer Station to Tartu, to Tiksoja (Ravila Street 75).

As the result of the work, it can be said:

1. The planned location is accepted by the officers of Tartu County Government and Tartu Town Government;
2. The above mentioned site is fixed in the "The development of Hazardous Waste Management System in Estonia";
3. The local authorities have accepted the established state system and are, in principles, agreed with the location of Transfer Station at Ravila Street 75.
4. The local authorities accept the establishment of Transfer Station to the state-owned land, in which realising the order maker and performer must follow the legislation valid at the Estonian Republic.

8. List of Appendixes

- 1. THE PATTERN OF SOIL INVESTIGATION AT THE TIKSOJA SITE**
- 2. LETTER FROM KESKKONNAKONSULT TO TARTU TOWN GOVERNMENT, 5TH OF OCTOBER, 1998**
- 3. LETTER FROM TARTU TOWN GOVERNMENT TOWN PLANNING DEPARTMENT, 14TH OF OCTOBER, 1998**
- 4. LETTER FROM TARTU TOWN GOVERNMENT LAND MANAGEMENT DEPARTMENT, 9TH OF OCTOBER, 1998**
- 5. THE TARTU TOWN GOVERNMENT DEVELOPMENT PLAN OF WASTE MANAGEMENT FOR THE PERIOD 1998-2002**
- 6. PLANNING AND BUILDING LAW (IN ESTONIAN)**
- 7. THE ORDER OF LEAVING LAND TO THE OWNERSHIP OF STATE (IN ESTONIAN)**

Tartu Linnavalitsus
Hr. Urmas Ivask
Linnamajanduse osakond
Juhataja

05.10.1998 KK/018

Programmi "Ohtlike jäätmete käitlussüsteem Eestis" raames oli rakendusuuringus (Eesti- Taani ühistöö, valminud 1994 mai) Lõuna-Eesti regiooni ohtlike jäätmete kogumiskeskuse asukohaks pakutud maa-ala Tiksojal (Ravila 75). Nimetatud programmi realiseerimise üheks kaasfinantseerijaks on olnud Taani Kuningriik, kelle esindaja, firma Chemcontrol AS ülesandeks on olnud rajatavate keskkonnakaitseliste objektide tehnoloogiliste lahenduste projekteerimine. Seoses Lõuna-Eesti regionaalse kogumiskeskuse projekteerimise ja ehitustööde planeerimisega palume Teie kaasabi teatud küsimustele vastuse leidmisel, et ennetada võimalikke tekkivaid probleeme ehitusliku projekteerimise käigus.

- Kas Tartu Linnavalitsus on endiselt nõus regionaalse ohtlike jäätmete kogumiskeskuse planeeritava asukohaga Tiksojal (Ravila 75)?
- Kas planeeritav asukoht langeb kokku Tartu linna üldplaneeringuga?
- Milline on kogumiskeskuseks planeeritava maa-ala staatus (riigimaa, munitsipaal-või eramaa)?
- Milline on Tartu Linnavalitsuse seisukoht eeltoodud küsimuses ehk kelle maale peaks rajatav keskkonnakaitseline objekt jääma?
- Kas kogumiskeskuse kommunikatsioonide (vesi, elekter, kanalisatsioon, side) projekteerimisel võib tekkida probleeme praeguste trasside valdajatega? Kes väljastavad vastavad projekteerimise tingimused?

Ohtlike Jäätmete Büroo (Keskkonnaministeeriumi Info-ja Tehnokeskus) tellimusel alltöövõtjana tegutseva firma Keskkonna Konsult esindajad on igati valmis kaasa aitama eeltoodud küsimustele vastuste leidmisel ning peavad oluliseks vastavate Tartu Linnavalitsuse ametnike osavõtul töökoosoleku korraldamist, et täpsustada detaile ja esitada täiendavat ning täpsustavat informatsiooni.

Lisa - skeem

Meeldivat koostööd soovides,

Peeter Rüügas
direktor

KESKKONNAKONSULT

Tartu Town Government
Mr. Urmas Ivask
Dept. of Municipal Services
Director

05.10.1998 KK/018

In the frames of "Estonian Hazardous Waste Management System" programme feasibility study (published by Estonian-Danish co-operation in May 1994) the area in Triksoja (Ravila Street 75) was selected for the location of establishing the Regional Hazardous Waste Transfer Station in South-Estonia. The above mentioned programme is partly financed by Danish Kingdom, represented by firm a/s Chemcontrol, who has been projecting the technological solutions for the established environmental protection objects. In accordance with planing the projecting and building work of South-Estonian Regional Transfer Station, we would like to ask for your help in finding answers for the following questions, to avoid in advance problems at the constructional stage.

- Is Tartu Town Government still agreed with the planned location of Regional Hazardous Waste Transfer Station in Triksoja?
- Does the selected location match with the general planning of Tartu Town?
- Which is the type of land use in the planned area (state, municipal or private?)
- What is the opinion of Tartu Town Government in above-mentioned question, i.e. in whose land use the established object will be?
- Could the project works of communication establishment (water, electricity, canalisation, communications) generate any problems with present connection owners? Who would work out the conditions of project work?

The representatives of Keskkonnakonsult (Environmental Consult) firm are working by the ordering of the Hazardous Waste Bureau (Info- and Technology Centre of Ministry of Environment) and would like to help in finding the answers of the questions. They do consider of setting up a meeting with the officers of Tartu Town Government to specify the details and present additional information.

Appendix – the scheme.

Hope for a pleasant co-operation,

Peeter Rüngas
Director



TARTU LINNAVALITSUS
LINNAPLANEERIMISE OSAKOND

Pr Helve Arukask
Linnamajanduse osakond
keskkonnateenistus

Teie 06.10.1998 nr 23/692
Meie 14.10.1998 LP-18/645

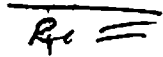
**Ravila 75 krundile ohtlike jäätmete
kogumiskeskuse rajamine**

Edastame Teile linnaplaneerimise osakonna arengu- ja planeeringuteenistuste seisukohad antud küsimuses.

1. Nimetatud asukoht sobib ohlike jäätmete asukohaks üldplaneeringu tasandil juhul, kui eelnevalt on täpsustatud kogumiskeskuse sanitaarkaitsetsooni piirid ja veduse liiklusskeem linna tasandil.
2. Planeeritava ala omandivormi määramine ei ole määratav üld- ega detailplaneeringuga vaid krundi praeguse omaniku ja taotleja omavahealise lepinguga.
3. Ohtlike jäätmete kogumiskeskuse rajamiseks on nõutav detailplaneeringu koostamine. Detailplaneeringuga tuleb määrata kogumiskeskuse rajamiseks ja teenindamiseks vajalik krundi piir ja naaberkruntide piirid, sanitaarkaitsetsoon (millest selgub naaberkinnistute sihtotstarbelise kasutamise võimalus) ning lähialade liiklusskeem.
4. Tehnovõrkudega varustatuse võimalused selgitatakse välja detailplaneeringu koostamise käigus.
5. Kehtestatud detailplaneering on projekteerimistingimuste koostamise aluseks.

Toetame igati ühisnõupidamise korraldamist

Lugupidamisega


Raul Tækker
Juhataja

Indrek Ranniku 44 02 62
Irja Alakivi 44 01 57