

Environmental Review



**Farma Terezov s.r.o.
Terezov 4, 920 03 Hlohovec**

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1. Introduction

Farma Terezov is owned by EPP A/S Terezov, and is a part of other productions units which are places in Slovakia.

Farma Terezov Pig production farm is an existing pig production farm, which will be completely renovated for producing 1,454 sows/gilts, 29,952 weaners (7,4-30 kg) and 29,896 finishers annually from 30 – 120 kg live weight. Now there are a pig production including sows, weaners and finishers.

The farm is located approximately 74 km to the capital Bratislava. The farm is placed in an area with other farmers, and there is approximately 3.5 km to the nearest farm. The farm is placed 1 km to the nearest lake.

The farm is located on an 8 ha farm site without any crop production. The crop production is handling from another farm.

Slurry from the Farm will be spread on the fields and biogas. The nutrients in the slurry will be used as fertilizer for the plants. Wheat are grown on the fields and harvested once a year.

The project documentation for the pig farm has been prepared, and preparation of detailed design of renovation of the pig farm has been launched.

Existing production buildings will be renovated. The old manure handling system and the channels inside and outside buildings will be changed during the renovation.

Pre-mixed feed for pigs will be purchased from a feed mill and delivered to the feed silos at the pig farm. The feed will be applied liquid feed for finishers and dry feed for sows and weaners.

It should be emphasised that elaboration of this Environmental Review will not be in interference with elaboration of Slovakian environmental assessments (IPPC and EIA) in compliance with Slovakian legislation.

The proposed scope and structure of this report is based on the OECD Updated Recommendations¹ and the Equator Principles² in force.

According to OECD recommendations annex 1, the farm is a category A level project, as pig production projects with more than 2,000 pig places or 750

¹ OECD Updated Recommendations on Common Approaches on Environment and Officially Supported Export Credits (25 February 2005) [http://webdomino1.oecd.org/olis/2005doc.nsf/Linkto/td-ecg\(2005\)3](http://webdomino1.oecd.org/olis/2005doc.nsf/Linkto/td-ecg(2005)3)

² Equator Principles <http://www.equator-principles.com/principles.shtml>

sows are a level projects. This is the justification that Danish financing institutions have requested elaboration of the Environmental Review in accordance with international guidelines.

2. Executive summary

The farm will be renovated to 1,454 sows/gilts, 29,952 weaners and 29,896 finishers from 30 – 120 kg.

The renovation is planned to start primo 2013/2014, and the farm will then gradually start production. It will take about one year from start of renovation until the farm is in fully renovated and in operation

The farm is located on a farm site without crop production.

The manure from the farm is applied at a crop farm and utilized as fertilizer and to biogas. The total harmony requirement from the two pig farms is 1,090 ha, based on the Danish calculation of 1.4 Animal Unit per ha.

The farm has made agreement with a Slovakian environmental consulting company for preparation of the detailed design according to Slovakian regulations based on Danish outline design. This company is in the process of preparation of the required Slovakian environmental permits etc. for renovation and operation of the pig farm in compliance with Slovakian legislation. The company EKOCONSULT, from Bratislava, Slovakia has over the years worked for several local and foreign companies with larger animal production (www.ekoconsult.sk).

It is the overall assessment that the farm has the permits and approvals necessary at this early stage of project implementation, and that the farm has initiated obtaining the remaining permits and approvals.

The pig farm will be renovated in compliance with Slovakian and Danish environmental and animal welfare regulations.

The manure handling and application of manure on cultivated area will be in compliance with Slovakian and Danish regulations.

The farm will prepare a waste management plan for the pig farm.

Operation of the farm will not have negative noise impact at neighbours. The farm is located 900 m to H. Zelena and 3 km to Sulekovo. The distance from the stable and to the nearest house is 63 m.

The location of the farm is in accordance with Slovakian Environmental regulations.

According to Danish odour standards there is only low risk of odour nuisance at the nearest village 900 m from the farm buildings. The required distance to the village is 645 m. The required distance to a single house is 363 m, and

from the centre of the farm to the single house the distance is 292 m. The location of the farm is observing Danish odour nuisance regulations.

The foreign management will be one pig production manager. During the renovation period there will also be some technical managers responsible for renovation of the farm.

The farm will establish training programs for Slovakian employees, who will gain knowledge and skills in modern pig production methods according to newest management and production systems.

The farm will have a very positive social effect in the area because it creates employment in a rural area with limited alternative employment possibilities in the agricultural sector.

The pig production farm will start renovation and pig production in 2013/2014 and when the pig farm is in full production the Slovakian employment will be 12 persons in the production. Additional staff will be needed for maintenance, administration, transport and other services so the total number of Slovakian employees for the entire farm will be 20 to 22 persons. In addition to this the farm will create secondary employment for the local community because the farm will purchase buildings materials and other commodities as well as purchase services such as transport of commodities to and from the farm.

The farm will employ a Slovakian veterinarian, which will report on veterinarian matters to the authorities. The farm will have the required inspection from Slovakian veterinarian authorities.

All employees will be trained in safety and provided with overalls and individual safety outfit.

3. Slovakian Legal framework

Farma Terezov has received the necessary Slovakian permits and approvals for the construction of housing facilities and operation of pig production. This includes technical building permits based on the Danish sketch design and Slovakian construction drawings. Farma Terezov has even arranged for these permits.

The first part of EIA is finished, and the second stage – elaboration of Assessment report and delivery to the Ministry of the Environment is not realised. Assessment report is being prepared, but not delivered to the Ministry of the Environment.

The Slovakian EIA is required before the land using permits can be issued. The IPPC procedures deal with buildings permits, demolishing permits, trial operation permits and permanent operations permits. The duration for

obtaining the Slovakian permits are estimated to: EIA 10-11 months (comparing to Velky Cetin 11,5months), land using 2 months, IPPC building permits 6 months, IPPC trial 6 months and IPPC permanent operation 3 months.

The EIA and IPPC procedures cannot be done in parallel, and this means that building renovation can start 6 to 8 months after the procedures IPPC have been launched. Starting of IPPC procedure could be officially announced only after ending of EIA procedure.

Part of the approval procedures is that both the Slovakian EIA and IPPC will be published in local media for comments and the EIA will also be published in the Web site of Ministry of Environment. Public hearing in neighbouring villages will be present as well. The main issue will be smell and distribution of slurry to the fields.

It should be emphasised that elaboration of this Environmental Review will not be in interference with elaboration of the Slovakian permits and environmental assessments (IPPC and EIA) which will be in compliance with Slovakian legislation.

It is the overall assessment that the farm has the permits and approvals necessary at this stage of project implementation, and that the farm has initiated obtaining the remaining permits and approvals.

4. Project Description

4.1. Baseline situation

The farm is located in an agricultural area with traditional crop production such as cereals and corn production.

There is little livestock in the area and therefore there is adequate separation from other pig farms. The farm is located far from other livestock and cities and villages. Location is chosen based on very long distance to other pig production unit. It is important with very high health status pigs and to keep low outside contamination of different virus.

The public road system to the Farm is suitable for operation of production. There is established an internal road system, so it is possible to get around by heavy vehicles.

Manure management system will be in accordance with Danish and EU environmental requirements.

The pig farm was built with the capacity of 1,150 sows plus weaners and finishers.

All buildings will be renovated and used for pig production.

The employment possibility at the rural sector is limited in the area because many of the livestock production facilities have closed down.

The existing manure storage facility will be used. There are 7 steel manure tanks that will be used as manure tanks, and there will be storage for minimum 9 months. The slurry tanks will not be covered. The slurry is led from the stables to a little tank and from there to the slurry tanks. Manure will then be spread on the fields and biogas.

Manure management system will be in accordance with Danish and EU environmental requirements.

The manure handling system will introduce improved storage facilities for livestock manure to the region which will also secure improved utilisation of the nutrients in the manure. This has an environmental impact as the nutrients are not leaking to the environment and it reduces the need to use chemical fertilizer in the fields. The manure handling system will be in compliance with Slovakian, Danish and EU environmental requirements.

The feed to the pigs will be produced at the external feed mill. The pigs will at finisher live weight of 120 kg be delivered to slaughterhouses in Slovakia and export in EU. There is sufficient capacity to serve the pig farm.

4.2. Location and design of farm

The farm is located in of Slovakia 3 km east from the city Hlohovec and 3 km to the village Sulekovo placed north from the Farm. The area can be characterized as farming area and scattered small forest areas. The project will not have effect on cultural heritage of the region. There are no nature protection areas which will be affected by farm operations.



Figure 1: distance to villages.

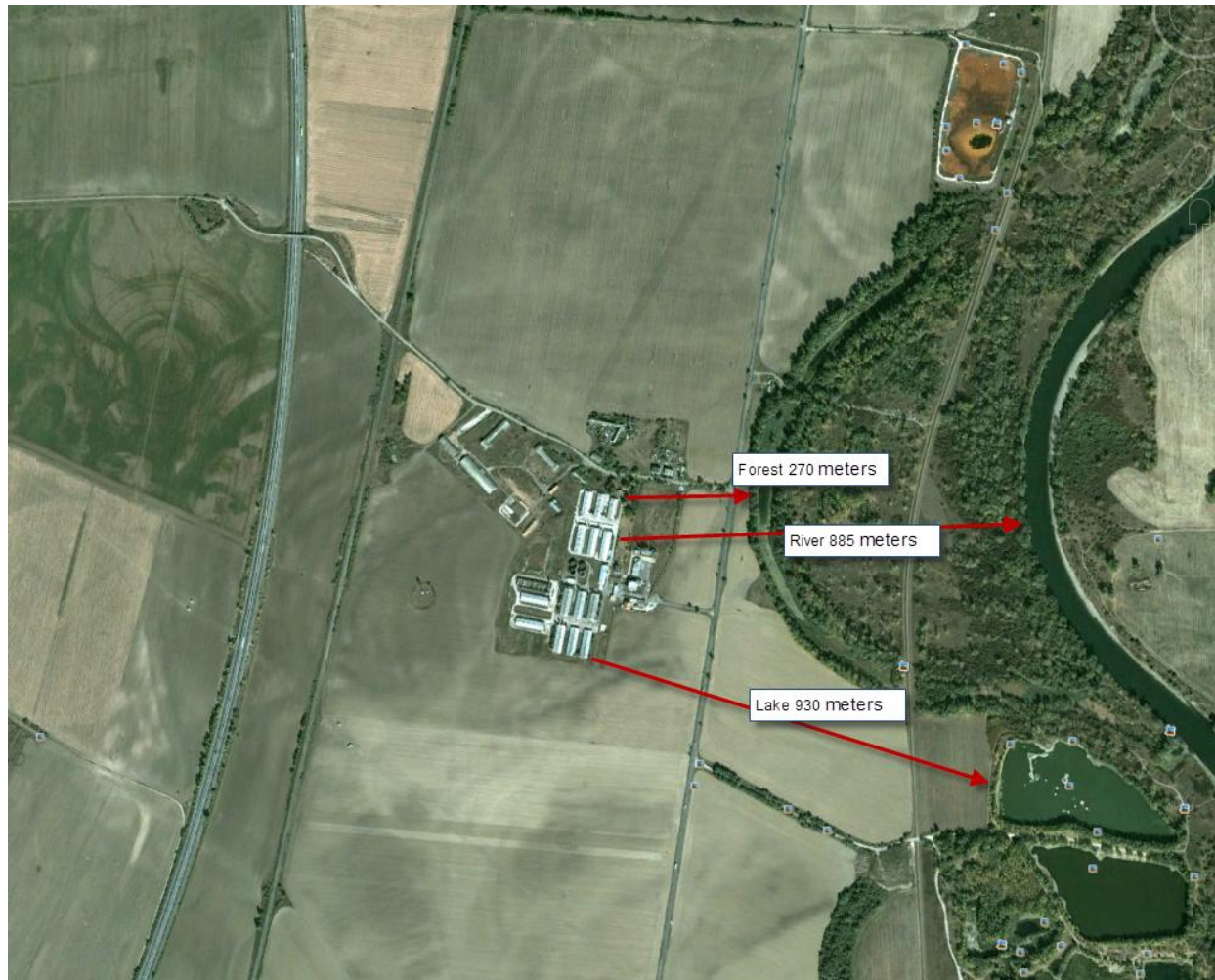


Figure 2: Distance to nature.

The distance from the Farm to the river in east is 885 meter and to the forest in east there is approximately 270 meter. There are number of lakes in southeast 930 meter from the farm.

The land around the farm is used to cultivate corn.



Figure 3: Distance to nearest houses used for farmworkers.

The distance to the nearest house is 63 m and the distance to the nearest farm is 3.5 km.

The location of the farm is in accordance with Slovakian environmental regulations.

According to Danish odour standards there is only low risk of odour nuisance at the nearest neighbour 63 m from the farm buildings. The required distance to the neighbour is 363 m. The required distance to a village is 645 m and to city 1,148 m, so there will be low risk of odour nuisance at Sulekovo and Hlohovec.

Table 1: Summary of Danish legislation and actual distances.

Location	DK legislation	Actual distance
City (Hlohovec)	1,148 meter	3 km
Village	645 meter	3 km

(Sulekovo)
Single house in
countryside

363 meter

229 m*

*this is from the centre of the farm

In Danish legislation a neighbour farm is not counting!!
Calculated as FMK (Foreningen af Miljø medarbejdere i Kommunerne), DK

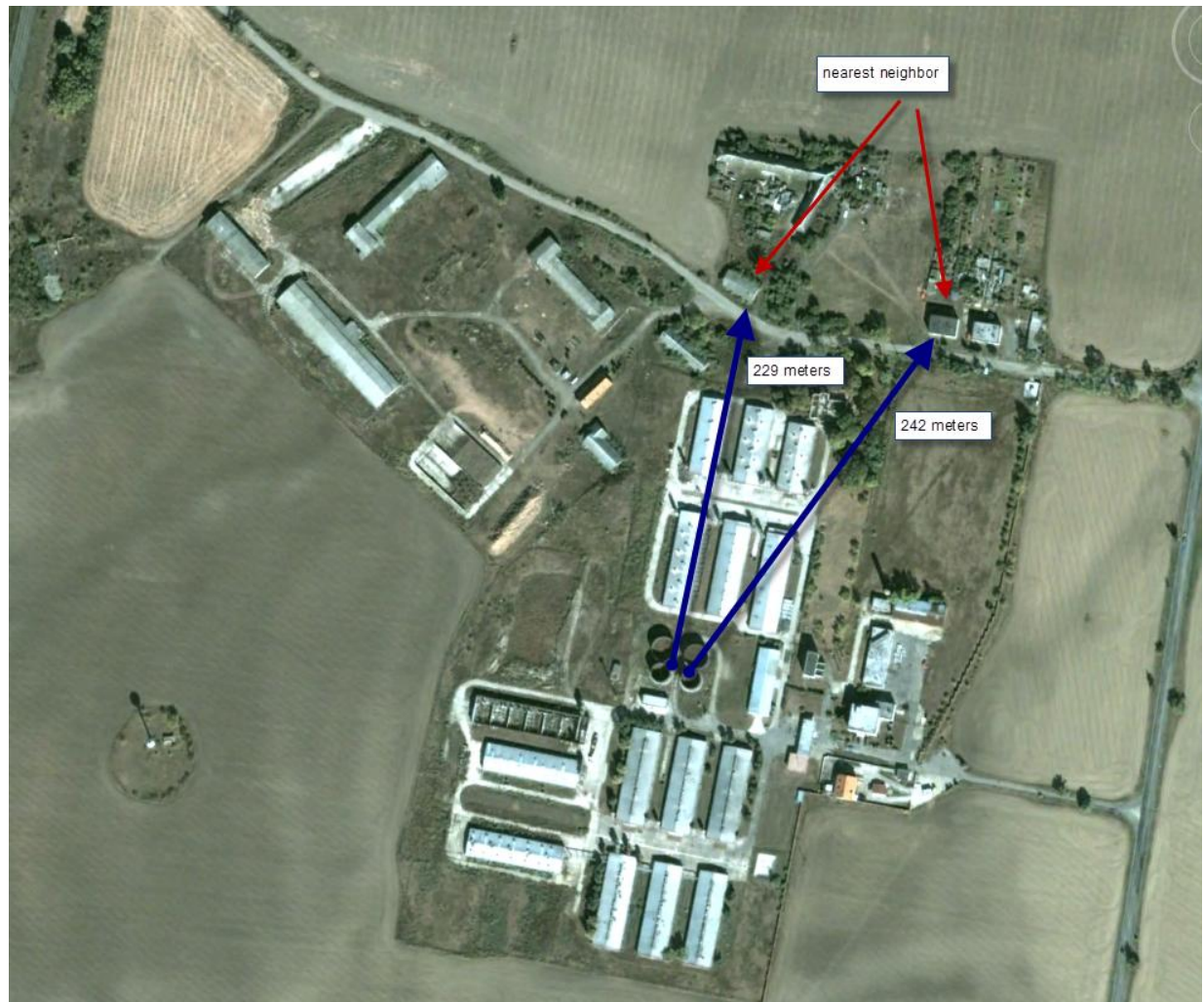


Figure 4: Distance to nearest houses from the centre and the farm according to FMK

4.3. Pig production

The pig production complex will be on 1,454 sows/gilts, 29,952 weaners and 29,896 finishers annually from 30 – 120 kg live weight. The pig production complex will after renovation comprise 4,608 pen places for weaners and 8,080 pen places for finishers.

The pig production project is renovation of an existing pig farm. The buildings are in good maintenance standard.

Some of the equipment is outdated and will be removed, and new modern equipment will be installed, and some of floor construction will be new with new manure channels covered by concrete drained and slatted floor.

The existing feeding system will be used in the production. The feeders will be replaced by new ones. The existing feed silos for pre-mixed feed will be used at the pig production.

The pig production complex is as indicated placed in 15 buildings or locations of different size. The total building area will be 19,000 m².

The pig production unit will be totally isolated via metal fences to prevent access from intruding animals and humans. There is only one entrance for staff. All staff and visitors must shower and change into farm clothing before entering the pig production area. The staff will then proceed to the pig production units and change footwear and change to working clothes.

All incoming trucks and vehicles have to pass the entrance with disinfection pit.

For staff working at the pig production, service facilities with changing shower and toilet facilities will be established. All incoming trucks and vehicles have to pass the entrance with disinfection pit.

Trucks collecting dead pig will not have access to farm area, and the dead pigs will be brought to a fenced area with direct access for the truck collecting the dead pigs.

The production complex comprises the following units.

- | | |
|--------|-------------------------|
| 1-6. | Finishers |
| 7-8. | Weaners |
| 9. | Finishers |
| 10-11. | Farrowing section |
| 12-14. | Gestation unit |
| 15. | Mating section |
| 16-18. | Warehouse |
| 19. | Administration building |
| 20. | Dead animals |
| 21. | Delay pool |
| 22. | Slurry tanks |
| 23. | Electricity |
| 24. | Clean/unclean zone |



Figure 5: View of Farma Terezov

Table 2: View of the production.

No. of buildings	Pig places	Area per pig, m ²	Flooring
1	1.118	0,65	Partially slatted floor
2	1.118	0,65	Partially slatted floor
3	1.118	0,65	Partially slatted floor
4	1.118	0,65	Partially slatted floor
5	1.118	0,65	Partially slatted floor
6	1.118	0,65	Partially slatted floor

7	2.688	0,65	Partially slatted floor
8	1.920	0,35	Drained floor
9	1.118	0,35	Partially slatted floor
10	152	-	Fully slatted floor
11	144	-	Fully slatted floor
12	288	2,25	Partially slatted floor
13	350	2,25	Partially slatted floor
14	250	2,25	Partially slatted floor
15	270	2,25	Partially slatted floor

Area per pig, 0.65 m²: when the pigs reach 100 kg the biggest pigs will be taken out, so there are more room for the rest.



Figure 6: Partially slatted floor and drained floor for weaners

There will be buffer and recreation pens at the farm. The production system in terms of area allowance per pig and flooring system are in compliance with EU animal welfare regulations applicable for new farms.

It is expected efficiency improvement due to improved genetics and good management. Efficiency would result in a better feeding efficiency, so the finishers are growing faster and reduced mortality and altered food consumption.

Variations within the year will occur. During the warm summer months may experience depression and therefore increased mortality among animals.

Pig production unit

The weaned pigs are stayed in the farm until they reached 120 kg. The pigs reach the live slaughter weight of 120 kg after 14 – 16 weeks, when they are sold to the slaughterhouse.

The total capacity of the sows are 1,454 penplaces, 4,608 pen places for weaners and 8,080 pen places for finishers.

One unit at the finisher unit will be used as a buffer unit, which will be used for the slow growing pigs, recreation for pigs requiring special care and in cases that additional capacity for finishers is needed.

When the pigs reach the slaughter weight, they are brought from the pig production buildings to the delivery stable. The truck loads the pigs at the delivery stables and brings the pigs to the slaughterhouse. The truck will only have access to the delivery stable.



Figure 7: Finishers at Terezov Farm



Figure 8: Finishers at Terezov Farm

Description of house decor

Housing System for farrowing sows is fully slatted floor. The system for gestation sows and mating sows is partially slatted floor. The system for weaners is drained floor and partially slatted floor. The system for finishers is partially slatted floor.

The channels with slurry are ordinary canals with a depth of 40-60 cm. The slurry pipes from various sections are placed under the floors and are joined outside the building to a common pipe, which is connected to the slurry tanks.

The slurry from the canals inside the building is emptied every 4th-6th week in shifts. The actual pumping out takes several minutes. The discharge of slurry from the tank to the slurry tank must be made each week.

In hot weather there is used a cooling system.

There are used an alarm system, if the ventilations are broken down – energy supply is gone or feed line has stopped.

Applied BAT (Best Available Technology)

- Established cooling system in all stables, this lowers the temperature and control the excretory behaviour, which minimize the air emission
- Drinking cups with a level sensor that reduces water wastage.
- The water supply will be tested regularly.
- Adjusting gram crude protein per. feeding units for finishers.
- After each batch of pigs the interior is cleaned with a high pressure cleaner.

The production system in terms of area allowance per pig and flooring system is in compliance with EU animal welfare regulations applicable for new farms. The production system will be in compliance with Slovakian requirements for pig housing.

Equipment in the pig production unit

Feeding system

For sows and weaners there will be installed dry feed and for finishers liquid feeding will be installed. Premix material for feed will be delivered in silos. All feed components are purchased from suppliers, as the Farma Terezov is not involved in growing crops. From the feed mill the feed will be transported with proper equipment to each silo places inside the feed unit, and from there the feed will be transported to each section.

Feed processing equipment for milling and mixing of feed for the pigs will be installed in a separate building. The feed processing is designed for milling grain and mixing with premixes. The feed processing prepares ready mixed diets for each category of pig.

The feed will be supplied from feed silos placed outside the pig production buildings.

The feed will be grain produced at the Farm purchased protein feed and premixes.

Watering system

Automatic watering system will be installed in all pig production units. Quality and management of the water supply is very important.

Ventilation system

An automatic controlled ventilation system will be installed in all pig production buildings. The ventilation computer regulates the heating system and the cooling system. Ventilators will be placed at the ridge of the roof with open exhaust.

Heating system

The pig production units will be equipped with a water based heating system. The heat will be supplied from gas.

Spray cooling system

A high pressure cooling system spraying system for cooling the pigs during summer periods will be installed in all pig production buildings.

Alarm system

Alarm system in compliance with Danish requirements will be installed in all pig production buildings. Part of the alarm system is emergency opening of the ventilation system in case of power failure.

Recreation pens

Pens for sick pigs and recreation pens will be established in compliance with Danish animal welfare regulations.

Production pigs

The farm will have sows and pigs from 7.4 kg to 120 kg. There will be restricted access to pig production facilities. A section for pigs will be completely emptied before a new batch of pigs is transferred to the section.

Pig Production Management system

All actions and operations regarding pig production will be weekly recorded in the Danish management software system. This system is used for organizing, analysing, reporting production performance and managing all actions for groups of pigs. This system is the most important management tool for the pig production.

All records will be made on the basis of notes and paper records in the production unit.

4.4. Storage and utilization of pig manure

The main environmental issue related to pig production is related to storage, handling and application of the manure on agricultural land.

The overall environmental strategy of the farm is to utilize the pig manure as a product, which can be used as fertiliser on agricultural fields and not consider the manure as a waste product.

All pig production buildings will be renovated with 40-60 cm deep manure canals.

The canals are covered by fully slatted floor/ partially slatted floor/drainage floor in compliance in EU regulations. A pull and plug piping system below the manure canals discharges the manure to the pumping station, and further to manure storage.

Table 3: Manure production

<i>Pig unit</i>	<i>Design of production facilities</i>	<i>Production capacity per pig</i>	<i>Pig manure m³ / year</i>
Gestations sows	Partially slatted floor	4.64	4,501
Mating sows	Partially slatted floor	3.92	1,898
Farrowing sows	Fully slatted floor	1.68	2,443
Weaners	Partially slatted floor	0.1247	3,735
Finishers	Partially slatted floor	0.5969	17,845
Total			30,422

The manure production is calculated by a spread sheet from Danish Agricultural Advisory Service in accordance with the official Danish standards presented below including waste water from washing and drinking:

The annual manure production will then be 30,422 m³.

At the Farm there are 7 existing manure steel tanks, totally of a capacity of 9,797 m³.

In connection with the expansion of the pig production the storage capacity of the liquid fraction will be equal to 9 months production, which fulfils the Danish requirement of 9 months. Rainwater to the slurry tanks is included in the storage capacity, but not rainwater from concrete areas. The manure steel tanks are checked by Slovakian authorities.



Figure 9: Manure steel tanks.

The manure will be transported by truck from the farm to the fields and biogas.

The manure will be used as fertilizer on the crop. The Farm will use slurry tanker with drag-hose system for the manure on the field.

The general Danish and EU requirement for liquid manure application is to use drag-hose system.

For the application of manure on agricultural land the description of abatement measures should focus on harmony requirement (required agricultural area available for manure application). The standards to compare against are Danish and EU regulations concerning application of livestock manure on agricultural land

The Danish regulations are more limiting than EU regulations.

The Danish environmental legislation stipulates a maximum of 1.4 livestock unit per ha for application of animal waste. The EU requirement is 1.7 livestock units per ha. The number of animal units is calculated in accordance to Danish standards, using the spread sheet Calculation of Animal Units and Harmony area developed by Danish Agricultural Advisory service.

Table 4: Animal units

<i>Production unit</i>	<i>Production</i>	<i>Animal units</i>
Sows	1,454	339
Weaners (7,4-30 kg)	29,952	149
Finisher (30-120 kg)	29,896	1,037
Total		1,525

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Harmony requirement is 1,090 ha, based on the Danish calculation of 1.4 Animal Unit per ha.

Slurry contains important nutrients, which plants can absorb in the spring. It is important that there is balance between the application of slurry and the amount needed for growing crops. Plants need to grow. Normally grain needs 120-160 kg N per hectares to give optimal yields.

Table 5: The contents of nutrients in the manure.

Manure fraction	Volume	N content	P content
Total tonnes	30,422	130,807	33,588

4.5. Consumption

Feed for pigs

Annual consumption of pig feed is calculated to 10,341 tons, which will be purchased at the farm. The feed consist of minerals, soybean meal and Pre-mix which they buy at Pig-Agro.

Water

Annual consumption of water is estimated to 29,439 m³.

The farm has its own water supply with boreholes and a water collection tank. Water will be used for drinking for pigs, cleaning of pens, cooling system in pig barns and in service buildings.

Electricity

Annual consumption of electricity is estimated to 1,021.772 kWh to the pig production unit, including heat consumptions.

The electricity supply will be from existing public grid connection. An emergency diesel generator will be installed.

Electricity is used for lighting, operation of ventilation, feeding system, manure pumping etc. and in service buildings.

Heating

Heating is by gas. Will approximately used 140,000 m³ of natural gas.

Heating is used in pig production buildings, administration and service buildings.

Oil for vehicles

There will be no diesel and lubrication oil at the farm.

Cleaning, disinfection and hazardous materials

Disinfection materials will be used for cleaning and disinfection of pig barns.

The farm will use a very limited amount of material which can be categorized as hazardous materials. These materials are used for disinfection and chlorine for water cleaning. There will be prepared a manual for handling such chemicals in compliance with Slovakian legislation.

All materials will be stored in locked stores.

4.6. Air emission

Ventilation from pig barns is the main source of air emission, but all ventilation outlets are placed on the roof of pig production buildings. The entire ventilation system will be selected with focus on low energy consumption and low noise level.

There will only be limited periodic air emission of dust from filling the feed silos at the pig production buildings.

The nitrogen emission from the pig farm (stables) will be 25,510 kg N per year. From the slurry tanks the nitrogen emission are 2,043 kg N per year. The background deposition of 15 – 20 kg per ha per year and the application of nitrogen on cultivated fields of 100 – 150 kg nitrogen per ha per year.

There is no special nature which is sensitive to nitrogen in the area where the pig farm is located. The distance from the farm to the river in east is 885 meter and to the forest in west the distance is 270 meter. The nitrogen emission from storage of liquid manure will be reduced by using floating layer.

Source of dust emission is from ventilation of pig barns. The dust will be released outdoor close to production buildings.

The source of odour is the outlet from the ventilation system. The odour from manure storage is very limited, because there will be a close floating layer. Transport of manure from the pig farm to the fields will cause very limited periodic odour.

The transport vehicles will be a source of air emission.

Inside the barns

CO₂: 600 – 3,500 ppm.- higher during winter with low ventilation rate

NH₃: 1 – 25 ppm. - Higher during period with low ventilation rate.

Odour

According to Danish odour standards there is no risk of odour nuisance at the nearest village or city from the farm buildings. For further information see the overview in Annex.

The location of the farm is observing Danish odour nuisance regulations.

Table 6: Summery of Danish legislation and actual distances.

Location	DK legislation	Actual distance
City (Hlohvec)	1,148 meter	3 km
Village (Sulekovo)	645 meter	3 km
Single house in countryside	363 meter	229 m*

*this is from the centre of the farm

In Danish legislation a neighbour farm is not counting as nearest neighbour. The calculations are in the international unit Odour units and the calculations are made in the electronic system called “www.husdyrgodkendelse.dk”. The calculations is made of both “Vejledning om tilladelse og godkendelse af husdyrbrug” and FMK-vejledning (vejledende retningslinier for vurdering af lugt og begrænsninger af gener fra stald, FMK, 2. udgave maj 2002). Odour nuisance distance to city is 5 OUE/m³, villages 7 OUE/m³ and finally 15 OUE/m³ to single house in countryside (OUE =Odour units). For further information “1572 af 20/12 2006; Lov om miljøgodkendelse m.v. af husdyrbrug”

Furthermore the calculations takes into account how many other farms with more than 75 AU there are placed 300 meter from villages and cities and 100 meter from nearest neighbour.

4.7. Noise

The source of noise is ventilation of pig production buildings and periodic from transport.

The noise level from ventilation is low and the noise level from operation on the pig farm will not cause noise impact at the nearest house, village or city. Noise from internal transport and external transport with feed, pigs, manure, staff etc. are limited sources of periodic noise.

Noise sources are mainly blowing feed in silos, compressors, ventilation systems, the daily use of tractors, loading the animals and transport to / from

the farm. Ventilation systems are stationary and always running. All other noise sources are periodic.

The use of tractors will normally be restricted to occur during the daytime, however, must be expected that season work can be beyond daytime. Transfers to and from the property and loading of animals is also primarily between 6-18. All stationary noise sources are located inside the buildings.

4.8. Waste products

The farm will elaborate a waste management plan for the pig production farm.

The farm will make written agreements with authorised companies to collect or receive waste from the farm. The farm will initiate establishing a recording system for delivery or collection of waste.

All waste will be sorted and stored separately. Written guidelines about sorting and storing waste will be prepared and all employees must be aware of the instructions to be followed.

The farm will draw specific attention to guidelines for storage of medicine and chemicals and disposal of medicine and chemical remnants and used packaging.

The dead animals and killed sick animals are collected daily from the farm units and brought to a cooling container for dead animals. The cooling container will be placed at a properly fenced and locked area.

The farm will establish an agreement with an authorised company to collect the dead pigs.

The amount of dead pigs is estimated at 110 tons calculated with a mortality rate of 2.6 % of weaners, 4 % of finishers and 0.8 % of the sows. Handling of dead pigs will be in compliance with Slovakian and Danish regulations.

Manure and water from cleaning the barns will be pumped to the slurry tanks, and later applied on agricultural land. The amount of manure produced is estimated at 30,422 tons per year.

Waste water from staff facilities such as toilets, bath facilities and canteen, will be collected and treated in a waste water treatment plant. Establishment of waste water treatment facilities will be according to Slovakian regulations.

Rain water from roofs and roads etc will be discharged to ditches and a rain water collection system and further discharged to the drainpipes. It will be secured that neither pig manure nor waste water from staff facilities is discharged to the rain water system.

The farm will establish an efficient system for controlling pests such as flies, mice and rats all over the farm.

4.9. Transport

The supply of feed to the farm will be 10,341 ton annually, equal to 345 trucks each carrying 30 tons. The feed will be delivered to silos at the pig production buildings.

The supply of young females will be equal to 6 trucks per year.

The annual delivery of pigs to the slaughterhouse will be equal to 208 trucks annually each carrying 145 pigs.

The farm produces 30,422 tons pig manure annually. The 30,422 tons will be liquid manure which will be transported from the farm to the fields and biogas by truck. This will be equal to 1,014 trucks annually each carrying 30 tons.

Other transport to and from the farm will include transport of staff working at the farm, waste from the farm etc.

The transport will have minor periodic impact (odour, noise, vibrations, traffic security, traffic load) on the roads and in the villages.

4.10. Veterinarian aspects

The farm will employ a Slovakian veterinarian.

A Danish veterinarian will be attached to the farm as veterinarian consultant, and will visit the farm according to need.

The farm will in general only use medicine and vaccines allowed in Denmark and EU. Consequently the farm will not use growth promoters.

The farm will follow Slovakian veterinarian regulations. The farm will thus have the obligation to follow Slovakian vaccination programs although these might not be allowed in Denmark.

The farm will have periodic inspection from Slovakian veterinarian authorities

The farm will make recording on use of medicine and report to Slovakian veterinarian authorities.

4.11. Best Available Technology (BAT)

The benchmark for the Danish environmental and animal welfare legislation is EU directives dealing with these subjects and EU BREF note on Intensive rearing of poultry and pigs.

Danish legislation of flooring system, density of pig, housing systems are in compliance with EU directives.

The pig farm will be in compliance with Slovakian and Danish legislation on these issues.

Danish environmental legislation is more specific and limiting than IFC Environmental, Health and safety guidelines for Mammalian Livestock production, April 30, 2007.

The farm will be in compliance with IFC Environmental, Health and safety guidelines for Mammalian Livestock production, April 30, 2007.

5. Alternatives

The pig farm is located appropriate in a rural area with the possibility to dispose and utilise the pig manure on a crop farm located near the farm.

Local infrastructure such as road connection, power supply, water supply etc will be used after some renovation.

It is renovation of an existing farm and further assessment of alternative location of the farm is therefore not relevant.

Then the farm will be renovated, the latest knowledge in welfare and environmental will be involved. There will be basis for improving the two parameters.

6. Evaluation of environmental impacts

The farm is located 3 km to the nearest village Sulekovo. The distance to the nearest house is 63 meter.

The location of the farm is in accordance with Slovakian Environmental regulations.

Operation of the farm will not have negative noise impact at neighbours and at the village.

According to Danish odour standards there is only low risk of odour nuisance at the nearest villages from the farm buildings. The required distance to the village is 645 m, and there will only be low risk of odour nuisance at that

location. The required distance to a single house is 363 m. The location of the farm is observing Danish odour nuisance regulations.

Transport of Weaners, feed, other commodities and staff and manure and pigs from the farm will have a minor impact (odour, noise, vibrations, traffic security, traffic load) on the local road system and in villages.

Operation of the farm will not have negative impact of air quality outside the distance of 1.0 km around the pig production buildings.

7. Evaluation of social impact

The farm will start operation in 2013/2014 and when the pig farm is in full production the Slovakian employment will be 12 persons in the production, and additional staff will be needed for maintenance, administration, transport and other services so the total number of Slovakian employees for the farm will be 20 to 22 persons. In addition to this the farm will create secondary employment for the local community because the farm will purchase building materials and other commodities as well as purchase services such as transport of commodities to and from the farm.

All Slovakian employees will have an employment contracts according to Slovakian regulations.

The farm will observe Slovakian occupational health and safety regulations. The farm will prepare written instructions for all work operations at the farm in order to reduce the risk of accidents and injuries. The instruction will be in compliance with both Slovakian and Danish regulations.

All employees will be trained in safety and provided with overalls and individual safety outfit according to Slovakian labour and safety requirements.

The farm will establish training programs for Slovakian employees, who will gain knowledge and skills in modern pig production methods according to newest management and production systems.

The farm will have a positive social effect in the area because it creates employment in an area.

8. Public hearing and grievance mechanism

Farma Terezov will receive the necessary Slovakian permits and approvals for the construction of housing facilities and operation of pig production. This includes technical building permits based on the Danish sketch design and Slovakian construction drawings. Farma Terezov has even arranged for these permits.

The first part of EIA is finished, and the second stage – elaboration of Assessment report and delivery to the Ministry of the Environment is not realised. Assessment report is being prepared, but not delivered to the Ministry of the Environment.

Part of the approval procedures is that both the Slovakian EIA and IPPC will be published in local media for comments and the EIA will also be published in the Web site of Ministry of Environment. Public hearing in neighbouring villages will be present as well. The main issue will be smell and distribution of slurry to the fields.

It should be emphasised that elaboration of this Environmental Review will not be in interference with elaboration of the Slovakian permits and environmental assessments (IPPC and EIA) which will be in compliance with Slovakian legislation.

This Environmental Review will be made public for 30 days at the farms website in both Slovakian and English language.

A short project description will be available on the website as well.

The website will include guidelines in case there should be any reason for grievance during the publication period and during operation of the farm.

9. Emergency plan

The farm will establish emergency plan in accordance with requirement from Slovakian authorities.

10. Environmental management plan

The farm will prepare an environmental management plan for the farm.

The farm will appoint a qualified person, who will be responsible for the environmental management.

The farm will prepare an annual report on environmental management including slurry handling, animal welfare, and veterinarian and medication practice.