

Environmental Statement 2009

(ORIGINAL EN ROJO)

BUREAU VERITAS CERTIFICATION C/ Viverillo Primera, 22-24 Edif. Caoba - R.I. La Granja 28108 Alcobendas (Madrid)	Declaración, Medición y validación según el Plan
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This document is the Environmental Statement of Befesa Escorias Salinas SA for the year 2009. It was prepared out taking into account the requirements of environmental management standards ISO14001: 2004 and Regulation 761/2001 of the European Union on the Eco-Management and Audit Scheme.

It is a public document validated by Bureau Veritas Certification, S.A.U., an ENAC-accredited environmental verifier with registration number ES-V-0003 and based at Calle Valportillo Primera 22-24, Edificio Caoba- P.I. La Granja, 28108 Alcobendas (Madrid).

The Environmental Statement now submitted is valid for 12 months and the following validated statement will be issued in May 2011.

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1. Description of the Registration of the Organization in the EMAS.

1.1 European Union Regulation N°. 761/2001.

Regulation No. 761/2001 (which superseded Regulation No. 1836/93) or Eco-Audit as known by its acronym in English EMAS (Environmental Management Audit Scheme) is a system that enables organizations to voluntarily adhere to a community system for environmental management and audits.

This regulation has three core commitments:

- Internal control of the environmental impacts of the process and its corresponding record under the basic hypothesis of compliance with applicable environmental legislation.
- Continuing decline of such impacts, defining and publishing the objectives and actions to be achieved, as well as the control and results through continuous environmental audits.
- Commitment to full transparency to society and others involved.

1.2 Environmental statement.

This is the essential element of the system since it involves the public provision of company environmental data:

- Consumption of raw materials, water, electricity, fuel, emissions, effluents, etc.
- The company's environmental policy, ensuring compliance with applicable regulations and in turn a commitment to continuous improvement based on measurable objectives.
- Validation of the system audit and compliance to the Regulation, all undertaken by an authorized verifier.

The objective is essentially to inform society about our activity, provide critical data and ensure our company's environmental compliance.

1.3 Adhesion of Befesa Escorias Salinas SA to the system.

According to the Order of 17th December 2009, the Directorate General for Environmental Protection and Planning of the Castilla y Leon Regional Government's Ministry of the Environment proceeded to register centres attached to the Eco-Management and Audit Scheme (EMAS), with Befesa Escorias Salinas being registered with number ES-CYL-000028.

Befesa Escorias Salinas SA carries out its activities in a manner that is respectful to the environment. From the reception of industrial waste, going through its storage and subsequent processing, it is our priority at all times to minimize the potential environmental effects and impacts that our business

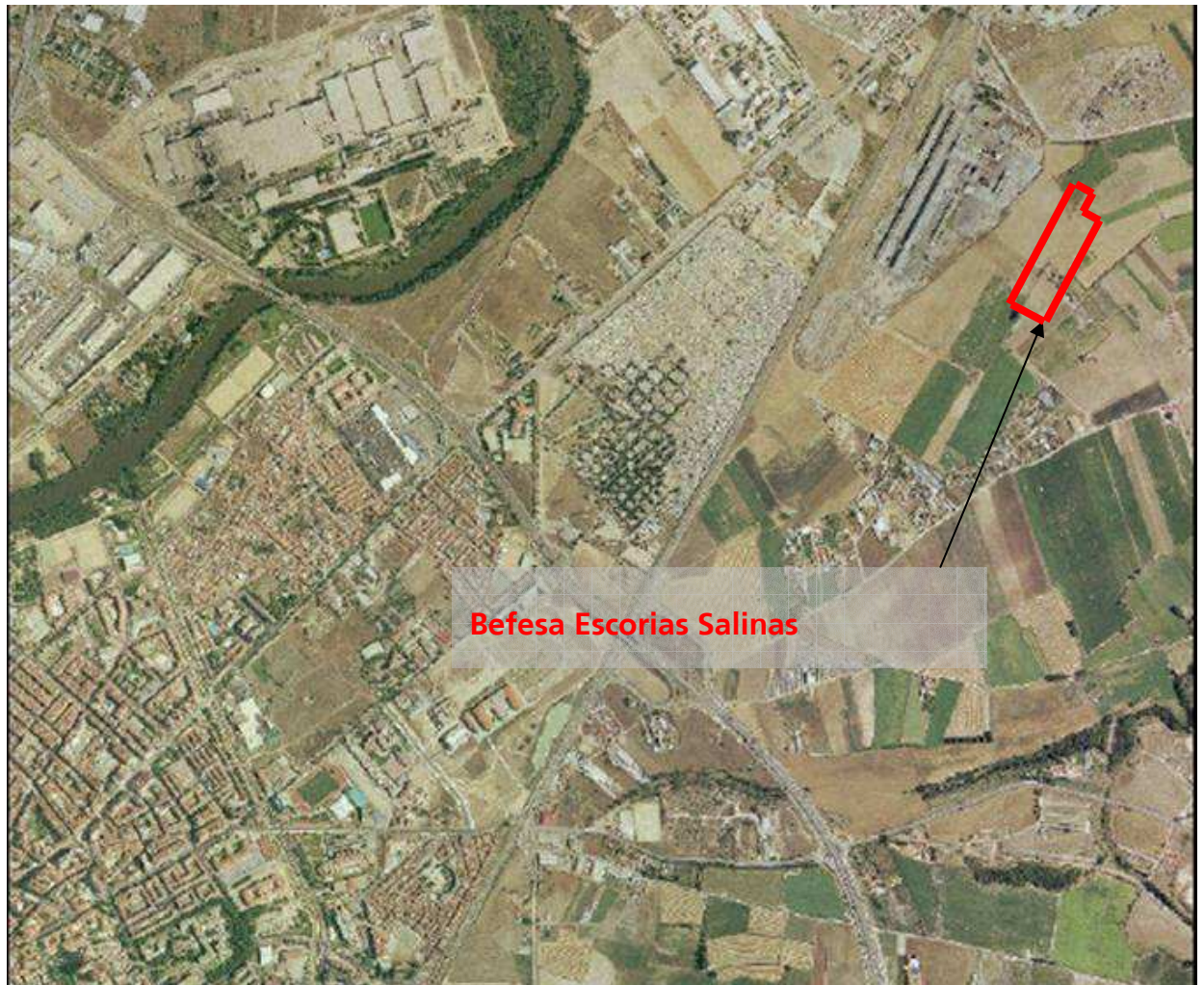
could generate. This has prompted Befesa Escorias Salinas SA to adhere to Regulation 761/2001, although the adhesion to it is voluntary.

In adopting the Regulation, we have a better understanding of the centre's different activities, allowing better control and minimizing the potential environmental effects arising.

The Regulation is a good tool to demonstrate to society the commitments made by Befesa Escorias Salinas SA in the area of the environment.

2. Location and Site.

Befesa Escorias Salinas SA is located in the municipality of Valladolid. It is specifically located about 5 kilometers from the centre of Valladolid, occupying an approximate area of 29,100 m² of the former grounds of ENDASA. The closest population centres to the facilities of Befesa Escorias Salinas SA are the suburb of San Pedro Regalado, belonging to the municipality of Valladolid, some 1,400 metres away and the town of Santovenia de Pisuergra, some 1,900 metres away.



3. Description of the activity.

The main activity of Befesa Escorias Salinas is the production of aluminium concentrate, aluminium oxides and crystallized salts from the residues of secondary aluminium production (salt slag, aluminium slag and filter dust). Therefore, the industrial activity of Befesa Escorias Salinas SA is the recycling, recovery and evaluation of waste from secondary aluminium melting. It has the Integrated Environmental Authorization, which includes, among other elements, the approval as a Hazardous (G.R. CL 4 / 96) and Non-Hazardous (G.R.N.P. CL 8/02) Waste Manager.

The recycling process of salt slag Befesa Escorias Salinas SA allows for the recovery of free metal and salt fluxes and the creation of a new product, composed mainly of aluminium oxide.

The activities of Befesa Escorias Salinas SA is an important and vital link in the aluminium lifecycle. Aluminium is easily oxydized in air, so that the metal is always associated with its oxide. For this reason, the aluminium recycling process is complicated and one can speak of refining aluminium.

Traditionally, the most important aluminium recovery process has been the smelting of aluminium metal (first cycle). Nowadays, the treatment process of the slag obtained in this operation is also carried out. The recycling of fluxes (second cycle) used for metal smelting completes the recycling process in refineries. The aluminium oxide that inevitably accompanies the metal is finally recovered (third and last cycle). Thus is the total recycling developed. The aluminium recycling industry is an activity that benefits the environment by valuing waste from the primary industry, from processing and consumption with zero discharges.

The salt slag treatment is carried out in dedicated modern facilities since this was recently added to the recovery cycle. The production process consists of a mechanical treatment of milling, a metal separation step, the aqueous dissolution of salts, the filtering of the inert material and the crystallization of salts. An aluminium concentrate is produced in the process which returns to the metal recycling cycle, flux, which is also used again in the smelting, and aluminum oxide, which has several uses. This product is known on the market under different names as a designation of a series of secondary raw materials with an aluminum oxide base.

The following products are obtained from the process:

- Salts, a mixture of NaCl and KCl in the respective proportion of 70/30, 50/50 or the proportion in which it arrives with more than 99% recovery of the salt content of the salt slag, which is estimated at 52,000t/salts produced per year for 130,000t/year of salt slag.
- High aluminium concentrate, with 60% to 70% concentration, with an estimated 80,000t/year and an average humidity of 20%.

- Concentrated aluminium, with 78% concentration, estimated at 7,000t for 130,000t of salt slag.

Below are the processes carried out in each of the above-referenced facilities:

- Mechanical grinding of the material: the object of this treatment is, first, the extraction of the metal aluminium content from the salt slag and, secondly, the reduction of the particles to an optimal size to ensure the perfect dissolving of salts. This dissolving is important because chlorides which are not dissolved leave the process included in the aluminum oxide and pollutes it, reducing its use and therefore its value.
- Dissolving, reaction and filtering: in this part of the process, first water is added to the grinding dust to dissolve the salts, ClNa and ClK. In addition to the salts, there are other aluminous compounds in the salt slag which, on contact with water, they react by releasing certain gases. In order to control the emission of these gases, the slurry resulting from the dissolution is taken to a reactor until the reaction is complete. Subsequently, the two phases existing, brine and inert solids, are separated using a vacuum filtering.
- Crystallization: to separate salts from water. This is done by the evaporation and subsequent condensation of the steam. In this way a mixture of ClNa and ClK is obtained as well as some condensates that are reused in the process.
- Drying: the last phase consists of an optional drying stage in which the salts in the earlier stage of crystallization or aluminum oxide can be dried in a rotary dryer, a system essentially made up of cylindrical trommel which, due to its inclination and its system of turning blades, makes the product inside move forward, thus putting it in contact with hot gases. Thus the material dries slowly and moisture-laden gases leave the trommel sucked up by a draft fan.

The products supplied by Befesa Escorias Salinas SA undergo quality control and are clearly identified so that full traceability of the data can be maintained in relation to the manufacturing process, raw materials used and checks made. All this is managed through our quality management system, which has been ISO 9001-certified since 2003.

Moreover, in line with its efforts to conserve natural resources and environmental protection, we believe it necessary to do our work with the least local environmental impact possible. Aware of this need, in the year 2000 we decided to introduce an environmental management system certified under ISO 14001.

Under current legislation, Befesa Escorias Salinas SA has fulfilled all its commitments for 2009, highlighting the following:

- Periodic Reporting of pollutants to the PRTR registry (in Castilla y León there is a regional registry, called PRIP).
- Obtaining of the Integrated Environmental Authorization by Order of 30th June 2008 from the Regional Ministry of the Environment.
- The dangerous goods reports, the annual manager and producer statements, annual environmental management summary under the sections of the Integrated Environmental Authorization, as well as analytics for atmospheric emissions, human water consumption, sanitary water and cooling towers have all been developed and delivered to the relevant authorities.
- The legal requirements under the law on the prevention of occupational hazards and the corresponding Royal Decrees relating to occupational safety, industrial hygiene and ergonomics have also been fulfilled.

4. Integrated System for the Management of the Prevention of Work Hazards, Quality and Environment.

Our management system is mainly made up of:

- Integrated policy on the prevention of work hazards, quality and the environment: This formally describes the guidelines and commitments adopted by Befesa Escorias Salinas SA. This policy is reviewed periodically based on the changes experienced by the organization, legislation, stakeholders, etc.
- The latest review and revision of the Policy took place in July 2009.
- Management programme, which sets out the activities required to achieve the objectives.

Management System documentation, which consists of:

- Management Handbook: this describes the corporate responsibility and control of activities and of all parties involved that cause or are likely to cause environmental effects.
- Management Procedures: this describes the development of the activities outlined in the Management Handbook.
- Instructions and records.
- Internal audits, used by management as tools, to assess the development and effectiveness of the implemented management system and identify opportunities for improvement.
- Annual review of the system by management to assess the implementation and effectiveness and to establish new targets for the continuous improvement of environmental protection.
- Evaluation of environmental aspects.
- Records of legislation and regulatory requirements.

It has three main objectives:

- The commitment of complying with legal and other requirements which apply to these installations.
- The carrying out of our recycling activity with respect for the environment, paying particular attention to those activities and products that may pose risks to the environment.
- The continuous improvement from the environmental point of view.
- These bases come from guidelines established in our management policy.

Policy.

As a leading company in the recovery of waste from the industry of primary and secondary aluminium (salt slag, aluminium slag, filter dust, etc.), Befesa Escorias Salinas focuses its activity on the pursuit of excellence through safe, efficient and effective management, thus contributing to sustainable development.

The Board of Befesa Escorias Salinas SA is aware that the essential factor for its successful operation is the complete satisfaction of all interested parties (customers, suppliers, shareholders, direct and indirect employees, the social surroundings, etc.), and according to this philosophy, it has adopted the following policy in order to develop the mission and vision of the company.

- Create value for shareholders and owners of the company in a sustainable and sustained way, ensuring the continuity of the company. To take advantage of its leadership position to achieve the best results.
- Offer a comprehensive service in the treatment of waste from the aluminium industry, which guarantees the satisfaction of our internal and external customers through the use of the best available technology and adequate resources.
- Offer quality products and advisory services to our customers through the development of new applications.
- Promote sustainable development by minimizing waste generation and air pollution, and by promoting the saving of natural resources.
- Promote the greater awareness, knowledge and contribution of all employees, providing adequate human resource management to facilitate their work performance and enhance their participation and ensure the management knowledge.
- Optimise all the activities of the organization by managing the same processes, always working towards the maximum safety of our workers and facilities and continuous improvement by setting measurable objectives and evaluating results periodically.
- Establish effective communication channels to facilitate stable and lasting relationships, especially with our customers, stakeholders and suppliers.

The Board of Befesa Escorias Salinas will ensure that this policy is maintained and interpreted as well as understood and accepted by all of its own staff as well as external workers.

This policy will be available to any other interested party upon request.

Director-general

Valladolid, July, 2009

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The Board of directors of Befesa Escorias Salinas SA will ensure that this policy is maintained and interpreted, as well as ensuring it is understood and accepted by all of its own staff and those under contract externally.

This policy is available to any interested party upon request.

Pursuant to the requirements of the internationally recognized standard ISO 14001:2004, the director general of Befesa Escorias Salinas SA has appointed the following person to ensure the implementation and maintenance of the established Environmental Management System:

- Inmaculada Paños Casteleiro, head of quality, work-related hazards and environmental protection, as the representative of the Directorship to establish, implement and maintain the management system updated and to likewise ensure compliance with all applicable environmental requirements.

It must be highlighted that the management of quality, work safety and environment systems have been integrated in order to move forward together in all three areas, streamlining efforts, while maintaining the rigor and seriousness characteristic of the three individual concepts without undermining the welfare of future generations . Befesa Escorias Salinas orientation towards business excellence must also be stressed, through the adaptation of its management system to the EFQM Excellence Model and the development of an inventory of greenhouse gases, according to NOC 05.003 mandatory standard, which is based, among others, on ISO 14064 on "Greenhouse Gases." This inventory includes both the generation sources of greenhouse gases controlled by the company, such as under the generation of electricity purchased and consumed by the company, as well as emissions due to goods and services purchased by the business.

5. Direct environmental Aspects.

The identification and evaluation of environmental aspects was based on an environmental review (diagnosis), based on the ISO 14001 norm and GRI:G3 protocols of environmental indicators.

In this identification, each element of the activities of Befesa Escorias Salinas that can interact with the environment in some way, positively or negatively, is selected.

The following list is a reference to them:

- Materials.
- Energy.
- Emissions, discharges and residues.
- Products and services.
- Regulatory compliance.
- Transport.

For each of the issues identified any changes that may occur in the environment (environmental impacts) will be determined.

The methodology for making such assessment has undergone significant changes in order to increase their objectivity.

The environmental aspects under normal conditions are valued based on the three following environmental parameters: amount, duration and danger.

- Quantity: weight, volume, concentration or extent of the environmental aspect.
- Duration: stay or actual duration in time of the environmental aspect.
- Danger: the property that can characterize a substance and / or waste, or the negative effect or impact that this aspect can have; the greater this is the more it approaches the legal limits or applicable references.

Environmental aspects in abnormal or emergency conditions are valued based on the following environmental parameters: probability and environmental impact.

- Probability: the chance that the event takes place on the basis of historical emergencies.
- Environmental impact: the intensity of the environmental impact resulting from an accident or emergency situation, along with security measures that the facilities have.

Once the method developed in the previous sections is applied to all identified environmental aspects and the final score obtained, all those aspects with a score equal or exceeding 7 is considered as a significant environmental aspect under both normal and abnormal and emergency conditions. If there are at least 3 aspects that exceed this score the 3 with the highest scores will be considered the most significant.

In order to propose new objectives and targets, or for their review, the Quality and Environment department will consider the significant environmental aspects and legal requirements as well as

other technological options and the financial, operational and business requirements of the company. It will also consider, where appropriate, the views of interested parties.

Those that can be beneficial for the environment are considered aspects with a positive impact.

These are:

- Treatment of salt slags, aluminium slag and dust filter since these directly affect the elimination of waste from the aluminium industry.
- Consumption of waste gases from the boiler torch, since it has a direct impact on reducing the emission of greenhouse gases and the consumption of natural resources such as natural gas.
- Volume of domestic sewage from the plant itself within the facility used for any purpose, for the reuse of water in the process, thus decreasing external consumption and therefore reducing the use of a scarce natural resource , as water is.
- Use of salt, paval and aluminium recycling because it replaces the consumption of natural resources of primary origin.

Indirect environmental aspects, i.e. those on which the company does not have full control over, will be assessed only by taking into account the environmental impact.

Classification of aspects in normal conditions in 2009:

Aspect: Materials.

EN 1. Materials used by weight or volume.	Repercussion of the duration/length of stay.
Treatment of salt slag.	Elimination of residues generated by the aluminium industry.
Treatment of aluminium slag.	Elimination of residues generated by the aluminium industry.
Treatment of filter dust.	Elimination of residues generated by the aluminium industry.
Consumption of pure NaOH.	Generation of greenhouse gases.
Consumption de flocculant.	Generation of greenhouse gases.
Consumption of anti-foaming agent.	Generation of greenhouse gases.
Consumption of additives for boilers.	Generation of greenhouse gases.
Consumption of N ₂ .	Generation of greenhouse gases.
Consumption of oil.	Consumption of natural resources.
EN 2. Percentage of materials used, that are materials valued.	Repercussion of the duration/length of stay.
Treatment of salt slag.	Elimination of residues generated by the aluminium industry.
Treatment of aluminium slag.	Elimination of residues generated by the aluminium industry.
Treatment of filter dust.	Elimination of residues generated by the aluminium industry.
Consumption of pure NaOH.	Generation of greenhouse gases.
Consumption de flocculant.	Generation of greenhouse gases.
Consumption of anti-foaming agent.	Generation of greenhouse gases.
Consumption of additives for boilers.	Generation of greenhouse gases.
Consumption of N ₂ .	Generation of greenhouse gases.
Consumption of oil.	Consumption of natural resources.

Aspect: Energy.

EN 3. Direct consumption of de energy classified by primary sources.	Repercussion of the duration/length of stay.
Consumption of vehicle.	Consumption of natural resources.
Consumption of natural gas.	Consumption of natural resources.
Energy produced as steam..	Consumption of natural resources.
EN 4. Indirect consumption of energy classified by primary sources.	Repercussion of the duration/length of stay.
Energy acquired from the grid or electricla system.	Consumption of natural resources.
EN 8- EN 10. Total water collection by sources.	Repercussion of the duration/length of stay.
Consumption of underground water.	Consumption of natural resources.
Volume of internal residual water (from the plant itself) that is used with the installations for whatever use (V _{RI}).	Making us of natural resources.

Aspect: Emissions, discharges and residues.

EN 16. Total emissions, direct and indirect, of greenhouse gases by weight.	Repercussion of the duration/length of stay.
Total emissions of GEI (CO ₂ , CH ₄ , N ₂ O).	Greenhouse gas emissions.
EN 18. Initiatives to reduce greenhouse gas emissions.	Repercussion of the duration/length of stay.
Use of gases by boiler torch.	Reduction of greenhouse gas emissions.
EN19. Emissions of ozone-destroying substances, by weight.	Repercussion of the duration/length of stay.
Amount recharged in equipment during preventive or corrective maintenance operations.	Greenhouse gas emissions.
EN 20. NO_x, SO_x and other emissions by weight or volume.	Repercussion of the duration/length of stay.
NH ₃ Emissions.	Atmospheric contamination.
Cl Emissions.	Atmospheric contamination.
SH ₂ Emissions.	Atmospheric contamination.
CO Emissions.	Atmospheric contamination.
SO ₂ Emissions.	Atmospheric contamination.
NO _x Emissions.	Atmospheric contamination.
Opacity.	Atmospheric contamination
Daily noise emisión.	Atmospheric contamination.
Night noise emisión.	Atmospheric contamination.
Particle emissions.	Atmospheric contamination.
EN 20. Diverse emissions.	Repercussion of the duration/length of stay.
Vehicle transit.	Atmospheric contamination.
Storage of salt slag, salt and paval.	Atmospheric contamination, and pollution of inland waters.
Storage of aluminium slag and filter dust.	Atmospheric contamination, and pollution of inland waters.
EN21. Total discharge of residual water according to type and destination.	Repercussion of the duration/length of stay.
Suspended solids.	Pollution of inland waters.
DBO ₅	Pollution of inland waters.
DQO	Pollution of inland waters.
EN22. Total weight of residues generated by.	Repercussion of the duration/length of stay.

type and treatment method.	
Generation of scrap.	Generation of non-hazardous residues.
Generation of paper and cardboard.	Generation of non-hazardous residues.
Generation of RSU.	Generation of non-hazardous residues.
Generation of mud from septic tank.	Generation of non-hazardous residues.
Generation of metal packaging.	Generation of hazardous residues.
Generation of absorbent material.	Generation of hazardous residues.
Generation of disposed chemical products.	Generation of hazardous residues.
Generation of computer residues.	Generation of hazardous residues.
Generation of contaminated plastic containers.	Generation of hazardous residues.
Generation of used oil.	Generation of hazardous residues.
Generation of used luminaries.	Generation of hazardous residues.

Classification of direct aspects in abnormal or emergency conditions 2009:

Aspect: Emissions, discharges and residues.

Type of environmental aspect.	Environmental Incident.		
	Low.	Medium.	High.
EN 23. Total number and volume of the most significant accidental spillages /discharges.	1	2	4
Discharges or spillages in the case of breakages in tanks or leaks in installations.	With automatic detection measures or retention bunds.	With manual mitigating security measures (sand, earth, etc.).	Without any protection measure.
Uncontrolled emissions or discharges due to faults in the purifying or control systems.	With automatic control of emissions.	With manual or visual control.	Without any type of control.
Uncontrolled emissions and discharges in case of fire or explosion.	With automatic protection and detection measures.	With manual protection measures (hoses, extinguishers, etc.).	Without any protection measure.
Contamination of refrigerating towers and/or the Hot Water installations due to Legionella.	With detection, correction and maintenance measures.	Cleaning, disinfection, correction and maintenance.	Stopping of the installations, Crash-Treatment, correction and maintenance.
Contamination due to radioactivity.	With automatic protection and detection measures.	With manual control.	Without any type of control.

Aspect: Regulatory compliance.

Type of environmental aspect.	Environmental incidence.		
EN28. Cost of significant fines and number of sanctions for non-fulfillment of environmental regulations.	Low.	Médium.	High.
	1	2	4
Contamination of refrigeration towers and/or Hot Water installations due to Legionella.	With detetction, correction and maintenance measures.	Cleaning, disinfection, correction and maintenance.	Stopping of the installations, Crash-Treatment, correction and maintenance.
Contamination due to radioactivity.	With automatic protection and detection measures.	With manual control.	Without any type of control.

Classification if indirect aspects 2009.

Aspect: Transport.

Type of environmental aspect.	Environmental incidence.		
EN29. Significant environmental impact of transport of products/ other goods and personnel transport.	Low.	Médium.	High.
	1	2	4
Transport of merchandise.	Use of electric means of transport (train).	Use of means of transport greater than 25t.	Means of transport less than 25t.
Transport of personnel.	Use of non-contaminating means of transport, such as the bicycle, or ecological means (bioethanol) or hybrid means.	Use of means of transport that contaminate little or with low greenhouse gas emissions (biodiesel).	Use of contaminating means of transport, such as diesel.

Aspect: Products and services.

Type of environmental aspect.	Environmental incidence.		
EN26. Initiatives to mitigate environmental impacts of products and services.	Low.	Medium.	High.
	1	2	4
Use of salt by clients.	In processes as a substitute for natural resources.	In processes mixed with natural resources.	Non-substitution of natural resources.
Use of Paval by clients.	In processes as a substitute for natural resources.	In processes mixed with natural resources.	Non-substitution of natural resources.
Use of aluminium by clients.	In processes as a substitute for natural resources.	In processes mixed with natural resources.	Non-substitution of natural resources.

5.1. Emissions into the atmosphere.

The plant currently has six associated and authorized points along with the main facilities, that make up part of the production process:

- Point Nº 1: boiler B.
- Point Nº 2: boiler C.
- Point Nº 3: extraction of band filters
- Point Nº 4: torch conduct
- Point Nº 5. extraction of grinding sleeve filters
- Point Nº 6: extraction of drying sleeve filters

Emissions from the boilers are made up solely of gases from the combustion of natural gas. At the third point, the vacuum band filters, steam is collected from washing the aluminium oxide cakes.

The gases produced in the reactors are burnt at the fourth point.

In the last two cases, emissions of particulate matter are controlled by an exhaust system at all possible points at which dust is created. The dust is treated in a sleeve filter and thus emissions to the atmosphere are below 5mg/m³ N, well below the 40mg/m³N that is allowed in the integrated environmental authorization.

- **Environmental conditioning of emissions into the atmosphere.**

According to the environmental conditions related to emissions into the atmosphere described in the Integrated Environmental Authorization for Befesa Escorias Salinas, the parameters and frequency measurements of emissions are indicated annually in some cases and bi-annually in others. This is due to the tight control that Befesa Escorias Salinas maintains of its process to minimize environmental impact, as shown in the following tables:

Point nº 1 and nº 2: Calderas B and C.			
Parameter.	VLEs (1)		Frequency.
	Quantity.	Unit.	
NO_x	200	mg/ Nm ³	Bi-annual.
CO	100	mg/Nm ³	Bi-annual.

(1)VLE: Value limit of emission.

Point nº 3: Band filter suction.			
Parameter.	VLEs (1).		Frequency.
	Quantity.	Unit.	
NH₃	40	mg/ Nm ³	Annual.
Cl⁻	230	mg/ Nm ³	Annual.

(1)VLE: Value limit of emission.

Point nº 5: Grinding extraction.			
Parameter.	VLEs (1).		Frequency.
	Quantity.	Unit.	
Particles.	40	mg/ Nm ³	Annual.

(1)VLE: Value limit of emission.

Point nº 6: Drying extraction.			
Parameter.	VLEs (1).		Frequency.
	Quantity.	Unit.	
NO_x	200	mg/ Nm ³	Bi-annual
CO	100	mg/Nm ³	Bi-annual
Particles.	40	mg/ Nm ³	Annual

(1)VLE: Value limit of emission.

Point 1 is currently unused, so the emissions are controlled at point 2. Point 2 is monitored on a quarterly basis due to the concern the company has about the emission of greenhouse gases, so it exceeds the control established in the Environmental Authorization. Currently, only point 2 is operational, i.e. boiler C.

With respect to Point No. 4 (the torch), the IEA includes the emission point but does not set emission limits. This is because the point was previously controlled in-line, i.e. before the final treatment of gases. In any case, Befesa Escorias Salinas plans to control emissions from this source annually.

Inspection chimneys meet all the requirements of the Order of 18th October 1976 on the prevention and correction of pollution. The installation, setup and dimensions of connections and access are suitable for measurements and sampling. The results of the last inspection are entirely within regulations.

Parameter evaluated.	2007	2008	2009	Units	Applicable regulations.	Limit value.
CO	<60	2	1.20	mg/Nm ³	IEA	100
CO daily maximum value.	457	4	3.6			
SO ₂	<160	2	0	mg/Nm ³	Point 27 of annex IV of D833/75.	4,300
SO ₂ daily maximum value.	140	5	2.85			
NO _x	<100	86	149.76	mg/Nm ³	IEA.	200
NO _x daily maximum value.	84.33	104	188			

Annual average results (January to December inclusive, for the reference year) for inspection of Point 2: boiler C. The "daily maximum" is the maximum value obtained in each reference year.

Parameter evaluated.	2007	2008	2009	Units.	Applicable regulations.	Limit value.
HCl	<1.6	<1.6	0	mgN/m ³	IEA	230
HCl daily maximum value.	<1.6	<1.6	0			
NH ₃	228	27.32	0.05	mg/Nm ³	IEA	40
NH ₃ daily maximum value.	456	107	0.05			

Annual average results (January to December inclusive, for the reference year) for inspection of Point 3: band Filter Extraction. The "daily maximum" is the maximum value obtained in each reference year.

Parameter evaluated.	2007	2008	2009	Units	Applicable regulations.	Limit value.
Particles.	<20	2.25	2.0	mg/Nm ³	AAI	40
Daily maximum value of particles.	1.5	4	2.0			

Annual average results (January to December inclusive, for the reference year) for inspection of Point 5: grinding sleeve filter extraction. The "daily maximum" is the maximum value obtained in each reference year.

Parameter evaluated.	2007	2008	2009	Units	Applicable regulations.	Limit value.
Particules.	<20	3	3.0	mg/m ³ N	AAI	40
Daily maximum value of particles.	<20	3	3.0			
CO daily maximum value.	<48	71	65.66	mg/m ³ N	AAI	100
CO	5	71	65.66			
SO ₂	0	0	2.8	mg/m ³ N	Pto. 27 del annex IV del D833/75.	4,300
SO ₂ daily maximum value.	0	0	2.8			
NO _x	<100	16	43.0	mg/m ³ N	AAI	200
NO _x daily maximum value.	9.6	16	43.0			

Annual average results (January to December inclusive, for the reference year) for inspection of Point 6: Drying sleeve filter extraction. The "daily maximum" is the maximum value obtained in each reference year.

- **Significant parameters.**

The emissions into the atmosphere which are considered significant, although these do not exceed the limit established in the IEA is NO_x in the boiler.

- **Measures implemented for the prevention, reduction and control of atmospheric emissions.**

Befesa Escorias Salinas SA, through its Integrated Management System, has defined a series of procedures which reflect measures for the prevention, reduction and control of atmospheric emissions and how to act in abnormal operating conditions due either to leakage malfunctions or any emergency that may occur in the plant:

- Identification, evaluation and updating of environmental aspects (PG-01).
- Monitoring and measurement of operations (PG-05).
- Operational control (PG-06).
- Prevention and control of environmental emergencies (PG-04).
- Self-Protection Plan (PG-29).

In addition, over its history the company has implemented a series of measures to reduce the pollutant load of emissions. The measures which have been implemented are indicated in the following table:

Measures implemented.	Objectives.	Year.
Paving the entire expanse of the factory with aluminium oxide.	Reduction of diffused dust emissions.	2001
Setting up of a new reactor.	Ensuring the reaction and minimising gas inmissions.	2002
Capturing of gases in the chemical plant.	Reduction of inmissions.	2002
Installation of a new torch.	Ensuring the burning of gases from the reactors.	2002
Installation of a new control system for the plant.	Standardization and control of the process.	2003
Installation of a new burner for salt drying.	Reduction of emissions and energy saving.	2004
Installation of a new control system for reactors.	Maximising the reaction.	2005
Use of boiler gases for the salt drying process.	Energy efficiency.	2006
Installation of two new reactors.	Maximising the reaction to avoid the emision of gases once outsider the process.	2007
Installation of a new steam production boiler.	Reduction in the consumption of natural gas.	2007
New installation for the dosing of slag into the process.	Reduction in the consumption of diesel.	2008
Substitution of a crystalizer for a more efficient one.	Reduction in the consumption of cleaning water.	2008
Installation of conveyor-belt Systems.	Reduction in the consumption of diesel.	2008
Paving of different zones of the plant.	Reduction of diffused dust emissions.	2008
New storage tanks.	Improvement in water management.	2008
Use of torch gases in the boiler.	A 20% reduction in the consumption of natural gas and a reduction in emissions of greenhouse gases.	2009
Elaboration of inventory of greenhouse gases.	Control of direct and indirect greenhouse gas emissions and those corresponding to goods and services acquired by the company.	2009
Plan for the reduction of greenhouse gas emissions.	Reduction of greenhouse gas emissions.	2010

Measures implemented for the prevention, reduction and control of atmospheric emissions.

5.2 Noise.

The noise and vibrations that are emitted are those of the activity of the plant due to machinery in motion and moving trucks.

- Environmental conditions of noise emissions into the atmosphere.

The integrated environmental permit granted to Befesa Escorias Salinas establishes the following emission limits for noise:

- Nighttime noise: 60 La_{eq} dB (A).
- Daytime noise: 70 La_{eq} dB (A).

After extensive sound pressure testing inside the facilities through periodic measurements carried out by our Prevention Service, it can be concluded that the main sources of noise at Befesa Escorias Salinas SA facilities are the grinding facilities and the separation of raw materials, both located within the process warehouse.

To a lesser extent, the movement of loading and unloading vehicles is also a significant source of noise.

In October 2009, noise emission measurements were carried out by an inspection body, which concluded that both nighttime and daytime noise levels at Befesa Escorias Salinas SA had levels below those set by law.

The results were as follows:

Date.	Point 1. dB	Point 2. dB	Point 3. dB	Point 4. dB	Point 5. dB	Point 6. dB
17/10/2008 (Daytime).	51.5	52.6	62.0	58.9	58.5	61.9
17/10/2008 (Nighttime).	48.6	49.1	52.6	51.7	53.8	54.6

Every three years, measurements of noise emissions are carried out by control agencies, with the next measurement scheduled for October 2011.

Befesa Escorias Salinas meets these limits, as shown in the analysis performed by the control agency in October 2008.

Befesa Escorias Salinas reviews and checks its sound emissions on an internal basis annually.

Date.	Point 1. dB	Point 2. dB	Point 3. dB	Point 4. dB	Point 5. dB	Point 6. dB
15/07/2006 (Daytime).	58.2	58.5	52.2	60.5	63.1	59.9
30/08/2007 (Daytime).	59.3	57.6	54.8	72.5	64.3	59.8
26/09/2008 (Daytime).	56.1	49.4	49.6	69.2	63	65.5
13/11/2009 (Daytime).	51.7	47.9	60.5	62.2	59.8	56.5

Results from sound emission testing carried out internally.

- **Significant parameters.**

In 2007, at Point 4, noise emission limits were exceeded due to the proximity of the measuring point to the railroad tracks. In 2009, the measurements were below the limits.

- **Measures taken to reduce noise emissions.**

In 2009, a plan to reduce noise was established, which arose from the establishment of a noise reduction target. This plan includes the replacement of several pumps, in particular BC-145, 127 and 120, at a cost of €18,000.

5.3 Discharges into the water.

Befesa Escorias Salinas SA has no point of discharge into the water system since both the industrial water from production processes and rainwater runoff is collected at a single point from which it is pumped to the process.

Outside the process, Befesa Escorias Salinas SA is authorized by the Duero River Water Authority to discharge waste water into the earth. This flow is characterized as "Urban."

- **Water quality.**

In the integrated environmental permit granted to Befesa Escorias Salinas, the limits imposed are:

Parameter/ substance.	Units.	Average daily value.
Suspended solids.	mg/L	90
Biochemical oxygen demand 5 days (DBO ₅).	mg O ₂ /L	60
Chemical oxygen demand (DQO).	mg O ₂ /L	200

As a result of the Permit, Befesa Escorias Salinas SA is required to file a regular report with the Duero River Authority in periods not exceeding one year, and which includes an analysis of the discharge with regard to the flow rate and composition of the effluent. The analysis must be performed by an "authorized business partner" as indicated in Article 253 of the Public Water Regulation. The results of the analysis performed on 17/12/2009 were as follows:

Parameter.	2007	2008	2009	Protocol.	Value limit.
DBO ₅	122±39	21±6.7	80	Incubation, 5 days at 20°C (PN/22).	60mg O ₂ /L
DQO	N/A	N/A	127	Digestion and determination with Mohr salt.	200mg O ₂ /L
Suspended solids.	39.3	14-3±2.6	120	Gravimetric method (PN/56).	90mg/L

Annual results of analysis of discharge quality.

- **Significant parameters.**

Suspended solids and DBO₅ are in breach of the discharge permit, so we opened a troubleshooting report (IRP/E41/4703/2010/001), which reflects the progress being made in this regard.

On 12th February 2010 permission was requested from the Aguas de Valladolid Water company for connection of both drinkable and urban waste water. Conversations have been held with Aguas de Valladolid to connect wastewater to the municipal collector but the collector is suffering significant delays because the company hired to build it has declared bankruptcy and has stopped all work. We will have to wait for the concession to be tendered once again and work to be completed. Furthermore, a qualified water technician from Aguas de Valladolid has visited the installations.

At the moment, only the possibility of connecting to the drinking water network exists since the sewage collector is not operating. It is not known when the City Council will create the connection because the company has gone bankrupt.

Befesa Escoriaas Salinas is awaiting the decisions to be taken by Aguas de Valladolid. Meanwhile, we will be in touch with the Duero Water Authority to try to expand the limits of the Discharge Permit.

On the other hand, the exit of the septic tank has been remodeled, so as to increase the time of sewage in it and access has been provided for sampling. As of July 2010, we are awaiting the results of recent analysis tests requested.

- **Measures implemented for the prevention, reduction and control of discharges.**

In order to ensure good management and continuous improvement, the Befesa Escorias Salinas SA waste water is treated through a purification system before its final discharge. This treatment system consists of the following elements:

- 2 septic tanks.
- A clearing well.
- A biological filter.

As well as the described treatment system, the company previously adopted other means that are listed below:

Measures implemented.	Objectives.	Year.
Residual water tank for posterior treatment at plant.	Ensure reuse of residual and rain water.	2001
Expansion of storm tank.	Minimize discharge in case of storm.	2004
Improvements in water channeling.	Ensure total reuse of run-off water.	2006
Reparing of tank, substituting the final discharge point.	Ensure correct functioning of purifying system.	2009
Treatment of residual water by adding bacteria.	Ensure minimum levels of DBO ₅ before filtering into the earth.	2009

Measures implemented for the prevention, reduction and control of discharges.

Additionally Befesa Escorias Salinas SA has set up a series of procedures which include measures for the prevention, reduction and control of discharges generated and how to act in abnormal operating conditions due either to leakage or malfunction, as well as in the case of any other emergency that may occur at the plant:

- Identification, evaluation and updating of environmental aspects (PG-01).
- Monitoring and measuring of operations (PG-05).
- Operational control (PG-06).
- Self-protection plan (PG-29).

5.4 Waste generation.

The integrated environmental permit establishes the following maximum quantities of hazardous waste per production unit:

Type of waste.	L.E.R. Code.	Description.	Generation process.	Max amount/ Production unit.
Empty sacks (big-bag).	150.110	Packaging containing remains of hazardous substances or contaminated by them.	Storage of raw materials.	0.41
Used oil.	130. 205	Non-chlorinated mineral oils from engines, gears and lubricants.	Maintenance.	1.24 10 ⁻²
Absorbent material.	150. 202	Absorbent and filter materials, cleaning cloths, protective clothing contaminated by dangerous substances.	Maintenance.	9.90 10 ⁻³
Outdated chemical products.	160. 508	Discarded organic chemicals consisting of or containing hazardous substances.	Laboratory.	9.90 10 ⁻⁴
Chemical product packaging.	150 .110	Packaging containing hazardous waste or contaminated by them.	Laboratory/ maintenance.	9.97 10 ⁻⁴
Luminaries.	200 .121	Fluorescent bulbs and other mercury-containing waste.	Maintenance.	4.12 10 ⁻⁴
Remains of análisis.	160 .506	Laboratory chemicals consisting of or containing hazardous substances, including mixtures thereof.	Laboratory.	-

The types of hazardous waste generated in non-significant quantities at Befesa Escorias Salinas SA plant are

Waste type.	L.E.R. code.	Origin.	Amount generated 2007 (kg).	Amount generated 2008 (kg).	Amount generated 2009 (kg).
Used oil.	130 .205	Maintenance.	2,900	1,000	3,000
Absorbent material.	150. 202	Maintenance.	160	81	16
Outdated chemical products.	160. 508	Laboratory.	160	20	96
Chemical product packaging.	150 .110	Laboratory maintenance.	54	91	-

Metal packaging.	150. 110	Maintenance.	380	160	42
Used luminaries.	200 .121	Maintenance.	25	28	30

Hazardous waste generated by Befesa Escorias Salinas SA.

Inert industrial waste produced at the plant comes primarily from repairs, alterations or improvements that can be classified under this definition. This waste and its management is as follows:

Waste type.	L.E.R. code.	Origin.	Amount generated 2007 (kg).	Amount generated 2008 (kg).	Amount generated 2009 (kg).
Solid urban waste.	200. 301	Several.	58,750	52,440	17,400
Scrap paper.	191. 201	Oficices.	980	1,880	1,047
Slime from septic tank.	200 .304	Waste water treatment.	32,020	9,920	11,302

Inert industrial waste generates by Befesa Escorias Salinas SA.

- **Waste generated in significantivas.**

The most important waste generated at the Befesa Escorias Salinas SA plant, taking into account the total amounts generated, are the big-bags used to transport filter dust and aluminium slag that are received at our facilities as raw material, as well as waste produced in our grinding process and the modification of facilities, junk that is, in this case, fully recyclable.

The quantities of waste generated in this way are associated directly to the company's production process so that the total annual amount generated depends directly on the amount of this type of material treated. Befesa Escorias Salinas has no capacity at present to reduce the generation of these two types of waste as they are both generated by the raw materials it receives.

The amounts -in significant quantities of hazardous and nonhazardous waste- generated by Befesa Escorias Salinas from January to December, inclusive over the last three years are:

Waste type.	L.E.R. code.	Amount generated 2007 (t).	Amount generated 2008 (t).	Amount generated 2009 (t).
Empty sacks (big-bags).	150. 110	25	35	5
Scrap.	160. 117	1,471	2,400	1,269

Annual amounts generated from January to December, both months inclusive, of significant waste.

- **Measures implemented for the prevention, reduction and control of waste generated.**

According to certification ISO 14001:2004, within the General Procedures for Quality and Environment, procedure PG-14 refers to waste management. This procedure perfectly details specifies waste, both hazardous and non-hazardous, as well as the procedure for the separation and storage of waste and its transportation to the waste manager's facilities. It also specifies the documentation and environmental records that are to be generated. Basically these are:

- Application to manager to accept the waste.
- Documentation of acceptance of waste by the authorized manager.
- Duly completed control and monitoring documents.
- Copy of the official authorization of waste manager.
- Copy of the official authorization of waste carrier.
- Record of waste produced.

The most important measures taken for the prevention, reduction and control of waste are:

Measures implemented.	Objectives.	Year.
Installation of a big-bag press.	Reduce big-bag volume.	2003
Substitution of polielectrolite machinery.	Ensure maturing, reduciing its consumption and the generation of used packaging.	2004
Building of a waste warehouse.	Improve storage an separation.	2005
Renewal of containers and labelling.	Improve storage an separation.	2009

Measures implemented for the prevention, reduction and control of waste generated.

The IEP includes Befesa Escorias Salinas' obligation to conduct a study to implement a waste minimization plan, which has been submitted to the Castilla y León Regional Government in 2010. It must be revised again in 2014.

5.5 Water Consumption.

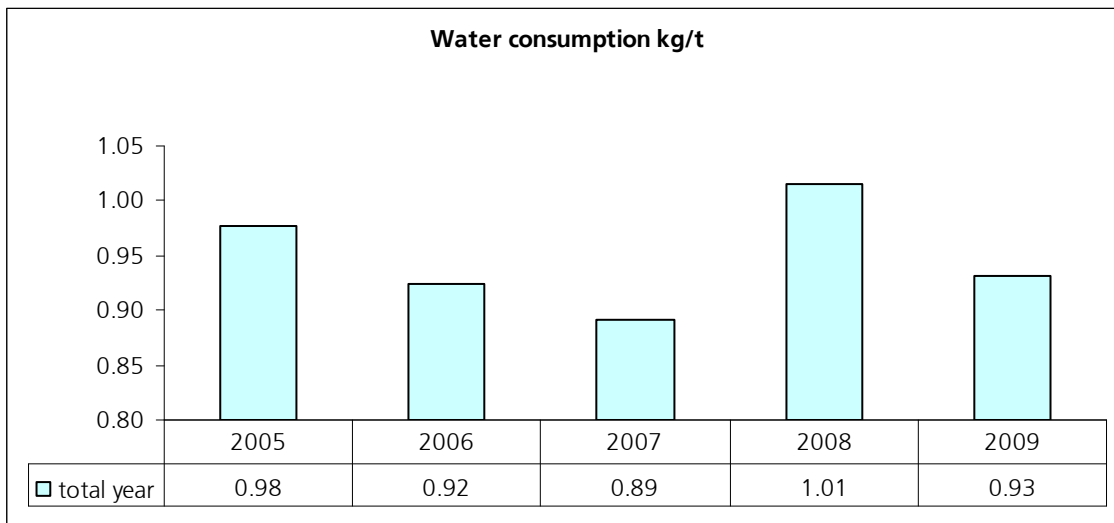
Water is a fundamental part of the process at Befesa Escorias Salinas SA, necessary for the dissolving of the salts contained in the Salt Slag. Therefore, water consumption is proportional to the raw materials consumed. The water used in the dissolving of salts is evaporated to obtain by crystallization ClNa and ClK, and then it is condensated again to be used in new production processes.

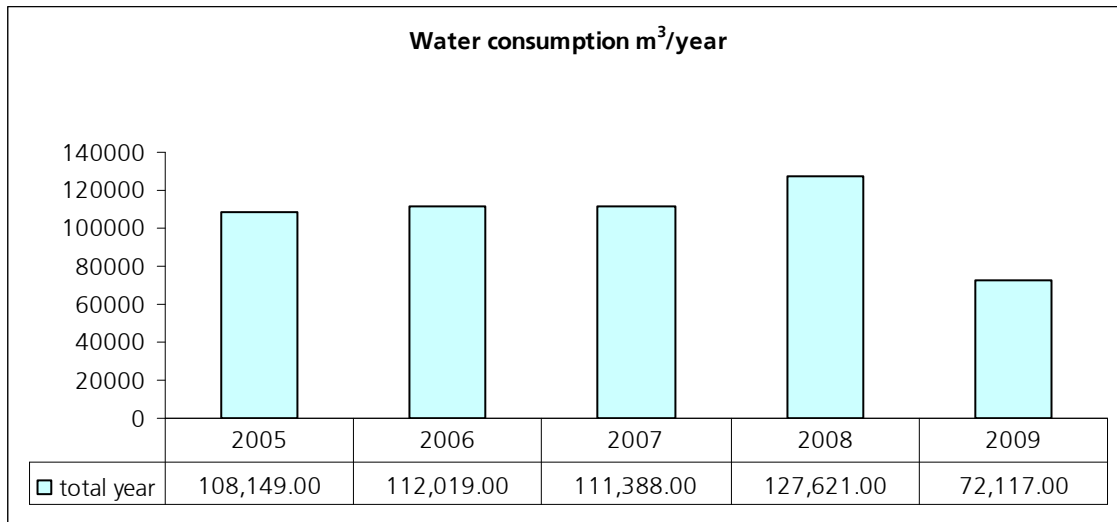
All the condensed substances from the evaporation phase are sent to the storage tanks, where water is provided for the different consumption points:

- Boilers for steam production.
- Oxide washing and/or salt melting.
- Pump seals and cleaning of pipes and facilities. After being used in the seals, the water is sent to the salt melting stage.

The process has been designed to reduce, as much as possible, the use of water from intakes, maximizing the performance and recycling the generated waters in the process and from the run-off. The only fresh water input that is made is to compensated the water output of the salts and the aluminium oxide.

Fresh water compensations come from groundwater abstraction, for which Befesa Escorias Salinas SA has the necessary administrative licenses. Befesa Escorias Salinas SA doesn't carry out any prior treatment on water received.





Historical consumption of water in the treatment process (annual average consumption from January to December over the last 4 years).

The decrease of water consumption by t is due essentially to the stops in the production process and the decrease of raw material input.

5.6 Energy consumption.

The main fuel used at Befesa Escorias Salinas SA is natural gas, that is used in the boilers for steam generation, in the rotary dryer and the security lighters.

Electric energy is used for pumping, mills, conveyor belts, fans, engines, etc. and also for the control of the installations.

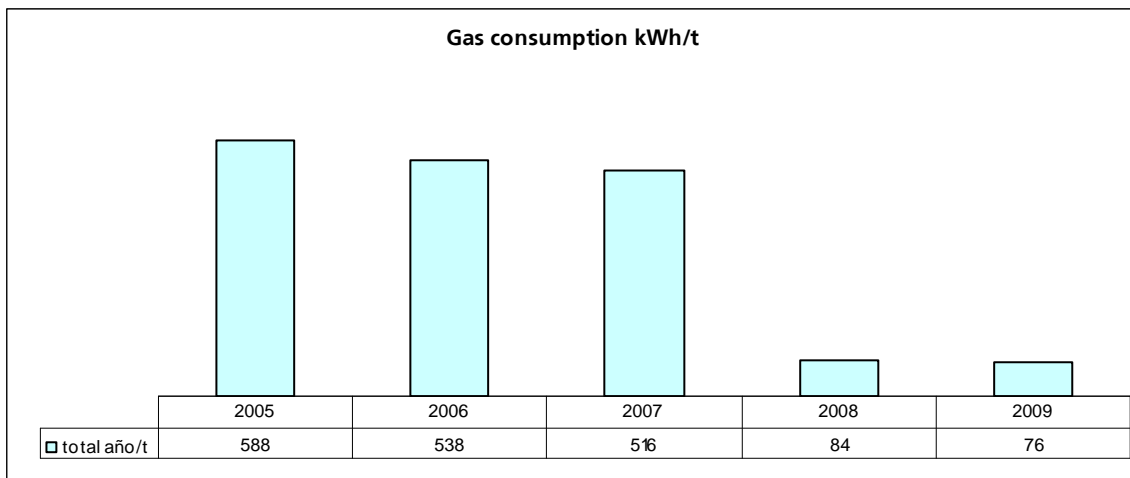
Diesel is not used in the production process, but is used for internal transportation (loaders and trucks).

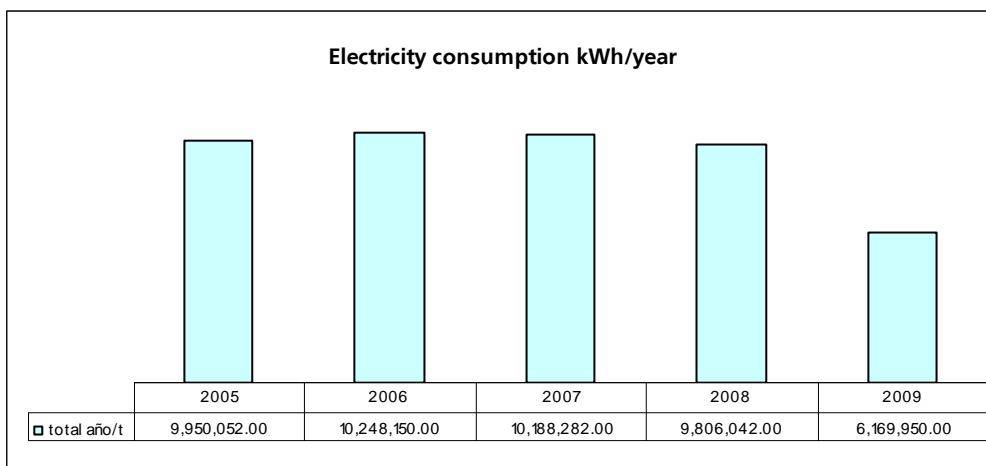
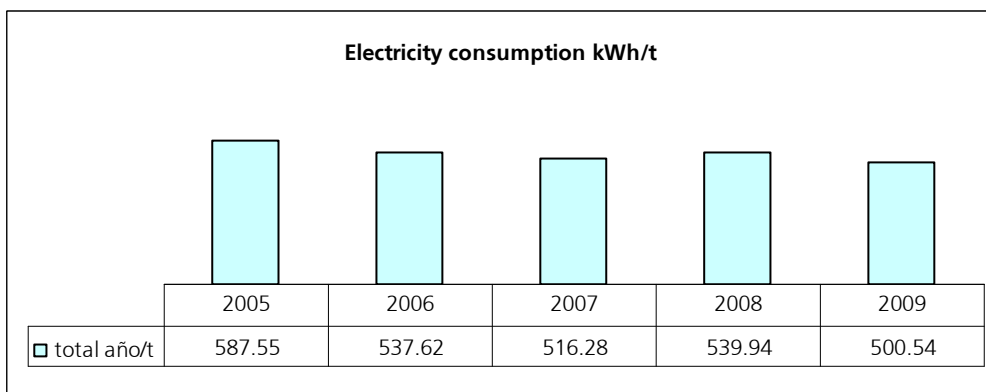
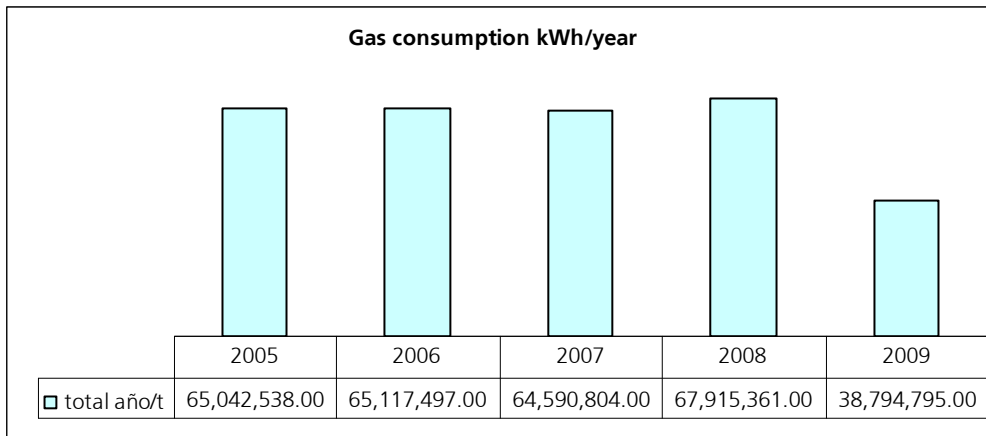
Befesa Escorias Salinas always keeps the objective of decreasing its energy consumption, achieving a gradual reduction in recent years of overall consumption through better management of equipment that is used and the reorganization of its processes.

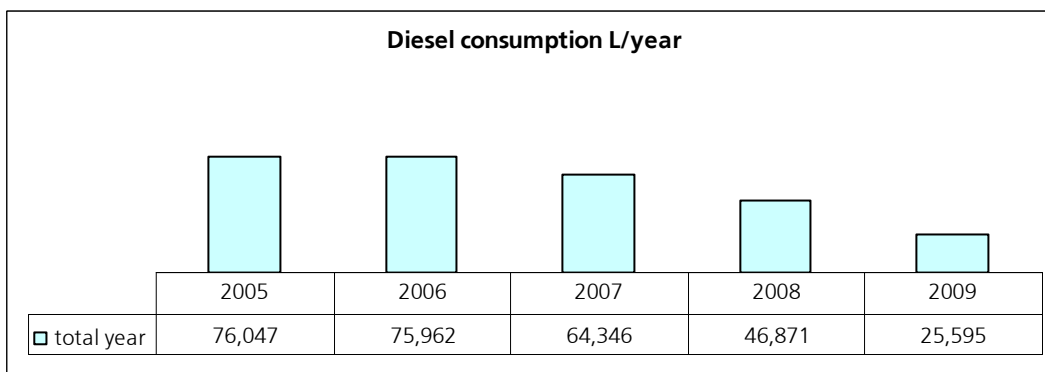
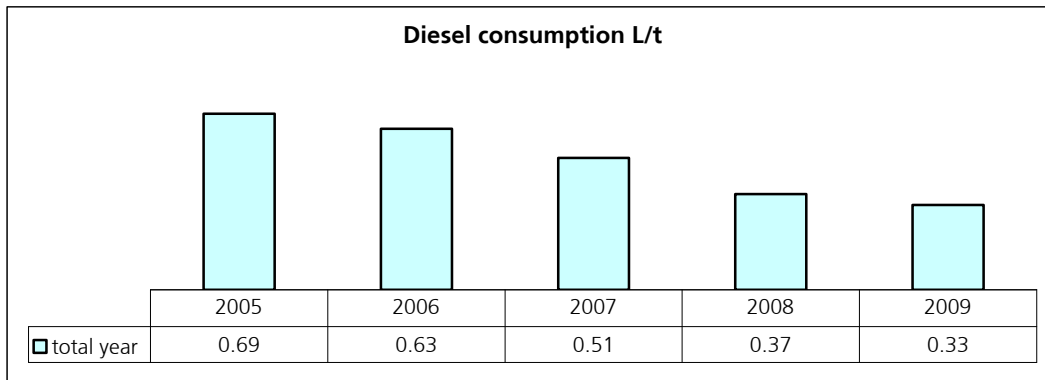
In the installations of Befesa Escorias Salinas SA there is a nitrogen deposit that is property of the supplier. Nitrogen is used in the inherited operations of reactors and the maintenance of the seal and torch. The storage unit is situated in the fenced zone on the outside and has had a total consumption over the last year of 0.25m³/t treated.

The diesel and nitrogen storage systems meet the provisions of the Royal Decree 1523/1999 of 1st October on the MI-IP 03 on storage installations for consumption at the installations.

Detailed below is the annual consumption (from January to December, both included) of energy over the last four years:







Historical consumption of energy in the treatment process (annual average consumption from January to December of the reference year, both included)

Energy consumption has decreased in 2009 and in absolute values, due to the plant shutdowns that have taken place in the second part of the year. Regarding the information referring to consumption per processed tons, this has also decreased because of management improvements, especially remarkable in gas consumption. Annually, Befesa Escorias Salinas sets an objective to decrease its consumption by 5%, which helps us improve our consumption in a systematic way, year after year.

5.7 Raw material treatment.

The raw materials that are consumed at Befesa Escorias Salinas SA are considered hazardous waste from the metallurgical processing of aluminium, called second melting.

At Befesa Escorias Salinas we consider its consumption a positive environmental impact, because through our process we avoid its depositing on a landfill and at the same time we reuse the products produced as a consequence of the raw material treatment, thus decreasing the consumption of natural resources in the aluminium industry.

Depending on its origin, these can be classified into three groups:

- Salt Waste: This comes directly from the rotary oven and is a mixture of the used flux containing the impurities of the aluminium waste.
- Aluminium waste: This comes from the melting ovens as a result of its slag treatment without the cooling of the slag. Having a low metal content, it is not safe for melting in the rotatory ovens, so it is subject to a grinding process, where the metal content is increased; the dust from this milling is treated at Befesa Escorias Salinas.
- Filter dust: This comes from the purifying process of the gases from the rotating oven. It has a low metal content and a high content in salt. The typical composition of this material is in the table below:

	Salt slag from second melting.	Other particles and dust, included in the grinding, different from that specified in 100.321.	Other particles and dust, included in the grinding, that contain hazardous substances.	Particles from gas effluents that contain hazardous substances.
L.E.R. Code.	100. 308	100. 322	100. 321	10.0 319
Metal aluminium (%).	4-6	<10	>10	Traces
Al₂O₃ (%)	45-55	70-75	70-75	40
ClNa + ClK (%)	40-55	≈15	≈15	60
Other (%)	1	-	-	-

Typical composition of raw materials treated at Befesa Escorias Salinas SA

The annual consumption (from January to December, both months included), of these raw materials over the last four years were as follows:

Year.	Total raw material treated (t).	Total LER 100. 308 treated (t).	Total LER 100. 322 treated (t).	Total LER 100. 321 treated (t).	Total LER 100. 319 treated (t).
2006	132,485	121,121	2,331	7,306	1,727
2007	137,559	125,659	2,439	7,863	1,598
2008	139,176	125,784	5,075	6,718	1,599
2009	66,189	61,807	3,185	607	590

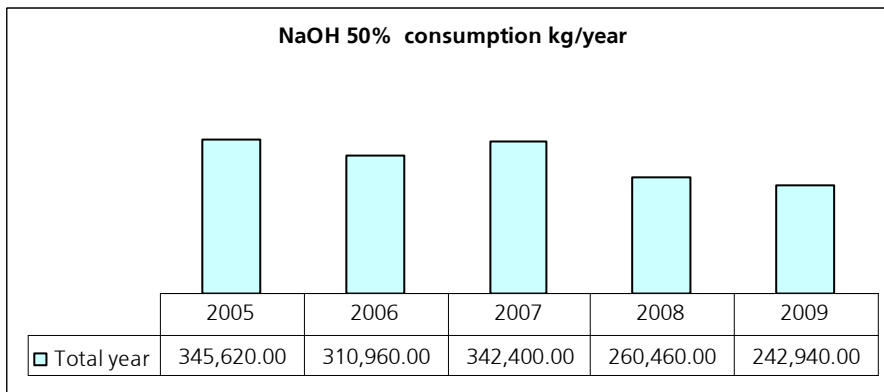
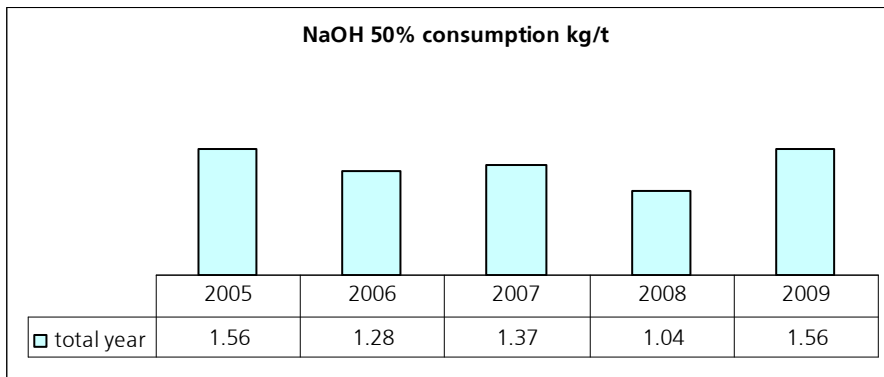
Quantity of raw material processed by Befesa Escorias Salinas SA from January to December over the last four years.

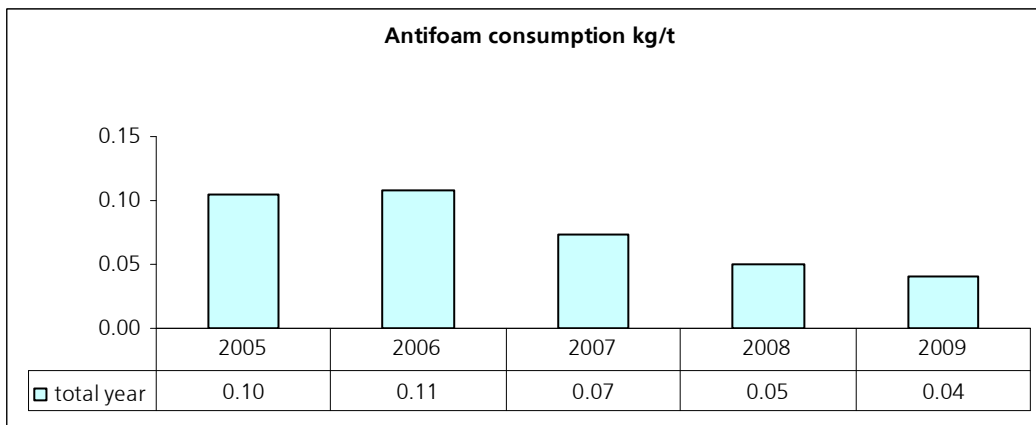
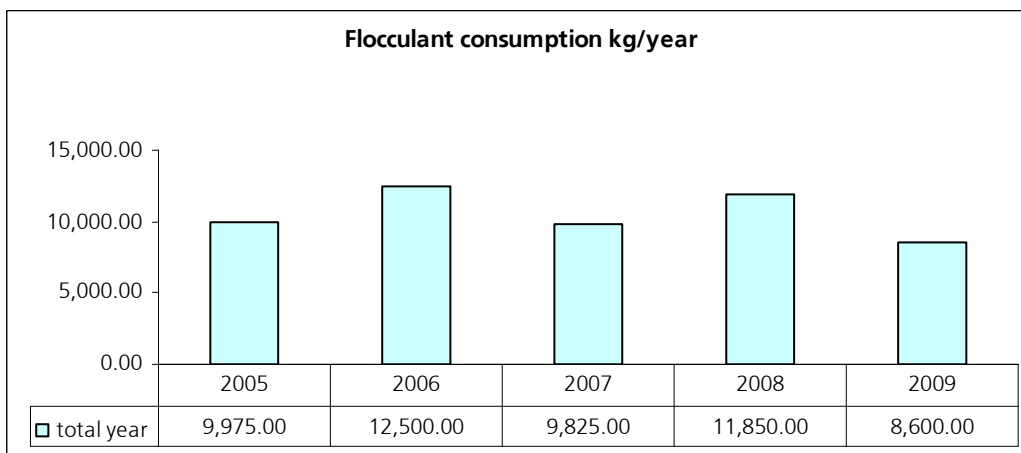
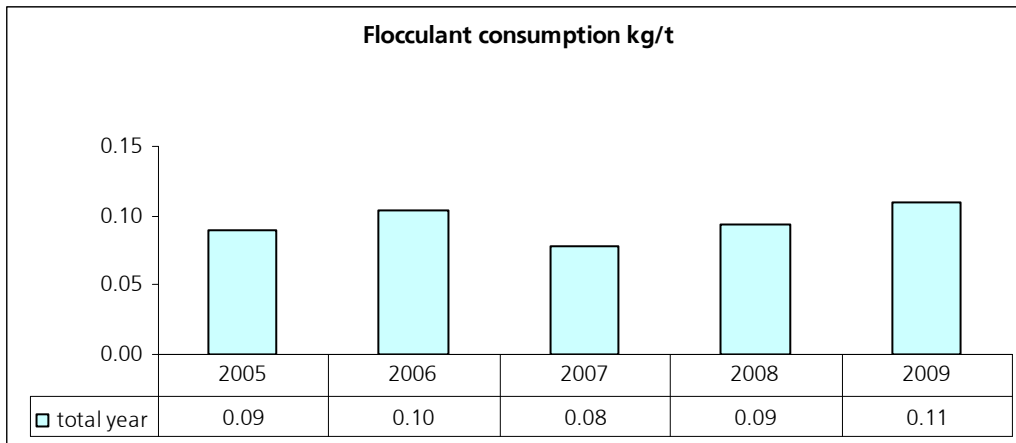
5.8 Additive Consumption.

As well as the mentioned raw materials, at Befesa Escorias Salinas SA the following chemical products are consumed as additives:

- NaOH: used to keep basic pH in the brine, decreasing the co-crystallization point of the alumina.
- Flocculent: used in the reaction-decantation process in order to facilitate the solid-liquid separation.
- Antifoam salt: used in the crystallization of salt process in order to decrease the forming of foam.

The annual average of consumption (from January to December, both months included) over the last four years has been:





Historical consumption of additives (annual average of consumption from January to December, both months included)

The increase in the consumption of flocculant is due to the increase of treated tons of aluminium. It must be remembered that this indicator is referenced to the amount of "t" of salt slag treated, thus this is a fundamental raw material of the process. On the other hand, the consumption of flocculant is adjusted to a few variations in the conditions of the process or of the raw material composition influencing the conduct of the oxides in decantation. Due to that, this influences the flocculant consumption, even if the absolute value of flocculant has decreased.

6. Indirect Environmental Aspects.

Depending on the parameters described previously, these are classified as:

Indirect environmental aspects.	Classification of the aspect.	Environmental impact
Merchandise and personnel transportation.	Not significant.	Decrease of natural resource use and atmospheric contamination.
Use of salt by clients (positive impact).	Not significant.	Replacing the use of natural resources.
Use of aluminium oxide by clients (positive impact).	Not significant.	Replacing the use of natural resources.
Use of aluminium by clients (positive impact).	Not significant.	Replacing the use of natural resources.

The transportation of merchandise is considered an indirect aspect because Befesa Escorias Salinas cannot control it. The main raw material is salt waste, which is transported in bulk in container lorries. Befesa Escorias Salinas manages the transportation by optimizing the transportation routes so that lorries don't return empty. It also "rewards" those freight companies concerned about environmental issues by checking contracts and suppliers; that is, the ones that have environmental certifications and have also implemented a stocktaking of greenhouse gases.

Regarding personnel transportation, this consists of reorganizing personnel by shifts, so that they can be grouped together if they live in the same zone (especially those who live several km away) so they can share a vehicle, thus aiming to decrease greenhouse gas emissions produced by personnel transportation to the plant.

The waste treatment process used by Befesa Escorias Salinas transforms hazardous and non-hazardous waste into new raw materials.

The products obtained from waste treatment are destined as raw materials once again for aluminium casting (in the case of salt and aluminium), replacing the use of the raw materials in the production process of secondary aluminium.

Aluminium oxide is used as a substitute of raw materials in different applications; it substitutes natural resources such as clay, calcium carbonate, etc.

7. Evaluation of the Environmental Aspects in Abnormal Conditions or Emergency Situations. Accident Prevention.

The identified aspects in abnormal conditions or emergency situations are:

Aspect: Emissions, spillages and waste.

Type of environmental aspect	Environmental Impact.		
	Low.	Medium.	High.
EN 23. Total number and volume of the most significant spillages / accidental discharges.	1	3	5
Spills or discharges in the case of a deposit rupture or leaks in the installations.	With automatic screening measures, or dikes.	With manual palliative protection measures (sand, earth, etc.).	Without any protection measure..
Uncontrollable emissions or spillages due to failure of the purifying or control systems.	With automatic control of emissions.	With manual or visual control.	Without any kind of control.
Uncontrollable emissions and spillages in case of fire or explosion.	With automatic protection and detection measures.	With manual protection measures (hoses, extinguishers, etc.).	Without any protection measure.
Refrigeration structure contamination and/or Hot Water system due to Legionella.	With detection, correction and maintenance measures.	Cleaning, disinfection, correction and maintenance.	Shutdown of the installations, shock treatment, correction and maintenance.
Contamination due to radioactivity.	With automatic detection and protection measures.	With manual control.	Without any kind of control.

Aspect: Regulatory compliance.

Type of environmental aspect.	Environmental impact.		
	Low.	Medium.	High.
EN28. Cost of significant fines and number of penalties for non-compliance with environmental regulations.	1	3	5
Contamination of the refrigeration structures and/or Hot water system due Legionella.	With detection, correction and maintenance measures.	Cleaning, disinfection, correction and maintenance.	Shutdown of the installations, shock treatment, correction and maintenance.
Contamination due to radioactivity.	With automatic protection and detection measures.	With manual control.	Without any kind of control.

The environmental aspects identified are not significant because the company has not only foreseen abnormal or emergency situations that could take place, but it has also implemented the necessary preventive measures aimed at reducing the possibility of any of these situations taking place. The preventive measures established are specific for each case of emergency. These measures are shown below:

Type of Emergency.	Prevention measure implemented.
Contamination due to Legionella.	<ul style="list-style-type: none"> • Treatment, maintenance and control of the refrigeration structures and Hot Water system as noted in current regulations. • Detection and correction measures implemented.
Contamination due to radioactivity.	<ul style="list-style-type: none"> • Automatic protection and detection measures • Monthly check-up of measuring system.
Fire.	<ul style="list-style-type: none"> • Creation of intervention teams and emergency chiefs. • Ion detector network, extinguishers and alarms. • The whole plant has been built of concrete. • Improvement of responsiveness through the establishment of an objective in 2010.
Explosion.	<ul style="list-style-type: none"> • Creation of intervention teams and emergency chiefs with continuous training. • Application of ATEX regulations.
Leak.	<ul style="list-style-type: none"> • Creation of intervention teams and emergency chiefs with continuous training.
Spillage.	<ul style="list-style-type: none"> • Creation of intervention teams and emergency chiefs with continuous training. • Emergency equipment with absorbent materials distributed throughout the installations. • Waterproofing of floors.
Failure of gas purifying systems.	<ul style="list-style-type: none"> • Creation of intervention teams and emergency chiefs with continuous training. • Regular revisions of the installations.
Failure of spillage purifying system.	<ul style="list-style-type: none"> • Daily self-control of the correct functioning of feeder pumps. • Water-collection tank is always empty.

With respect to the migration of the environmental impacts associated with emergencies, once the emergency period has concluded, the directors of Befesa Escorias Salinas SA will evaluate the situation providing the necessary resources in order to mitigate, to the extent that is reasonably possible, the impacts associated to the emergencies that have occurred.

Befesa Escorias Salinas has informed the Valladolid Civil Protection Service of its emergency plan (the self-protection plan).

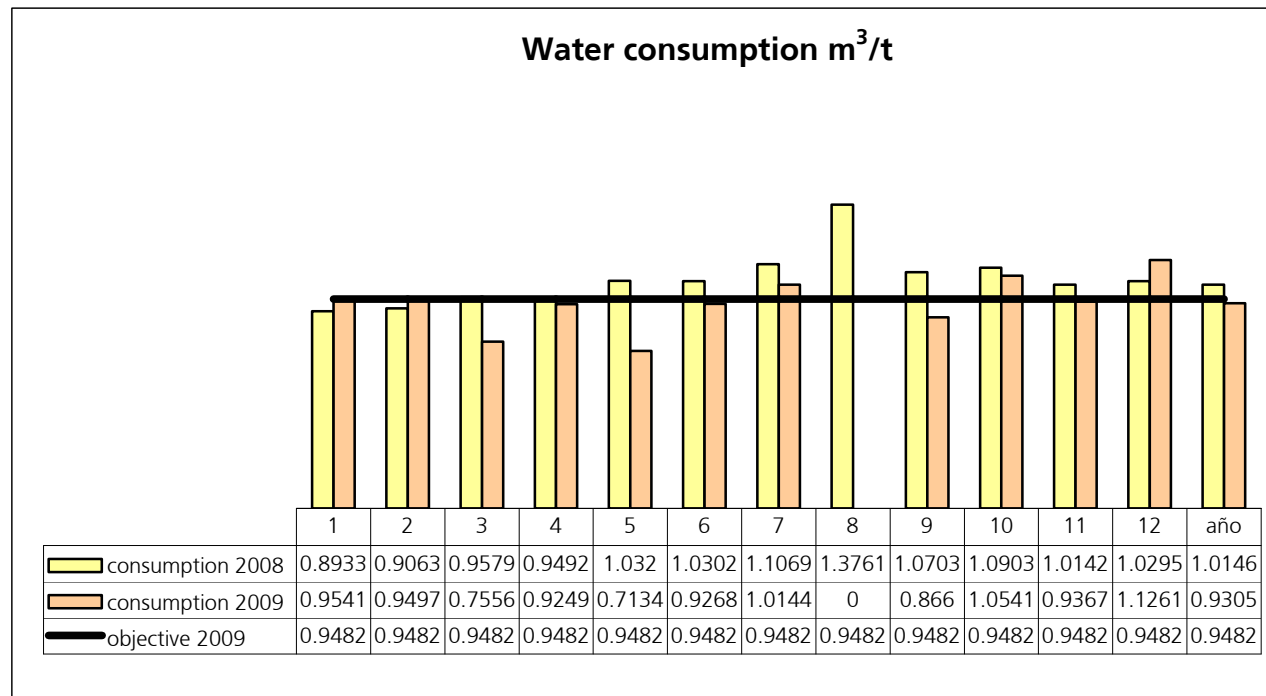
8. Technology used Compared to the Best Available Application Techniques.

Best available technique	Current situation of the company
Storage	
Indoor storage of hazardous waste of the recovery process (salt slag, aluminium slag, filter dust).	Indoor zones totally installed for the separated storage of different kinds of raw materials.
Process	
Grinding, crushing, milling and sieving for the recovering of aluminium contained in treated salt slag.	Completely installed corresponding mills and screens.
Physicochemical process for the recovery of constituent salts of treated salt slag.	Totally installed dissolution tanks, reactors, decanters, crystallizers and dryers.
Intake and gas elimination system	
<p>Grinding Installations:</p> <ul style="list-style-type: none"> • Dust: sleeve filter <p>Reactors:</p> <ul style="list-style-type: none"> • Gas: ammonia extraction and burning of fuel gas. <p>Decanters and crystallizers:</p> <ul style="list-style-type: none"> • Gas: steam extraction. 	<ul style="list-style-type: none"> • Suction and sleeve filter systems in the raw materials loading bays (elimination of diverse emissions). • Elimination of ammonia generated in the dissolution operation through cleaning with water and burning of gases with torch. • Steam extraction to collect steam generated during the production process.
Waste waters	
Pick-up and use of internal storm waters. Re-use of water in the productive process.	The evaporated water in the production process is re-used through cooling systems. Storm water is collected picked through a sewage system and incorporated into the production process.
Waste	
Prevention, minimization and reuse of generated waste.	Filter dust generated during the grinding operation is incorporated into the production process. The aluminium extracted after the grinding and screening treatment of salt slag is reused in the new aluminium recycling melting process.
Environmental management	
Implementation and adhesion to an international voluntarily accepted system.	Befesa Escorias Salinas SA has been certified according to internationally recognized ISO14001 standard since the year 2000.

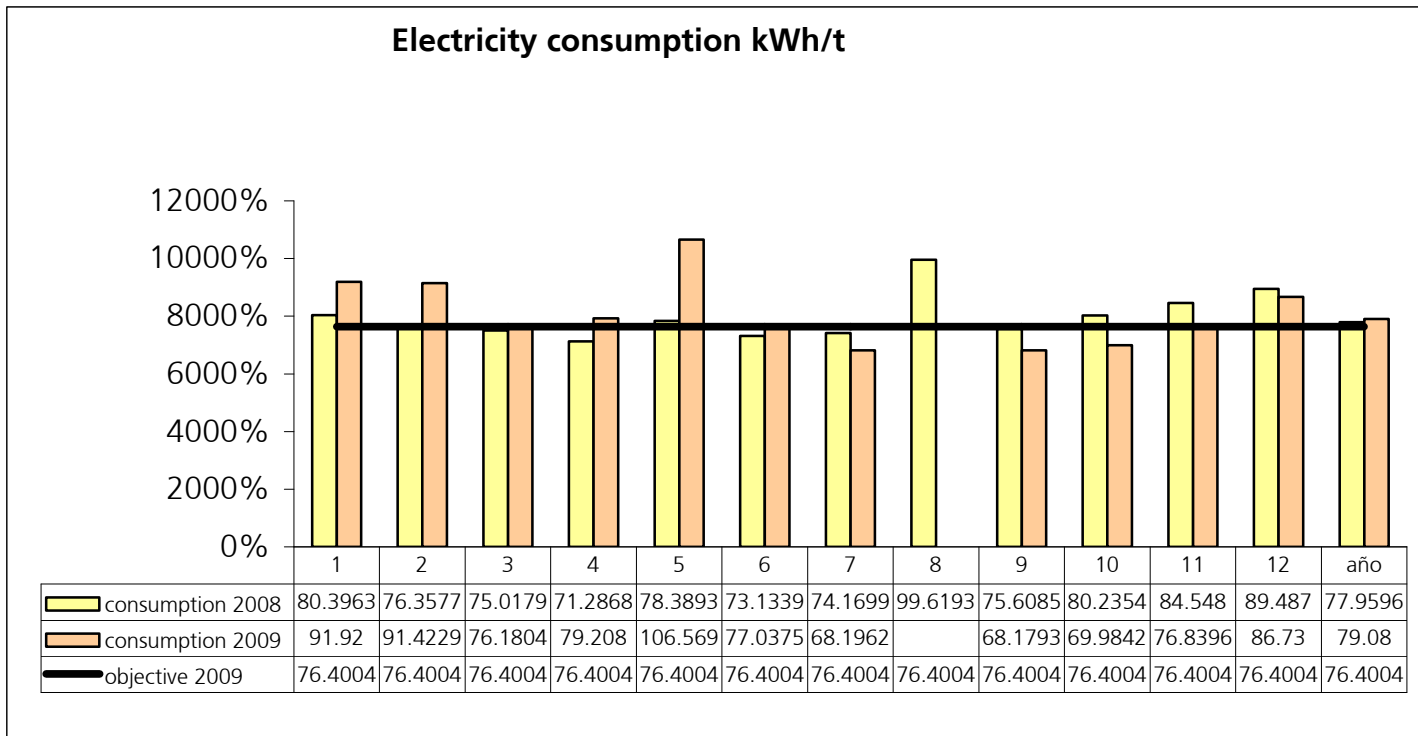
9. 2009 Environmental Objectives.

On an annual basis a number of environmental objectives are established at Befesa Escorias Salinas SA that are contained in the objectives and goals plan, where the goals associated with each one of the objectives are defined and also the corresponding assignment of human and material resources. The environmental objectives defined for the year 2009 are described below, along with a brief summary of their final degree of implementation:

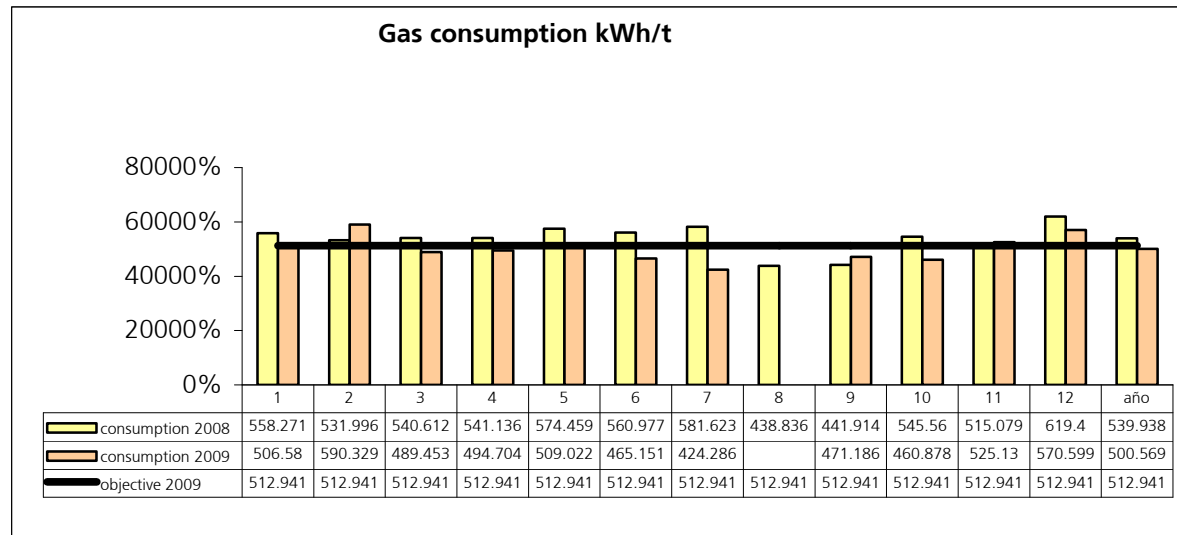
Objective N° 1.		5% decrease in water consumption with respect to the year 2008.				
Goals.	Terms.	Responsible.	Means assigned.	Completion Date.	Indications.	
1	Re-use of the water in dissolution.	March	Production manager.	N/A	March.	% of decrease with respect to previous year.
Degree of compliance: 103%.			Comments: different measures have been taken during the whole year aimed at decreasing and optimizing water consumption; the results have been satisfactory. The re-use of water in dissolution, both the water in the decanters as well as in the brine in the different reactors has led to a significant reduction in water consumption with respect to the previous year.			



Objective N° 2		2% decrease in electricity energy use with respect to the year 2008.				
Goals	Terms	Responsible	Means assigned	Completion Date	Indications	
1	Implementation of a power map	August	Production manager	N/A	April	% decrease with respect to previous year
Degree of compliance: 95%		Comments: the decrease in electricity consumption objective that was planned could not be reached for two reasons: the increase in the number of engines installed during 2009 and the ERET periods in which maintenance was carried out and in which electricity consumption stopped. However, most of the plant stoppages have been managed to optimize energy consumption when it was possible.				



Objective N° 3		5% decrease of greenhouse gas emissions with respect to the year 2008				
Goals	Terms	Responsible	Assigned Means	Completion Date	Indications	
1	Energetic exploitation of plant gases, optimizing hydrogen	March	Production/maintenance manager	€350,000	Pending	Degree of progress
2	5% decrease of gas consumption with respect to the year 2008 (512kW/ t) excluding plant hydrogen through: - Time control of operations with natural gas - Discriminating gas consumption	March	Production manager	N/A	December 2008	% decrease
Degree of compliance:50%			Comments: the objective has been accomplished with respect to the decrease of gas consumption. The first of the goals is pending upon the completion of other tests.			



10. 2010 Environmental Objectives.**1. 2% decrease in water expenses with respect to 2009, with a maximum consumption of 119,000m³/ year.**

- a. Decrease water consumption at unnecessary places, removing pipes, etc.
- b. Discuss the possibility of using water condensed with flocculent.
- c. Optimize the cloths in the filters, changing the raw water for another from TA-45.

Indication: m³/ t processed.

2. 2% decrease of gas expenses with respect to 2009.

- a. Control of the contribution density to the plant.
- b. Control and decrease of water contribution to crystallization.
- c. Completion of hot stops in crystallization.

Indication: Kwh/ t processed.

3. 5% decrease of additives with respect to 2009.

- a. Additives consumption control per processed ton.
- b. Regular calibration of samples.
- c. Search for cheaper options.

4. Treatment of new waste and consolidation of current waste (SPL, PF, EA).

- Treatment of the aluminium slag without interfering with salt slag treatment, separating the processing paths.
- Treatment of dust filter without interfering with salt slag treatment, separating the processing paths.
- Treatment of SPL, by obtaining necessary license and consolidating the sand treatment and also that done by clients.

Indication: t treated of EA/ t received (The equation must be equal to 1).

Indication: t treated of PF/ t received (The equation must be equal to 1).

Indication: degree of progress .

5. Progress in emergency response capacity. Reduce the minutes of time from the detection of the emergency to the stoppage in secure conditions.

- a. Review stoppage instructions of plant in emergency situations.
- b. Placement of signs with stoppage instructions in each zone.
- c. Training of whole plant for stoppage in plant in emergency situation.
- d. Implementation of practices / simulation by zones.
- e. Simulation.
- f. Simulation (without the person responsible being present on the premises).

Indication: degree of progress.

6. GEI Inventory.

- a. Change in fuel use of machinery fleet.
- b. Consider emissions of 100% of suppliers.

Indication: % of GEI's emissions reduction (t CO₂/ t processed).

Indication: 100% controlled suppliers.

11. Company Social Responsibility.

11.1 Mission, vision and values.

Mission:

Offer solutions for the sustainable development of the aluminium industry, both primary and secondary. Give long term value to shareholders, employees and society in general.

Vision:

To be a world reference in waste treatment for the aluminium industry, working on sustainable growth and the saving of non-renewable resources.

Values:

Team work.

Respect for people and the environment.

Integrity, honesty and clarity

Legality.

Dual approach to the client:

Client service (waste generator/supplier of raw materials).

Client product (user of secondary raw materials).

Innovation and technological development.

11.2 Dialogue with our interest groups.

11.2.1. Internal communication.

Communication is at the same time the key for involving the people that take part in the accomplishment of the mission, objectives and a vocation of orientation towards the client. Amongst the most important media for the communication function we can highlight the following:

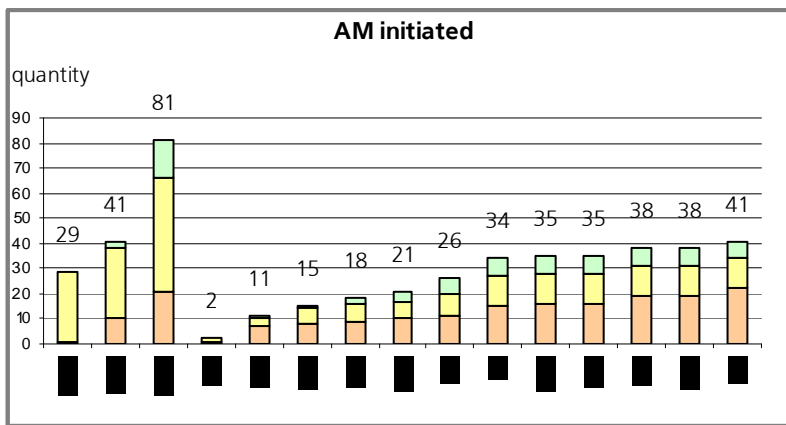
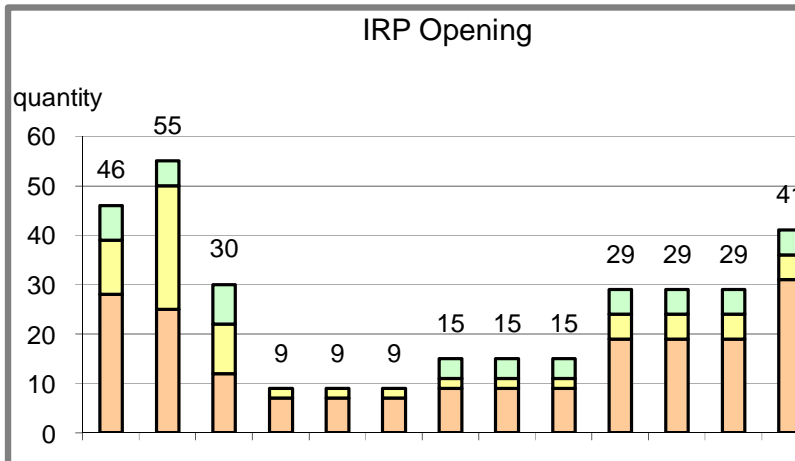
Employee Portal. In the year 2003, the Abengoa portal started operating, which is used for internal, fast and universal transmission of all information and knowledge referred to the business group, companies and of the people that take part in the organization.

The portal is an internal communication and information element. It intends to be a professional desktop for all employees, where, apart from offering static and dynamic information of the business group and its companies, it can be accessed through all management systems needed for the professional performance, and also for the different Human Resource processes with respect to management and personnel.

Arrival manual: Befesa Escorias Salinas provides its new employees and practice personnel with arrival and integration plans, in order to welcome them, ease their adaptation and offer them a global vision of the company, its risks and environmental management.

Additionally, the internal bulletin that Abengoa publishes on a bi-monthly bases, not only includes the main actions of its business groups and companies, but also has technical articles, quality and environmental news and news related to human resources. The magazine is written with the collaboration of employees, it is published in Spanish and English and has a circulation of 15,000 copies. This is an internal publication and it is also available to all employees and on the employee portal and the corporation website (www.abengoa.com).

Corporation tools for the Resolution of Problems and Improvement, Suggestions and Reports, used by the employees to report possible deficiencies or to make suggestions through the system, both by computer or in paper format. The monitoring of these actions is monthly in committees under the general direction of the company.



Colors bars: Pink = Prevention of Work-related risk; Yellow = Quality; Green = Environment.

The employee portal: this has been going since 2003. Through this portal all information and the knowledge referring to the business group, companies and the people that take part in the organization is transmitted internally in a fast and universal way. The employee portal is structured in different modules that include aspects like organization charts, history, news, relevant facts, quality, environment, innovation projects and activities from the different companies in the group. It also promotes the exchange of opinions and suggestions among employees through the virtual noticeboard. It furthermore allows people to download from the work area all the corporation applications that are used on a daily basis. They can access all the management systems needed for their professional work and also for the different human resource processes related to management and personnel.

People Center: This can be accessed through the employee portal. This tool allows employees to do the following:

- Visualization and printing of payrolls.
- Visualization of the work times.
- Possibility of modifying bank and personal information.
- Possibility of distributing in various bank accounts the amount of the payroll (including a direct percentage or amount).
- Visualization of Income Tax withheld, tax certificate and the possibility of increasing the minimum statutory rate.
- Consultation and frequent question service (FAQ) in all areas.
- Possibility of requesting advance payments.
- Work related-consultation and personal affairs management.

11.2.2. External communication.

- Befesa's website: The Befesa website (www.befesa.com) was designed in 2003 and since then it has been subject to continuous update to be adapted to the new activities of the group and also to the new design and navigation techniques. Through its headings Befesa offers all the specific information addressed to clients, investors and suppliers and general information for anyone interested in the company's activities, information that can be accessed from the "links of interest" which connects to the pages of the rest of the business groups that make up Abengoa. The website also allows the user to contact the company and request information through the befesa@befesa.com email address.
- Befesa and its clients: Befesa has the commitment to orientating its products and services to achieving the complete satisfactions of its clients. The effective implementation of its management systems is the result of guidelines established by the quality, environmental and risk prevention Policies Director, the objectives proposed every year and their regular monitoring, the continuous improvement and training implemented as well as the unconditional support given by personnel that make up Befesa. The responsibility of the good working of the management systems in companies of the group falls on the general directorship and is delegated to the quality, environment and risk prevention management department which ultimately looks after the obeying of regulations, proceedings and current legislation that must be applied in every case. Befesa has established a management system, focused on the process that supports and executes the policies and organizational strategy, and is orientated towards continuous improvement, according to requirements established in international regulations. In this context, it is the management system itself, along with its control and monitoring actions, which guarantees that in each of the phases of products and services lifecycles, the impacts on the safety and health of clients will be assessed. Through the information channels that are available to Befesa, no incident has been registered due to non-compliance of legal regulations or non-adherence to voluntary codes of conduct, related to the products impact on health and safety during their lifecycle.
Product and services labelling.
- Befesa and its suppliers: Due to the importance of suppliers for the organization and the successful accomplishment of its objectives, before and during the relationship with them all the fulfilment of

legal, commercial, logistics, safety and health, quality, environmental, technical and after-sales service aspects are all assessed in detail. Befesa Escorias Salinas has a standard selection process as well as control and monitoring mechanisms of suppliers. Agreements with suppliers are formalized through the issuing of the documentation needed which reflects the commitments acquired by both parties, including both the technical requirements as well as the commercial conditions that must be applied. In order to make the relationship with suppliers as successful as possible, the company demands, as do the companies that make up Befesa, high quality levels with respect to the environment and a high level of accomplishment on safety matters.

12. Compliance with Legal Requirements.

Befesa Escorias Salinas has controlled all legal and other requirements set out for 2009 with respect to occupational hazard prevention and the environment.

In 2009, non-compliance with three legal requirements was detected, generating the corresponding opening of IRPs. These cases of non-compliance corresponded to:

- Passing the underground water consumption limit, according to the limits established in the underground water use license.
- Passing the DBO₅ limits and solids in suspension according to the established limits in the spillage license, as seen in tests performed on the water in the septic tank.
- Non-compliance with the 2009 ADR after not controlling the load of wastes that left the plant.

13. Other outstanding Activities Related to the Environmental.

- In order to achieve our objectives, Befesa Escorias Salinas SA has always been aware that it must count on the collaboration of highly qualified and motivated personnel. That is why, every year an ambitious training plan is established related to quality, risk prevention and environmental activities, in which the permanent staff and newly incorporated personnel actively participate. Throughout 2009, almost 1,000 hours have been invested in personnel training.
- Befesa Escorias Salinas SA, aware that in order to achieve compliance to its environmental policies and the objectives and goals established, it was necessary to have an advanced environmental management system, it had its system certified according to ISO14001 standard by the certifier B.V.Q.I in 2000. According to the commitment that Befesa Escorias Salinas SA has to the environment, it has decided to voluntarily adhere to the European Union's Environmental Management and Audit System (EMAS).
- According to standard ISO14001 and the European EMAS regulations, Befesa Escorias Salinas SA has undergone the corresponding environmental audits, both internally and externally, in order to evaluate the correct functioning of the environmental management system implemented. The performance of audits is a key element in order to verify both the validity of the data that the different departments obtain through the exercise, as well as the procedures and instructions designed to undertake the management correctly. When, in the course of the audit, non-compliances with the integrated management system is detected, some Correctional Actions are activated to solve such situations. The internal and external audit programs have been satisfactorily accomplished in the year 2009.
- Befesa Escorias Salinas SA has the corresponding integrated environmental license.
- Befesa Escorias Salinas SA takes part and actively participates in the following associations:
 - Spanish Quality Association (AEC).

- Spanish Confederation of Metal Business Organizations CONFEMETAL, being an active member of the Environmental Committee.
 - Member of the Permanent Environmental Forum of the Valladolid Chamber of Commerce and Industry.
 - Spanish Association of Special Waste Managers ASEGRE: It is an umbrella-organisation for companies whose activity is the management of hazardous wastes.
 - Castilla y León Association of Environmental companies (CASLEMA).
 - Innovative Environmental Sustainability Business Group.
-
- Befesa Escorias Salinas SA regularly participates in R&D programmes together with different research centres and other European companies, mainly aimed at recycling, valuation and the complete exploitation of wastes from the aluminium industry.

14. Complaints and Reports.

During 2009 environmental complaints or reports were received.

15. Next environmental Statement.

This environmental statement is intended to inform partners, authorities, customers, suppliers, media and neighbours about our management policy and also propose constructive dialogue.

The next validated environmental statement will be issued in April 2011.

Befesa Escorias Salinas SA
Valladolid, April 2010

Annex 1.

Abreviatures list.

t: ton.

kg : kilogram.

mg : miligram.

kWh : kilowatt.hour.

m³ : cubic metre.

L: liter.

DQO₅: quematical oxygen demand.

DBO: bioquematical oxygen demand.

VLE: value limit of emission.

dB: decibel.

Leequiv: equivalent limit.

ATEX: explosive atmosphere.

SS: salt slag.

SPL: spilepot line.

PF: filter dust.

EA: aluminium slag.

IRP: problem resolution report.

AM: improvement action.

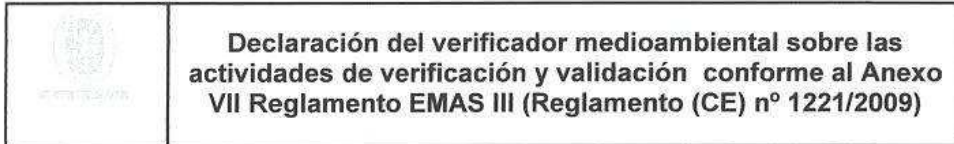
NOC: mandatory standard.

AAI: environmental integrated authoritation.

CHD: Confederación Hidrográfica del Duero.

ADR: transport regulation.





CÉSAR ALVAREZ PÉREZ verificador cualificado por BUREAU VERITAS CERTIFICATION SAU en posesión este último del número de registro de verificadores medioambientales EMAS ES-V-0003 acreditado o autorizado para el ámbito NACE 17 Y 24, declara haber verificado que el centro(s) o toda la organización, según se indica en la declaración *medioambiental/declaración—medioambiental actualizada(*)* de la organización BEFESA ESCORIAS SALINAS SA en posesión del número de registro ES-CYL-000028 cumple todos los requisitos del Reglamento (CE) nº 1221/2009 del Parlamento Europeo y del Consejo, de 25 de noviembre de 2009, relativo a la participación voluntaria de organizaciones en un sistema comunitario de gestión y auditoría medioambientales (EMAS).

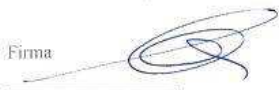
Mediante la firma de esta declaración, declaro que:

- la verificación y validación se han llevado a cabo respetando esmeradamente los requisitos del Reglamento (CE) nº 1221/2009;
- el resultado de la verificación y validación confirma que no hay indicios de incumplimiento de los requisitos legales aplicables en materia de medio ambiente;
- los datos y la información de la *declaración medioambiental/la—declaración—medioambiental actualizada(*)* de ~~la organización/~~ *del centro(*)* reflejan una imagen fiable, convincente y correcta de todas las actividades de ~~la organización/centro(*)~~, en el ámbito mencionado en la declaración medioambiental.

El presente documento no equivale al registro en EMAS. El registro en EMAS solo puede ser otorgado por un organismo competente en virtud del Reglamento (CE) nº 1221/2009. El presente documento no servirá por sí solo para la comunicación pública independiente.

Hecho en Madrid, el 05-11-2010

Firma



(*) Táchese lo que no proceda

(**) Declaración ambiental verificada y validada según reglamento EMAS II REGLAMENTO (CE) No 761/2001 DEL PARLAMENTO EUROPEO Y DEL CONSEJO de 19 de marzo de 2001 por el que se permite que las organizaciones se adhieran con carácter voluntario a un sistema comunitario de gestión y auditoría medioambientales (EMAS)