

Pedro Poveda

Lawyer specialized in Environment. One of the greater Spanish experts in residues, environmental authorizations (IPPC), water and systems integrated of management of residues.

In IDALSA, as a result of their productive process, some residues are generated, the salt cake, that are submitted to a new process of prior processing, by means of grinding, grinding and electromagnetic and mechanical separation of the one that are extracted a series of metallic components that are object of use in the own aluminum production process. The remainder of the residual product, qualified as dangerous residue (Code LER 100308), **elimination in a dump of dangerous residues is negotiated by means of, of the one that is a holder IDALSA and that is located in the same complex of the plant of recycled.**

IDALSA counts on all the authorizations and licenses of environmental character required by the legislation in force:

- Municipal License of activities classified (included the mandatory procedure of binding autonomous qualification).
- Autonomous Authorizations of agent and producer of dangerous residues.
- Autonomous Authorization of dangerous **residues dump installation**, as well as of its adaptation to the Royal Decree 1481/2001, subject to formulation of the corresponding Statement of Environmental Impact. In this sense, is precise to emphasize that the design and the construction of this **dump** was carried out keeping in mind the greater demands predicted in the Managing one 1999/31/CE, of the Counsel, of 27 of December, in spite of the fact that yet was not obligatory, upon not having produced still in that date the incorporation to the internal Code of it cited Board of directors (**by these motives, IDALSA did not have any problem its adaptation to the new Regulation, according to it established in the article 15 of the Royal Decree 1481/2001**)
- **Inclusion in the Registration of Emissions and sources Contaminants-EPER Spain.**
- **IDALSA has adapted its installations to the Law 16/2002, of 1 of July, of prevention and control integrated of the contamination (IPPC).**
- **By means of Resolution of 23.11.2007 is offered the Environmental Authorization Integrated.**

From interests linked to businesses of the competencia has been intended to question the compliance on the part of IDALSA of the regulation on residues, being based exclusively in the fact that, in spite of including all the environmental authorizations (and, among them, the exactable in matter of residues) **IDALSA would not be complying the options hierarchy principle in the management of residues, according to which, the residues should be negotiated According to an order of preferences in which priority the management is considered by means of appreciation (preferably by means of recycled) to the elimination in dump.** It would want it to say, in opinion of who thus they think, that IDALSA would be breaking the mentioned principle of hierarchy when negotiates by means of deposit in **dump** the salt cake generated in its process of production, instead of proceeding to its recycled.

Without entering to question the suitability of the principle of hierarchy, and much less to doubt of its existence, the certain thing is that turns out to be precise to delimit so much its true meaning as the linking that implies on the operating newspaper of the residues management activities, circumstances both that will permit us to verify with facility that **also in this aspect the behavior of IDALSA is absolutely respectful with the environmental legislation.**

Thus, one must cause to be evident, in the first place, that, in the Common Right of Environment, the options hierarchy principle in the management of residues was formulated for the first time in the common Strategy on residues of 1990 and its reach was mentioned shortly after, in the V Programs Common of Action in matter of Environment and Sustainable Development, in the sense **to set an order of preferences That implies to give priority to the reduction of the generation of residues**, followed by the "promotion of its recycled and recycling and the optimization of the methods of final elimination of the residues done not recycle or reused", in environmentally sure conditions.

In this sense, should not pass unnoticed **the fact that what truly is placed in the last step are the residues "done not recycle or reused" and not the "not reusable or recyclable", what gives to understand that the principle of hierarchy comes to report on the options that are preferably since the environmental point of view, but with the only repercussion of that, once generated the residue, themselves "it will promote" their management by means of recycled (or recycling), in such a way that the residues that themselves recycle not, at least they should be negotiated by means of elimination in dump in adequate conditions** (what, as is evident, and will be justified with more detail in the following paragraphs, in no way implies that only they can be placed in **dump** the residues that be not recyclable).

On the base of the previous decision of the Common Strategy on residues, the Managing one 91/156/CE is limited to establish, in its article 3,1, that you Be you them members "will take the adequate measures **to promote**" the appreciation of the residues, but without it imply obligation or imposition of a determined method of management.

To greater abundance, in the Article 1 of the Law 10/1998, of 21 of April, of residues, the options hierarchy principle in the management of residues is established truly and there is left well clear that one of the purposes of the same one is that of **"to promote**, by this order, the reduction, recycling, recycled, appreciation ...". And all it, clear is, with independence that, with the technological advances of nowadays, plainly, practically all the residues are "potentially recyclable or valorizables" for which a strict interpretation and fundamentalist of the previous precept would carry us to the absurd one of that he would be prohibited the elimination in **dump** of the residues.

This criterion has been assumed also by the Court of Justice of the EU when in its sentence of 23.02.1994 (matter 236/92) when indicated that the "Managing Framework" on residues "does not impose, by itself, the adoption of concrete measures or a determined method of management of the residues".

All in all, the options hierarchy principle in the management of residues does not imply any obligation for the possessors of residues but, by the reasons exposed, operates only as a mere guideline that should guide the action of the Public Administrations, never like a duty that can be exactable.

More concretely the regulation on residues (be common, state or autonomous) in no way permits to prohibit the utilization of the dump as method of management of the residues, provided that such operation be carry out in installations that comply scrupulously with it FIF

In this sense, the only residues that would not be able to be placed in **dump** are them enumerated in article 5,3 of the Royal Decree 1481/2001, of 27 of December, among the ones that not the **residual salt** cake are found in IDALSA.

Idalsa - Ibérica de aleaciones ligeras

Pedro Poveda

In support of this interpretive criterion we can cite the doctrinal opinion of diverse authors, some of which they figure among the most renowned of as many as they have studied the legal state of the residues:

KRÄMER, L: "There is not legal hierarchy among the different objectives. The preference offered by the texts to such or which objective does not have legal consequences in the sense that the promotion of such or which objective by a member State constitute an infraction to the obligations that be derive from the common Right".

CAMPINS ERRITJA, M: "does Not exist with general character a prohibition to utilize you determined methods of management", in such a way that, in which refers to specific prohibitions to utilize some specific method of management (and, more concretely, the elimination) "alone the Board of directors on the residues originating in the Industry deTitanio prohibits poured them of these in the sea".

ALENZA Garcia, F: "in practice, the common regulation does not impose really a hierarchy, but is limited to collect these objectives, but without establishing a concrete duty, save the volatile obligation of promoting the operations that conduct to the attainment of the objectives of reduction and use. (...) Save in these cases and although the hierarchy be imposed in an espresso way, the legal consequences of a violation of the same one are in practice nonexistent".

It remains, finally, to analyze if, in application of the regulation on prevention and control integrated of the contamination (IPPC), IDALSA would be obliged to negotiate by means of recycled the salt cake generated in its process or, what is the same thing, if it would prevent to continue the current method of management, by means of deposit in the **dump** of the business located in the same complex.

Therefore well, also in this case the action of IDALSA is, in my opinion, absolutely respectful with the regulation on IPPC, by the reasons that are exposed subsequently.

The installations of IDALSA, so much those of production of aluminum as those of the **dump**, they are included in the environment of law enforcement 16/2002, of 1 of July, of prevention and control integrated of the contamination (in concrete, categories 2, in the main activity, and category 5,4, the secondary activity).

The installations of IDALSA include the Environmental Authorization Integrated of the autonomous region of Aragon.

IDALSA has in consideration, among others criteria, the **better available techniques** (BATs - MTD), understanding for such those that permit to obtain the better environmental results, **in economically viable and technical conditions**.

In the breast of the Bureau European of IPPC they have been created a series of working Parties to define them called "Documents of reference of the best Available Technology" (you known with the acronyms BREF) for each one of the 32 sectors of activity in which the totality of industrial installations has been divided affected by the regulatory one IPPC.

The BREFs, in short, they do not establish legally binding measures though they provide a valuable information to the Administrations and to the different sectors affected on what, in opinion of the participants in the respective working Party and after an intense technical debate, can serve as main criterion of decision of the emission limit values that be going to impose to the industrial activities in question.

We are, therefore, before an element that provides information for it takes of decisions of the competent Administrations at the moment of to offer the environmental authorization integrated, but always leaving from the transcendental premise that so much the Managing one 96/61/CE as the Law 16/2002, **prohiben explicitly that as a result of the Better Available Techniques a concrete technology can be imposed (article 7.1.a, in fine of the Law 16/2002)**.

In this sense, the working Party of Metalurgia not ferrous of the IPTS established that among the characteristics to consider for the decision of the BATs (MTD) in secondary smelting furnaces they would be those of to use teams in which be possible, among others criteria, **to minimize** the use of salt as flux, to reduce the consumption of energy (incorporating the technology of oxi-combustion in the burners of the ovens, for example), The quantity and toxicity of the residues generated and to recover the possible maximum of the present products in the final residual fraction.

According to the previous thing, among the ovens that are considered in the cited BREF as "better available technology" for the production of secondary aluminum are the ovens newspapers and the dumpers newspapers ovens that are the ones that employs IDALSA.

As for the actions to recover the salt cake, the objective set in the BREF is to try to avoid the deposit in **dump**, when it be possible (and, by the own philosophy of the concept of "better available technology", defined in the second hyphen of the article 3, of the Law 16/2002, the possibility one must value it "in economically viable and technical conditions") and, in the case that be necessary **Dump** (again, we insist again, when it be derive from the conditions "technical and economically viable" of the method of finally chosen management), to require a system of poured with some requirements of adequate security.

The things, I have seen how the process followed by the IDALSA in its installations complies scrupulously with the previous decisions of the BREF of the sector of metalurgia not ferrous in the measure in which:

In which refers to the ovens, utilizes the ovens newspapers indicated in the document (even, since 2002, one of them dumper and of the latest generation, especially designed to recycle residues of aluminum utilizing a minimum quantity of you leajavascript::ve flux) and incorporates the oxi-combustion in the burners, with the consequent reduction of the consumption of energy.

It carries out a pretratamiento of the commodity and of the saline dross generated in the process of production, in such a way that they recover and they take advantage of to the maximum the residues generated and the utilization is diminished sensitively of you leave flux.

It utilizes a new mixture of you leave flux by means of the one that the quantity of chlorides manages to reduce sensitively to introduce for each kilogram of impurities that contain the scrap and products to melt, reducing as a result of it the saline dross generated in the process (and, therefore, the toxicity of the residual fraction).

The assembly of the previous actions has supposed for IDALSA an important one minimización of the residues generated by ton of aluminum produced, what, in general lines, has been translated in which, according to data contrasted, during the period 2000-2007 has been reduced in a 56% the ratio Kg of salt cake generated by Kg of ingot of aluminum obtained (has passed of 0.97 in the year 2000 to 0.43 in

Idalsa - Ibérica de aleaciones ligeras

Pedro Poveda

2007) IDALSA understands, with legal base that the continued method for the final management of the salt cake generated in its installations, by means of deposit in dangerous dump controlled of residues, is the unique economically viable one.

In support of the criterion of IDALSA I cite the following paragraph that figures in the Technological Guide elaborated by the Foundation Environment and the Department of Industry and Energy for the application of the Managing one IPPC to the industry of the metalurgia of the aluminum, in the referring thing to the secondary aluminum:

8.2. Better available techniques:In installations with rotary ovens and due to the addition of flux, a great percentage of salt cake is obtained, being this a dangerous residue for whose processing has two techniques: grinding, crushing, grinding and sifting and physiochemical procedure.

The consideration or not as better available techniques on the part of the sector to solve the problem of the salt cake originating in the fusion in rotary ovens depends on other considerations, independent to the purely technical and economic. Keeping in mind this, would be able to be considered as better available technology the first one of them [grinding, crushing, grinding and sifting] that, although the solution is partial, evidently supposes an improvement and permits the recycling on behalf of the aluminum whenever the percentage of aluminum recovered be on the order of the 4-5% or of the 6%, in function of the conditions of market" (is understood, therefore, that the residual fraction Once it extracted the aluminum recovered of the salt cake, after the process of grinding, would be able to be placed in dump of dangerous residues).

9.2. Emerging techniques:In United States, where historically the saline dross have been carried and they continue carrying to **dump** of security, the new anxiety of developing exists technologies that permit to recover possible the majority. The Laboratory Argonne National, next to the Department of Energy of United States and the association of recycling of aluminum, has studied and developed in phase of experimentation four processes for the processing of this residue, that would enable to obtain aluminum, you leave and aluminum oxide residues.(...). **Of the economic studies carried out, in general lines these processes do not turn out to be economically viable. Among the different possibilities contemplated seems that the to limit the recycling to recover only the aluminum and to carry to deposit of security you leave them and not recoverable oxides contaminated, is the more close to the credit balance, whenever the contents in aluminum of them leave they be over the 4-5%"** (subsequently, in this document the reasons by the ones are explained that them cited processes do not turn out to be economically viable). To the same conclusion, in short, arrives in the study elaborated by the Department of Chemistry Applied of the Public University of Navarre, in which, by way of summary, the following thing is indicated: "Due to the economic importance that has the production of secondary aluminum, its process of obtaining has been summarized, doing special emphasis in the generation and management of the salt cake. **The appreciation of these new residues is not economically viable, being the best option to minimize its production, to recover the metal aluminum fraction and to place in dump controlled the remaining fraction"**.

CONCLUSIONS:

First:The business IDALSA counts on all the authorizations and exactable environmental licenses for the operation of the installations located in Pradilla of Ebro (Zaragoza), integrated fundamentally by a secondary aluminum production plant and a **dump** of dangerous residues.

Second:The options hierarchy principle in the management of the residues is a mere guideline of action that only implies a guide for the promotion of the operations that are considered priority, but without that in no way it imply that can be obliged to continue a specific method.

In concrete, according to it established in the Autonomous, State, and Common Regulation on residues, the mentioned principle does not imply legal obligation some so that they have that to be negotiated necessarily by means of recycled the potentially recyclable residues neither, consistently, to prohibit the deposit in **dump** of any type of potentially recyclable residues or valorizables.

Third:The better available technologies, with the object of the application of the regulation on IPPC, they are an element to determine the emission limit values of the industrial installations affected, but without it permit the obligatory imposition of a complete technology. So that a technology can be considered "available", has to permit its application "in economically viable and technical conditions". For which it refers to the secondary aluminum production industry, the BREF approved in the working Party of metalurgia not ferrous of the IPTS establishes a series of criteria to determine the best available technology, in such a way that the reduction of the consumption of energy will keep in mind itself, of the utilization of you leave flux and of the residues generated, as well as the increment of the recovery Materials of the residual product generated. In this sense, considers as better available technology the ovens newspapers (especially the dumpers) and the ones that utilize the oxi-combustion in the burners.

The management of the fraction residual resultant end by means of its elimination in **dump** of dangerous residues, is, according to the technical information handled, the unique available one to day of today, in economically viable conditions.

QuarterThe action of IDALSA in the installations located in Pradilla of Ebro and, especially, that of negotiating by means of deposit in **indump** the residual fraction obtained after the grinding of the resultant saline dross of the aluminum production process (and the consequent extraction of the recoverable material), complies with the demands established so much in the legislation on residues as in that of prevention and control integrated of the contamination (IPPC). Particularly, IDALSA complies the requirements on better available technology predicted for the industry of the aluminum in the BREF of metalurgia not ferrous, especially the above-mentioned to the techniques for minimización in the generation of residues. In the same way, the **dump** of dangerous residues complies to day of the date with the requirements established in the regulation on residues.

Pedro Poveda Gómez.