

European Commission  
**Attn: Mr. Andris Pielbags**  
**EU Energy Commissioner**  
B-1049 Brussels  
Belgium

Madrid, April 22<sup>nd</sup>, 2008

Dear Sir,

Greenpeace España (henceforth Greenpeace), the Spanish branch of Greenpeace International, is a non-governmental organization promoting environmental protection included in the Spanish national register of civil associations. Consequently, it fully qualifies as “public concerned”, as defined in article 2.5 of the Aarhus Convention, of which both Spain and the EURATOM Community are parties, and in article 2.2 of the Spanish Law 27/2006, regulating access to the information, public participation in decision-making and access to justice in environmental matters.

The objective of this letter is to request, at the earliest possible time, European Commission involvement pursuant articles 35 through 37 of the Euratom Treaty in relation with three cases occurred in Spain which have given place to releases of ionizing radiation to the environment. Attached to this letter there is a summary of known facts and information around these three cases (see [Annex 1](#)).

For the purpose of being informed of the European Commission opinion on these three cases, I designated the following postal address:

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Should the European Commission need any further clarification or information made available to Greenpeace on the matters brought up in this letter, please, do not hesitate to contact Greenpeace España through the contact information given above.

Yours truly,



Juan López de Uralde  
Executive Director  
Greenpeace España



## LIST OF ATTACHMENTS

1. Greenpeace press release dated 5<sup>th</sup> of April 2008
2. CSN press release dated 5<sup>th</sup> of April 2008
3. CSN press release dated 7<sup>th</sup> of April 2008
4. CSN press release dated 14<sup>th</sup> of April 2008
5. CRIIRAD report with the results of the analysis of the samples taken a) by CRIIRAD in the FERTIBERIA phosphogypsum dumpsites in the river Tinto salt marshes, and b) by Greenpeace of water with Cs-137 leaking out the CRI-9 dumpsite in the Mendaña salt marsh.
6. Report of the CSN on the radiological status of the CRI-9 in the Mendaña salt marsh.
7. Greenpeace letter requesting CSN intervention in Zabalgabi's case
8. CSN letter responding to Greenpeace letter requesting CSN intervention in Zabalgabi's case
9. Greenpeace letter requesting further actions to the CSN in relation to Zabalgabi's case

## ANNEX-I

### DESCRIPTION OF THE THREE CASES INVOLVING THE RELEASE TO THE ENVIRONMENT OF RADIOACTIVE MATERIALS

#### **Accident at Ascó Unit I Nuclear Power Plant causing a release of ionizing radiation to the environment**

- 1) On 26 of November 2007, Asco-I NPP staff poured a 50 litre tank of water containing highly radioactive waste to the spent fuel pond. The water was in the tank of a vacuum-cleaner pump used to recover remnants of radioactive water after draining the transference channel between the reactor and the pool. This water included, among other radioactive materials, hot particles of activated metallic scraps swept from the primary system of the plant and very likely also rest of crud adhered to the fuel pins during operation and later detached during the movement of fuel assemblies back and forth the reactor core.
- 2) For unknown reasons, the staff of the plant, instead of delivering the contaminated water to be managed as radioactive waste, they threw it into the pond from a position near the entry grids of the spent fuel pool ventilation system, some of them located near the surface of the pool. Again for unclear reasons, the emergency ventilation system was at that moment on and part of the highly contaminated water was sucked into the ventilation system, producing substantial contamination in it and on the surface of the grids. Between the 26th and 29th of November the ventilation system worked in emergency mode, releasing the air of the spent fuel building to the environment in a filtrated manner. However, on the 29th of November, unexpectedly the operators put back to operation the normal non-filtrated ventilation system, starting to freely release a highly contaminated mixture of air plus rest of water to the environment though the ventilation stack. For reasons to be clarified, the release of radioactivity to the environment was not stopped, neither automatically by the signals of the radiation monitors nor manually by the operators, causing a significant dispersal of radiation to the environment.
- 3) These facts were, fully or partially, known both to the managers of the plant and to the resident inspector of the Consejo de Seguridad Nuclear (henceforth CSN), the Spanish regulatory body for nuclear matters, but the public were not informed. Three and half months later, on the 14<sup>th</sup> of March, during a routine radiological survey of the plant, the plant staff discovered a primary system hot particle outside the containment building. Again, the event was not reported to the public. Three weeks later, on the 2nd of April, more particles started to be found in several locations over the site of the NPP. Apparently the plant managers had informed the CSN about the detection, but no information was given to the public. On the 5<sup>th</sup> of April, an anonymous source of information from the workers of the NPP made aware Greenpeace of the events that had happened in November 2007, as well as of the discovery of hot particles outside the buildings of the plant. Based on the estimated activity of the contaminated water poured into the pond according to the information received, Greenpeace made a 5 Ci conservative estimate of the release of radiation to the environment. On this very morning, Greenpeace contacted

the CSN to verify the discovery of the hot particles and once it was confirmed by the CSN, Greenpeace published a press release informing the population ([attachment 1](#)). Only then, after Greenpeace had published its press release, the CSN reacted and published a press release ([attachment 2](#)) confirming the event but downplaying the radiological consequences of it, stating that the total amount of radiation released to the environment was only 230,000 Bq and classifying the event as level 1 of INES scale. This information was amplified in a second press release dated 7<sup>th</sup> of April ([attachment 3](#)).

- 4) The information in the CSN's press releases was misleading and not rigorous at all; it made reference to regulatory limits that do not exist in the Spanish regulations transposing the European Directive on the Basic Safety Standards and, furthermore, did not compare the doses measured with the limits applicable to members of the public in all age intervals at the time the release had happened (i.e. taken into account radioactive decay), in spite that it was known that the day after the release of radiation took place a group of students visited the plant (the managers of the plant did not cancelled the visit in spite that they knew that the ventilation system was contaminated) and six more groups of students visited the plant over the period from December 2007 to April 2008. In addition to that, some populated areas of Ascó town are located near the plant, making impossible to ensure that the radioactive contamination did not arrive to these populated areas, swept by air and rain.
- 5) On the 9 of April the Ministry of Industry and the local authorities arranged an extraordinary meeting of the Local Committee for Information, composed of majors of the towns near the plant, representatives of the central and regional Administrations and of the CSN. At the end of the meeting there was a press conference, in which Asco NPP and the CSN stubbornly insisted in giving to the public the same shameful information provided before in the press releases of the 5<sup>th</sup> and 7<sup>th</sup> of April and criticized the information given by Greenpeace. In this conference it was said to the public that there would not be any health concern "even if all the hot particles were introduced in a sandwich and the sandwich were eaten", which is an irresponsible statement.
- 6) Over the following days more hot particles were found everywhere on the site and even outside. The CSN delivered a press release on the 14 of April ([attachment 4](#)) reporting that many more particles (150) had been found, increasing the toll of the release of radioactivity to the environment up to 84 millions of Bq and reclassifying the event to level 2 of INES scale. However, the discovery of hot particles did not end then. On the following days more particles have been found, inside and outside the controlled area of the plant (more than 210 so far according to some newspapers). Although, neither the CSN nor the plant have given a new estimate of the radioactivity released to the environment, for Greenpeace there is not the slightest doubt that the final estimate of the source of radiation released to the environment will confirm or even eventually exceed the first estimate of 5 Ci, in spite that the CSN rejected that estimate from the very first day and accused Greenpeace of creating an unjustified public alarm for a negligible event.

- 7) Bearing in mind the inaccurate information repeatedly reported to the public by the CSN and the NPP since the 5<sup>th</sup> of April, as well as the lack of rigorous information around the event that led to the release of radioactivity to the environment, making unfeasible to reach conclusions on the root cause of the event and on the radiological consequences of it, hereby Greenpeace request the intervention of the Commission services to ascertain whether all the applicable Community's regulations (BBS, access to the information,...) and derived recommendations (i.e. on disposal of radioactive waste, including accidental release to the environment, communication of the release to other Member States,...) have been properly fulfilled by the operator and the Spanish authorities, as well as to provide to the public independent and rigorous information on the estimates of radioactivity released to the environment and on whether the dose limits to the public and to the workers stemming from the Basic Safety Standards could have been exceeded.

**Disposal of highly contaminated radioactive materials at the “Centro de Recuperación de Inertes nº9 en las Marismas de Mendaña” (CRI-9), in Huelva province, and release to the environment of part of the radiation disposed of**

- 1) On the 30<sup>th</sup> of May 1998 a radioactive source was accidentally melted in the oven of a steel factory owned by ACERINOX, S.A., which was located at Los Barrios (Cádiz). This event gave place to substantial contamination by Cs-137 of the ashes generated from the combustion of the radioactive source hidden among the metallic materials. The Spanish authorities were aware of the incident only a few days later, due both to the lack of surveillance means at the plant and to the undetected transport of the radioactive plume over the Mediterranean sea. The arrival of the radioactive plume was first detected on the South of France.
- 2) When the Consejo de Seguridad Nuclear (henceforth CSN) started its investigations, it was found out that part of the contaminated ashes had already been sent to the EGMASA industrial waste inertization and solidification plant located at Palos de la Frontera (Huelva) and, subsequently, inadvertently disposed of at CRI-9, a facility run by the public company EGMASA, where combustion remnants are admixed as fill material with NORM byproducts (phosphogypsum) generated in the chemical process for manufacturing fertilizers. The origin of the NORM byproducts is a facility owned by FERTIBERIA, located also nearby the Mendaña salt marsh. Furthermore, at the time when the radioactive materials were disposed of at CRI-9, the site had been temporary transferred by the responsible authorities of the Spanish Ministry of the Environment to the company FERTIBERIA in order to implement an environmental restoration plan in some of the phosphogypsum disposal cells.
- 3) At the request of the CSN, the Direction General of Energy of the Ministry of Economy and Finances, presently the Direction General of Energy Policy and Mines (henceforth the DGE) of the Ministry of Industry, Tourism and Trade (henceforth MITYC) ordered EGMASA to submit a Plan with four different alternatives to decontaminate the CRI-9. Three of the alternatives

considered retaining the contaminated material at the CRI-9 and one of them, the most expensive, considered transferring all the contaminated materials to El Cabril, the low and intermediate level waste storage facility run by the national radioactive waste management company (ENRESA) in Cordoba province.

- 4) The CSN delivered to the DGE its favourable opinion on the alternative 2 of the Plan, consisting in: a) confining and protect the contaminated territory by means of a clay layer; b) restrict uses of the territory; and c) implement a surveillance plan supervised by the CSN. Subsequently the DGE mandated EGMASA to implement alternative 2 in a resolution dated 15 January 2001.
- 5) The estimated amount of radioactivity of the waste disposed of at the CRI-9 was 1000 GBq. The most highly contaminated waste ( $> 100 \mu\text{Ci}$ ) was recovered and sent to El Cabril for final management. The rest was confined at the CRI-9, covering the contaminated territory with a layer of clay.
- 6) After implementing the confining measures provided for in the Plan mandated by the DGE, the surveillance activities started. However, until very recently, neither the CSN nor EGMASA, nor the Spanish Ministry of the Environment and nor the Junta de Andalucía (the Regional Government of Andalucía, which have competences for environmental matters) have provided the general public with reliable information on the routine analyses and measurements of radioactivity carried out at the territory of CRI-9 and nearby waters and lands.
- 7) Furthermore, the known existence of highly radioactive contaminated material confined at CRI-9 plus the daily activities of FERTIBERIA, in which huge amounts of radioactive NORM are generated, was a matter of growing concern among the population of Huelva. As a matter of fact, populated areas of Huelva start only 300 meters away from CRI-9. On the other hand, several non-governmental organisations devoted to the protection of the environment, including but not limited to Greenpeace, have many times reported the potential danger of spreading the radioactive contamination to the salt march, bearing in mind the highly radioactive contaminated materials disposed of at the CRI-9 from both the accident at ACERINOX steel production plant and the NORM generated at FERTIBERIA plant. The salt march of Mendaña is part of the rivers Tinto and Odiel salt marshes and is close to the Doñana National Park, which is a resort with paramount importance for the EU, being one of the most important fauna and flora reservoirs within the EU and a key element to protect biodiversity in this region of the world.
- 8) In spite of the reiterate petitions of reliable information to the Junta de Andalucía and to the CSN, Greenpeace has never been provided with satisfactory responses to the concerns brought up. Due to this, in October 2007 Greenpeace decided to set up a surveillance program, using its own resources to analyze, on the spot, the quality of the waters and lands near the CRI-9 to check whether they were free of radioactive contamination or not. To the surprise of the experienced technicians sent by Greenpeace, who were provided with suitable radiation monitors and other means,

substantial amounts of Cs-137 were found, among other radioactive nuclides, leaking to the river Tinto from the CRI-9 area, giving undeniable evidence that the radiation was not only coming from NORM byproducts generated at FERTIBERIA plant but also from leakages of the CRI-9. (See attachment 5, with the results of the CRIIRAD analysis of the samples taken by Greenpeace)

- 9) The CSN rejected in the media the outcome of the investigations and measures carried out by Greenpeace and mocked the experience of those who made the measurements on behalf of Greenpeace. However, after the mounting pressure of several political parties, environmental organizations, as well as the general public, the CSN had no other option than to take into consideration the outcome of Greenpeace measurements and start its own assessment of the information reported.
- 10) Several contacts and one meeting were hold between the CSN and Greenpeace to discuss the matter since then. The CSN has been requested by Greenpeace to hand over several facts finding and assessment reports pursuant the current nuclear and general legislation on access to the information and public participation in environmental matters. A report elaborated by the technical staff of the CSN summaries the latest investigations on the radiological surveillance of the CRI-9 (attachment 6) giving undeniable evidence that the CSN was aware of the existence of leaks of Cs-137 to the environment for more than four years, as well as that EGMASA had repeatedly lied in several reports sent to the various Spanish authorities, hiding the adverse results of the radiological measurements taken over the years. Furthermore, the reports clearly confirm that the clay layer deposited on CRI-9 to confine the radiation neither properly covered the whole affected land nor was securely anchored to solid land in order to preclude the dispersal of radioactive materials to nearby zones. Attached to this report there is a proposal to the Ministry of Industry for ordering EGMASA the implementation of a new action plan to improve the confinement of the CRI-9.
- 11) As it has been explained, only after the media paid attention to this affair on the ground of the information provided by Greenpeace and other NGOs on the unacceptable conditions of the CRI-9 and the dubious conduct of the CSN over the past years, which sometimes seemed to be protecting the interests of EGMASA and the other players, the CSN and the DGE of the Ministry of Industry reacted and started to take more involvement in the matter to correct the situation, requesting EGMASA immediate implementation of a new restoration plan of CRI-9 following the report prepared by the technical staff of the CSN. However, the chronic lack of trustworthiness of the Spanish authorities, in particular of the CSN, which has proven to be in many cases in favour of whatever industry involved in nuclear or radioactive business, makes Greenpeace and other NGOs not to expect a satisfactory solution to this very important issue. Therefore, hereby Greenpeace request the intervention of the Commission services in this affair, being the Commission the independent institution of the EU responsible for ensuring and verifying fulfilment of EURATOM Treaty obligations. Furthermore, the European Commission is implementing a large program of activities in Member States in relation to implementation of articles 35 to 37 obligations, and this relevant matter can not pass

unnoticed to the Commission.

- 12) Greenpeace commits to provide the European Commission with the results of the measurements already made, as well as to cooperate fully in the surveillance or review activities that maybe considered adequate to give clarity to this important matter.

**Release to the environment of radioactive materials detected in an urban waste incinerator owned by Zabalgardi S.A.**

- 1) On December 2007 Greenpeace España received information from an anonymous source reporting radioprotection concerns in a waste urban incinerator plant owned by Zabalgardi S.A. and located at C/ Camino de Artigas, N.10, 48002, Bilbao, Vizcaya. According to the information provided by the workers of the plant, which included the records of several positive detections of radioactive materials at the portals installed on the site, the practice followed by the managers of the plant whenever they detected radioactive materials was to get rid of it in an uncontrolled manner, sometimes burying it and sometimes smelting it at the oven of the facility. The workers of the plant, which have no education and training on radioprotection matters, were forced to handle the radioactive materials, without any information about the health risks of exposure to ionizing radiation.
- 2) Waste urban incinerators are not regulated facilities under the Spanish nuclear legislation, as it is considered that there is very low probability of finding radioactive materials in urban waste. In spite of that, for reasons to be clarified, this facility had had several positive detections of radioactive materials. Greenpeace understood that Zabalgardi workers' concerns merited deserved attention to investigate the source of the materials (hospital, industrial facilities,...), the nature and the practices followed by the plant, particularly concerning the release of radiation to the environment. Therefore, on January 2008, Greenpeace sent a letter to the CSN ([attachment 7](#)) asking the regulatory body to start investigating the reported Zabalgardi workers' concerns.
- 3) Dated 4<sup>th</sup> of March, 2008, the CSN answered to Greenpeace's letter ([attachment 8](#)), informing that inspectors of the CSN had inspected the plant pursuant its function of ensuring control and surveillance of the radiological quality of the environment in all national territory and confirming the positive detections of radioactive materials in the radiation portal monitors of the facility. However, the CSN concluded in its letter that the practice followed by the managers of the plant, consisting in segregating the radioactive materials and managing it either by confining or by dilution and dispersal into the environment, once the materials had been incinerated at the oven of the plant, seems to be appropriate.
- 4) The answers given by the CSN in his letter to Greenpeace, backing the operator's practices without further investigation, were very disappointing for the following reasons:
  - a) The letter of the CSN did not clarify where the radioactive materials



handled in the plant were below the exception levels defined in the Spanish regulations (Regulations on health protection against ionizing radiation) following the Basic Safety Standards. This is a key point, since if the plant is handling in any way radioactive materials above the exemptions limits then the facility should have a license granted by the regional government. Greenpeace has asked further clarifications in this to the CSN.

- b) In any case, according to the Spanish Regulations, any release of radiation to the environment requires approval. This is particularly important when a plant like that of Zabalgardi does not have neither qualified humans resources nor appropriate system to manage in a safe and controlled way releases of radiation to the environment, as they are doing according to the letter sent by the CSN to Greenpeace. Therefore, Greenpeace is of the view that if a non-regulated installations detect radioactive materials it should immediately contact the Spanish authorities to request safe management of the radioactive materials through an authorized radiological service or through ENRESA, the national radioactive waste management company, for final disposal. In fact, in Spain there is a Protocol for the radiological surveillance of metallic materials, voluntarily signed by the owners of plant for recycling metallic materials, which provides for appropriate procedures and means to manage radioactive materials whenever they are found within metallic scraps. Unfortunately this Protocol is not opened, as it should, to the signature of other type of plants, like Zabalgardi's plant for urban waste incineration.
  - c) Furthermore, in its letter, the CSN does not mention any planned action for informing the workers and the public of the potential radiological consequences of an accident in which the mishandling of radioactive material (either due to inappropriate management or inadvertent incineration) may have for human beings and for the environment. Greenpeace considers that to be in contradiction with the duties of the CSN for informing the concerned public of the effects of accidents involving radioactive materials.
- 5) In summary, Greenpeace is of the view that a non-regulated facility, as it is the Zabalgardi's urban waste incinerator, which lacks of educated and trained staff on radioprotection matters and adequate technical means to manage radioactive materials and to alert of unacceptable releases of radiation, should never be allowed to release to the environment radioactive contamination without regulatory control, since there is a high risk that this could, sooner or later, produce an accident with undue and undetected radiological consequences for the population and the environment. Dated on April 18<sup>th</sup> Greenpeace sent a second letter to the CSN expressing these concerns (attachment 9), but there is little hope that this will be sufficient to move the CSN to take further actions on this matter, that is why Greenpeace kindly request the European Commission intervention in this case too.