

# MARCOULE EXPLOSION

## FIGURES "ERRONEOUS IF NOT LIES"

The 12 September explosion in a furnace at the Centraco low-level radioactive waste processing facility at Marcoule in southern France has been rated at Level 1 on the International Nuclear Event Scale (INES). The blast at the facility, owned by EDF subsidiary Socodei, resulted in the death of one worker and injury to four others. CRIIRAD found out that the figures given concerning the radioactivity of wastes at the Centraco furnace were erroneous, and probably deliberate lies.

**(734.6171) CRIIRAD** - In nuclear matters, the files keep changing yet the same conclusions can be drawn: every time the companies involved underestimate the risks, and the official experts show a lack of critical thinking, even a certain complacency.

On 23 September, the CRIIRAD contacted the French Nuclear Safety Authority (Autorité de sûreté nucléaire -ASN) and the ministries of Health, Industry and Ecology. Its task is to regulate nuclear safety and radiation protection, on behalf of the State, in order to protect workers, patients, the public and the environment from the risks involved in nuclear activities.

In their letter, CRIIRAD denounced the secrecy shrouding the key elements of the Centraco file, as well as the publication by IRSN (Institute for Radioprotection and Nuclear Security) which presented an astoundingly low figure (63 000 Bq) for the activity of 4 tons of metallic wastes present in the furnace at the time of the September 12 explosion. CRIIRAD considered this figure "absolutely incompatible" with the dose rate of 8,5  $\mu$ Sv/h (microSievert/hour) reportedly measured in the body of the explosion victim. Since the information on the dose came from an unofficial source, the CRIIRAD had not gone further than asking questions and seeking clarification from ASN.

On 28 September, from the website of Le Dauphiné Libéré, the CRIIRAD learnt of the declarations of the Procureur in

charge of inquiries, M. Robert Gelli, its declarations confirmed the dose findings. CRIIRAD therefore sent an official letter to the Procureur de la République (a high-level attorney), emphasizing that it is "impossible to measure such a high dose rate if the contamination comes from metallic wastes as weakly contaminated as the operator and the IRSN claim them to be", and calling on the inquiries office to carry out dosimetric cartography and laboratory analyses in order to establish the real activity of the 4 tons of radioactive wastes.

On September 29, CRIIRAD sent a letter to ASN saying CRIIRAD has just become aware of the information published by ASN on its website the day before, which indicates that the "the furnace contained, at the moment of the accident, a load of about 4 tons of waste with an activity of 30 million Bq and not 63 thousand Bq as the operator at first announced". This new figure is 476 times higher than the one that had been circulating since September 12.

This information prompts some very serious questions:

1. Would those new numbers also have been published if CRIIRAD had not officially, by registered mail, contacted the various authorities on September 23?
2. How come the state's expert body, the IRSN, which was present onsite and has far greater resources than CRIIRAD, accepted without reservation the suspect figures given by SOCODEI, the operator. The figure of 63 kBq was published on September 12, by IRSN



without any subsequent correction.

3. What credibility can we give to the operator's self-monitoring, which is an essential aspect of the Centraco plant? From 63 kBq to 30 MBq, the discrepancy is not 10 or 20% but nearly 500 times! And it is highly improbable that this was a mere unlucky set of circumstances, that the explosion involved the operator's only set of ill-measured wastes. CRIIRAD has studied the original project plan for the Centraco plant and one of its main criticisms at the time concerned specifically the lack of a reliable system for monitoring the activity of wastes.

Is the Centraco plant not operating in complete breach of the rules prescribed for its operation? Does the plant not violate the authorization decree that

limits the total activity it may hold; and exceed of the ceilings for radioactive and chemical pollutants discharged into the atmosphere and the Rhone river. If the real discharges are 10 times or 100 times greater than those declared, the limits for discharge of, for example, tritium or alpha emitters would certainly be exceeded.

The inquiries office will have to determine whether the underestimation of the activity of waste is due to a deliberate action by the operator or a failure to master the radioactive substances it deals with. Whichever explanation is the correct one, both are very worrying.

In order to obtain access to all parts of the dossier, the management of CRIIRAD have decided to place a Depot

d'une Plainte en Justice (formal legal complaint) on the agenda of ASN's next administration council meeting, scheduled for 14 October next.

The objective is to make sure that all responsibilities are well researched and well established. The explosion caused the death of an employee, and another is in a critical condition. Full light must be shed on the plant's operating conditions and monitoring systems.

**Source and contact:** CRIIRAD (Commission de Recherche et d'Information Indépendantes sur la Radioactivité), 471 Av. V Hugo, 26000 Valence, France  
Email: [contact@criirad.org](mailto:contact@criirad.org)  
Web: [www.criirad.org](http://www.criirad.org)