

## EEB comments on Commission press release

*Batteries: Commission stands firm on new Directive - Brussels, Strasbourg, 20 April 2004*

May 2004

The EEB has the following comments on the Commission press release following the European Parliament plenary vote on the Commission proposal on Batteries and Accumulators and spent Batteries and Accumulators (COM 723(2003)), in Strasbourg on the 20<sup>th</sup> of April 2004

### 1) 'Closed loop' is NOT a closed loop

The Commission says the following in the press release of 20<sup>th</sup> April:

*"... therefore stand by our proposal to introduce a closed loop system for lead and nickel-cadmium batteries, and the collection targets we set out for the different kinds of batteries."*

Further down, the following is said:

*"The closed-loop system would mean that all batteries be collected and recycled, and their metals re-introduced in the economic cycle. In this way, no lead or cadmium would leak into the environment."*

However, the Commission proposal only foresees an 80% collection target for NiCd batteries based on waste nickel-cadmium batteries and accumulators discarded in the municipal solid waste stream. Article 8 furthermore requires that "Member States shall take the necessary measures to prevent the final disposal of spent batteries and accumulators and to aim at achieving a closed loop system for all spent batteries and accumulators."

Given

- that the level of the collection target proposed is 80% and not 100% (therefore it does require ALL batteries be collected),
- that the basis of the collection target ( the amount eventually collected in the municipal waste stream) does not equal all batteries potentially discarded (for example in other waste streams), or even thrown directly into the environment,
- the lack of clarity of the meaning of "final disposal" in article 8. Firstly, there is no definition of final disposal in EC legislation; secondly, there is continuing lack of clarity about the distinction between recovery and disposal, not least due to the latest revision of the packaging directive, in which incineration of packaging waste is treated as recovery (even though the ECJ has ruled that incineration of municipal waste is disposal, even if energy is generated,). Therefore it is not to be excluded that only waste going to landfill would be considered as final disposal, but not waste going to incineration
- the non-binding wording of the article - "aim to achieving"
- the fact that recycling can also have Cd emissions to air and water (p 32 EIA) and can also expose workers to occupational emissions

the statement "*The closed-loop system would mean that all batteries be collected and recycled ... In this way, no lead or cadmium would leak into the environment*" can NOT be substantiated.

Furthermore, the Commission, recognises, in its own Extended Impact Assessment (EIA) that *the collection of (and therefore individual targets for) specific battery types is not efficient and therefore " In order to stop batteries and accumulators from going to landfills and incinerators all [types of] batteries have to be collected"*. The memorandum of the Commission proposal also emphasises: "*For portable batteries and accumulators the current collection rate is poor. One of the main reasons seems to be that consumers have considerable difficulty distinguishing between the batteries and accumulators covered by the current Directives (batteries containing certain amounts of mercury, cadmium and lead) and other batteries (e.g. general-purpose batteries). ...So, it is generally considered that moving to an 'all batteries' collection scheme will also increase the collection rate of the batteries and accumulators containing mercury, cadmium and lead.*"

Therefore it is hard to see how even a separate, higher, target of 80% NiCd batteries (compared to lower targets for non NiCd batteries) is assumed to be a credible mechanism, even for reducing incineration and landfilling, let alone closing the loop completely. The implementation of these levels would seem to require separate collection systems or additional measures for NiCd batteries.

## **2) Collection and monitoring a Lower Cost option for an equivalent level of environmental protection?**

The Commission says the following in the press release of 20<sup>th</sup> April:

*"Assessment showed that existing legislation, such as the End-of-Life Vehicles Directive, together with the closed-loop system proposed, can provide an equivalent level of environmental protection at lower costs compared to banning lead and cadmium in batteries."*

The Extended Impact Assessment (p59) on the comparison between the respective environmental protection that can be expected from a phase-out and from the proposal (a combination of closed loop and monitoring (article 6)), is made in the following terms: "*A ban on the use of cadmium in portable batteries and accumulators was not chosen, since the proposed measures are expected to provide an equivalent level of environmental protection at lower costs.*"

An additional argument is added, namely that "*Such a ban would not cover existing and hoarded portable NiCd batteries and accumulators.*"

### ***On costs***

Member States should thus monitor the quantities of portable NiCd batteries and accumulators found in the municipal solid waste stream and report this to the Commission. On the basis of this information as well as new scientific and technical progress, the Commission will evaluate the specific environmental risks related to the use of cadmium in batteries and accumulators on a regular basis.

However, the costs<sup>1</sup> associated with the compliance of the monitoring requirements are insufficiently accounted for in the EIA, both investment expenditures as well as running

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<sup>1</sup> Based on oral statements from Collect NiCad 25 February 2003

costs. The latter have been evaluated in a range of 3 to 6,5 M€ per year for a single Member State. The technology for such monitoring is apparently only in place at a very restricted number of plants located in few Member States and the results achieved so far have not been independently validated. Moreover, the methodology to conduct the monitoring is not foreseen in the proposal, thus is not harmonised and comparability would be questionable.

The costs of such monitoring are foreseen to be borne by Member States with no clear link to the NiCd producers shouldering the financial responsibility.

Furthermore, in the consideration of *Economic impacts* the EIA has not made reference to potential costs of any worker health impacts of the proposed monitoring techniques or the costs of other impacts of continued cycling of Cadmium in society – be it worker health impacts of recycling or contamination of other waste streams or treatment of contaminated incineration ashes, landfill leachate sludge etc.

On the other hand, the costs of a phase-out on NiCd batteries the EIA reads “ *few data are available about the costs related to this policy option.*” It goes on to admit that even when considering addressing employment impacts “*as all producers also produce the substitutes to the portable NiCd batteries in household appliances [the same can be said for other categories].. this policy option might eventually have limited negative effects on employment*”.

### ***On environmental protection***

The Commission proposal should, it claims, “*avoid potential air and water pollution and external costs caused by the negative environmental impacts from incinerating/landfilling spent batteries and accumulators. ...Certain substances in batteries and accumulators may also pollute incinerator ashes, which could otherwise have been used as construction materials. The levels and effects of exposure to human beings and the environment are potentially very significant.*”

The EIA attempts to quantify the direct emissions of Cd, but at the same time makes it very clear that this quantification is incomplete, lacking data on major impact categories. It reads - “due to lack of certain methodologies, **not all environmental impacts related to the use of cadmium in portable nickel-cadmium batteries could be quantified.** Indeed, the Targeted Risk Assessment (TRAR) indicates that “*neither the delayed cadmium emissions of the re-use of incineration residues nor the impact of future expected increase in cadmium content of bottom ash and fly ash on the re-usability of these incineration residues have been quantified*”. Furthermore “*the contamination of the groundwater compartment due to fugitive emissions of landfills have not been quantified in this TRAR since no guidance is available to perform these calculations.*”

Therefore “*If NiCd batteries cannot be collected efficaciously, the future cadmium content in the MSW stream is predicted to increase. The impact of this potential increase on future emissions has been assessed for MSW incineration only. The impact of a future change in the MSW composition on the composition of the leachate of a landfill could not be judged based on the current lack of knowledge and methodology*”.

Another recent study mentioned in the EIA concludes that “*the replacement of NiCd batteries by NiMH and Li-ion batteries would result in decreased negative environmental impacts.*”

Most importantly, however, the EIA omits a serious consideration of the FUTURE benefits of a Cadmium phase-out in assessing that policy option. Initiating such a phase-out, in those applications where alternatives are available, would send a strong message to producers that Cadmium’s use is not to be tolerated in batteries in the future. This creates a strong incentive (and investment certainty) for further research into alternatives and their improvement, ensuring that the phase-out can be extended progressively over time.

On this point the EIA merely comments “*since cadmium batteries are classified as ‘hazardous’ waste and its substitutes are not, one could conclude that a **phase-out of the use of cadmium in batteries where substitutes are available would, in any case, result in decreased environmental impacts in the future, even though on the basis of the scientific information currently available one could argue about the scale of those impacts.***”

It should also be emphasised that whilst an incomplete phase-out would not necessarily cover all cadmium battery applications immediately, due to the high impacts of even small quantities of the substance in question even a partial phase-out would be highly relevant to the environment in the immediate term. These benefits have however not been estimated.

#### ***Equivalent levels of cost and environmental benefit?***

Given that so called *closed loop* is in fact only partially closed and will not prevent emissions into the environment – both in disposal and recycling.

Given that the costs of the alternatives to the so called closed loop have not been properly covered. Given that the costs of the phase-out would apparently be marginal, due to the fact that the producers in question have already made the step towards diversification onto the alternative technologies (see SAFT website<sup>2</sup>)

Given that the immediate and future benefits of a phase-out have not been taken into account.

There is thus no basis that closed loop and monitoring can provide an equivalent level of environmental protection at lower costs compared to phasing-out cadmium (and lead) in batteries

#### ***...and hoarding?***

As to the phase-out not covering existing and hoarded portable NiCd batteries and accumulators. With the calculation method applied to the collection of these batteries in the Commission’s proposal, hoarded batteries are per definition also not covered since they are considered as non-available for collection. Thus presenting this as a built in weakness of a phase-out is somewhat dubious. Hoarding may also be partly due to the absence of adequate collection systems and therefore become less of a problem when

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<sup>2</sup> [http://www.saft.fr/070-MS\\_Professional/60-30-10\\_produit.asp?sSegment=Professional+electronics&sSegmentLien=10%2D10%2D10%5Fprofessional%5Felectronics%2Easp&sSecteurLien=60%2D10%2D10%5Fphoto%5Fvideo%2Easp&Secteur=Photo+%2F+Video&Intitule\\_Produit=MP](http://www.saft.fr/070-MS_Professional/60-30-10_produit.asp?sSegment=Professional+electronics&sSegmentLien=10%2D10%2D10%5Fprofessional%5Felectronics%2Easp&sSecteurLien=60%2D10%2D10%5Fphoto%5Fvideo%2Easp&Secteur=Photo+%2F+Video&Intitule_Produit=MP)

adequate collection systems are introduced, especially if additional mechanisms such as deposit-refund systems are introduced.

It is true that a phase-out which is not complemented with respective collection targets for NiCd batteries would not cover existing and hoarded portable NiCd batteries, which is why it is important to support a phase-out AND ensure the collection targets apply separately to NiCd batteries ( but based on sales rather than on waste analyses and monitoring) in order to keep the collection ambitions high.

However, the phase-out is the only way to progressively ensure that in the future, hoarded batteries become less of a potential environmental problem.

The Commission proposal, whilst identifying the hoarding as a problem does nothing to address this issue. Measures such as deposit refund – especially on hazardous batteries – would have several positive impacts, including higher price signals on hazardous batteries and greater incentive to return. A complementary measure is ensuring that the information campaigns are included in the financial responsibility of producers, as they are often very costly.

**Considering the above the EEB asks that the Commission revise its position on :**

- **A nickel-cadmium phase-out where alternatives are available.**
- **Deposits refund systems to deal with the hoarding issue**