Chlor-alkali industry needs permanent disposal solutions and welcomes the proposed EU Mercury Regulation (2016/0023)

Summary
Europe needs safe and cost-effective solutions for the permanent storage of elemental mercury which is no longer used in chlor-alkali mercury cells (‘excess mercury’). Euro Chlor wants these solutions to be environmentally sound and economically viable, have sufficient capacity and underlines these solutions are needed urgently.

Background
The European chlor-alkali sector is progressing towards a phase-out of mercury cell technology. The sector has for a long time proceeded on a voluntary basis towards a phase-out deadline of 2020. The legal deadline is now December 2017, set by the BAT Conclusions of the chlor-alkali BREF published in December 2013 under the Industrial Emissions Directive.

Safe permanent storage solutions
The safety of long-term underground storage is guaranteed by existing EU waste legislation (Directive 1999/31/EC and Decision 2003/33/EC) which ensures only storage sites with the necessary permits for the storage of hazardous waste can be used. The permit shall also include requirements for regular visual inspections of the containers and the installation of appropriate vapour detection equipment to detect any leak.

Storage of mercury in sealed containers in deep salt mines is considered a very safe option for the disposal of mercury by hazardous waste experts and established storage company operators. This solution also reduces the risk of accidental environmental exposure as the mercury does not need to be moved after it has been stored in a dedicated area.

The chlor-alkali industry has a long history of safe handling and storage of liquid mercury and the experience is documented in several Guidance Documents in Euro Chlor’s technical library, such as the ‘Guideline for the interim storage of metallic mercury in shut-down chlor-alkali plants’.

This extensive experience can support the development of liquid mercury storage into a practical, safe and cost-effective solution for permanent disposal.

- In conclusion, we urge the Council and European Parliament to vote in favour of a permanent safe disposal solution of mercury in salt mines
- We also call on the Commission to urgently establish acceptance criteria for storage facilities and for waste storage requirements
Key facts about the European chlor-alkali industry:

- More than 20 million tonnes of chlorine, caustic soda and hydrogen are produced each year by the European chlor-alkali industry.

- Chlorine and caustic soda are essential to economic and social welfare and are used in a wide variety of products e.g. plastics, medicine, disinfectants, clothing, building materials, etc.

- In 2015 the mercury technology accounted for 23% of EU production capacity, membrane production was 61%.

- The total amount of mercury still in use in chlor-alkali manufacturing is about 5200 tonnes (2015).