

Brussels, 5th March, 2014

Mr. Hans-Christian Eberl
Unit C2
Sustainable Production and Consumption
DG Environment
European Commission

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Request/Comments

Concerning time frame Restriction of Hazardous Substances (RoHS, Directive 2011/65/EU)

Dear Mr. Eberl,

EUnited Cleaning¹ (<http://www.eu-nited.net/cleaning/>) represents the leading producers of floor cleaning machines and high pressure cleaners for commercial and industrial use.

Directive 2011/65/EU deals with rules on the restriction of the use of hazardous substances in electrical and electronic equipment (EEE) in order to protect human health and the environment, which includes the safe recovery and disposal of electric and electronic equipment waste. This Directive is in the view of our industry the right strategy to deal with the great amount of substances applied in machinery and their effect on the human health and the environment. Nevertheless, due to the huge variety of industries covered by this Directive it can happen that some parts are addressed in a way that problems and/or misunderstandings occur. We want to take the chance regarding the **period of review for the scope and the restriction of certain substances** (22nd July, 2014) in order to address different points, which should in our point of view be modified in order to avoid wrong interpretations and disadvantages for certain types of machinery.

At the moment: Appliances, sold, e.g., on 21st July, 2019 and do not comply with RoHS II, but RoHS I, have to be removed from the market. As we understood during the discussion with you regarding this topic, the European Commission is considering of removing the retroactive measure and allows the existence of the machines. However, there are thoughts within the discussion to reduce the date from 2019 to 2017, which from our point of view is not achievable due to following points:

During operation, strict requirements are put on all devices in terms of quality and safety.

¹ The association of European cleaning machines manufacturers - EUnited Cleaning - represents the leading producers of floor cleaning machines and high pressure cleaners for commercial and industrial use. Members are: Columbus, Comac, Diversey, FIMAP, Ghibli, Hako, Kärcher, Nilfisk-Advance, Numatic, RCM, Schwamborn, Starmix, Stolzenberg, Tennant, Truvox, TTS Cleantech.

Factors include

- strong vibration,
- the effects of weather and road salt,
- use of acid or alkaline cleaning agents.

ROHS compliant alternatives must meet these requirements, e.g.,

- secure solder joints, despite the use of lead-free solders,
- reliable corrosion protection, despite absence of chromium(VI),
- safe electrical lines, despite phasing out of lead and cadmium.

In addition, it must be examined whether altered materials have impact on approvals.

The review of ROHS-compliant and technical assessment of alternatives is, therefore, complex and time-consuming.

Example of the sequence of a review:

- Supplier offers an alternative to, e.g., chromium(VI)-free corrosion protection layer.
- Specialist department verifies that solution acceptable in principle.
- If not acceptable, search for another alternative for existing or new suppliers.
- If acceptable: Specialist department decides whether alternative technical and / or chemical quality and safety test must be subjected.
- Example: Water-carrying parts in floor cleaning machine. Water contains acidic or alkaline cleaners. High requirements for corrosion protection. ROHS compliant alternative is subjected to the salt spray test.
- If test is successful, approval of alternative;
- if not successful, search for another alternative procedure is repeated until successful test.
- If all tests are negative, applying for a ROHS exception in EU possible.

Other examples of tests (experiences from ROHSI):

- Is lead-free soldered board suitable for machine with lots of vibration, such as floor cleaning machine?
- Do lead-free / cadmium-free cables meet the electrical safety requirements and are tested positive by the appropriate test houses in all EU countries?
- Can a chromium(VI)-free screw be used in the production of existing automatic screwing or is it due to changes of the surface not possible?
- Must the torque be changed for chromium(VI)-free screw?
- If color changes due to chromium VI free surface, may need paint required for design.
→ Test whether the electrical conductivity is still given.
- When change flame retardants (PBDE / PBB) are required - check safety and impact on admission.

The review and technical assessment takes on complex devices, like mobile machines, **several years**. Therefore, it will be necessary to **keep** the date at 21st July, **2019** in order to give the industry sufficient time to find suitable solutions, **which do not constitute a risk in terms of safety of the machines**.

We thank you for your time and help and look forward to hearing from you.

Best regards,

Charalambos Freed

Technical Director - EUnited Cleaning