Feedback from developers on Sector Use Maps - Fertilizer sector
ENES Workshop on Sector Use Maps Brussels 12 May 2016

Reetta Puska, Yara International ASA

Fertilizer sector working group, ”FUM”

CONTRIBUTORS - we did it together!
• Fertilizers Europe
• Farm consortium
• ReachCentrum, coordinator
• Yara International ASA
• Borealis AG
• ICL Group
• Tessenderlo
• Anwil

OBJECTIVES
• Improved fertilizer sector uses map
• Improved exposure assessment – coverage of human and environmental exposures

CONTRIBUTORS - we did it together!
• Fertilizers Europe
• Farm consortium
• ReachCentrum, coordinator
• Yara International ASA
• Borealis AG
• ICL Group
• Tessenderlo
• Anwil

OBJECTIVES
• Improved fertilizer sector uses map
• Improved exposure assessment – coverage of human and environmental exposures
What are fertilizers and who are the users?

FERTILIZERS CONTAIN

• Nutrients
  ✓ Nitrates, potassium salts, phosphates, trace elements (e.g. Cu-sulphate, Mn-sulphate etc.)...
• Co-formulants
  ✓ Fillers, colours, coatings, stabilizers, surfactants etc.

FERTILIZERS ARE APPLIED

• Outdoor and indoor
• In solid or in liquid form
• For the crops according to their needs
• Soil fertility, crop developmental stage etc are taken into account
• To ensure crop/harvest growth and to correct nutrient deficiencies

FERTILIZER USERS

• Professionals – all farmers/growers are professional workers
• Consumers

Reetta Puuka, Yara International ASA, on behalf of Fertilizers Europe

FUM schedule

Uses coverage checks on raw materials: Suppliers had not assessed fertilizer uses in their eSDS or there were differences in the views how to describe fertilizer uses by PROC and ERc codes

- Old fertilizer sector map (2010) was the basis
- Use descriptors were assigned IU and CA names etc
- Awareness about the needs to consider sector specific assessment inputs increased (spERC?)
- Quality checks: updated R12 uses map template
- FUM published on Cefic platform fertilizer sector uses map
- Position paper to document ERC rationale

Uses coverage checks on raw materials: Suppliers had not assessed fertilizer uses in their eSDS or there were differences in the views how to describe fertilizer uses by PROC and ERc codes

- ECHA Template was tested
- FUM Working group established
  Volunteers found
  Rules to work were set
- Uses were drafted
  Old fertilizer sector map (2010) was the basis
- Map was filled
  Use descriptors were assigned IU and CA names etc
  Awareness about the needs to consider sector specific assessment inputs increased (spERC?)
- Quality checks: updated R12 uses map template
- FUM published on Cefic platform fertilizer sector uses map
  Position paper to document ERC rationale
- Improvements on exposure assessment spERC?
- SUMI?
- ESCom?

2014 2015 2016

Reetta Puuka, Yara International ASA, on behalf of Fertilizers Europe
Working group challenges

• Understand the scope of the work
• All companies did not see the need to create the sector uses map
• Find common time and experienced resources for the work
• Confidentiality and EU competition law might have caused hesitation

• Sector was forced to think together:
  ✓ What kind of products does our sector have?
  ✓ How are our products really used?
  ✓ How can we describe the uses on a harmonious way?
  ✓ Which phrases would be descriptive and simple enough?
  ✓ Which use descriptors to be assigned?
  ✓ How to interpret ECHA guidances?

• Sector also challenged ECHA with questions

• FUM taught us a lot - by discussing we were able to agree (see next slides)

• Tips: document your decisions!
  ✓ we published map + a document showing the rationale behind the selected use descriptors

FUM helped to understand the boundaries of an identified use

• Professional use of fertilizers.
  One use is enough - no need to split these steps to separate identified uses:
  ✓ Step 1. mixing, dilution, dissolving
  ✓ Step 2. loading fertilizers into the equipment
  ✓ Step 3. applying the fertilizer with different techniques (spreading, spraying, fertigation ...)
  ✓ Step 4. cleaning the equipment

• Step 1 is not a separate activity of “formulation”
FUM helped to understand the content of the use descriptors within our sector

**ERC3**
- Formulation by incorporating fertilizers onto or into a matrix.

**PROC8a**
- Unloading and loading of fertilizer without exposure controls in place, including sampling and cleaning fertilizer residues from the equipment.

**PROC11**
- Air-dispersive application of liquid fertilizers or powders.

**PROC 14**
- Production of fertilizers by granulation or low-energy compression.

**PROC28**
- Manual maintenance of equipment during intentional pauses and blockages of fertilizer production process.

Reetta Puuka, Yara International ASA, on behalf of Fertilizers Europe

**EXAMPLE – FERTILIZERS HAVE NO SERVICE LIFE**

- Some registrants have thought that fertilizer granules are articles
- FUM conclusion: mixture of substances
- Rockwool cubes imbibed with fertilizers – are they articles?
- FUM conclusion: combination of article and substance(s)
- Fertilizer coated seeds – are they articles?
- FUM conclusion: combination of article and substance(s)

Reetta Puuka, Yara International ASA, on behalf of Fertilizers Europe

**Benefit 1: Fertilizer sector DUs have it easier to convince the raw material registrants to register the fertilizer uses properly**

- Some registrants have thought that fertilizer granules are articles
- FUM conclusion: mixture of substances
- Rockwool cubes imbibed with fertilizers – are they articles?
- FUM conclusion: combination of article and substance(s)
- Fertilizer coated seeds – are they articles?
- FUM conclusion: combination of article and substance(s)
Benefit 2: Fertilizer sector manufacturers can submit high quality dossiers

- Clear data on uses is easily available to perform the chemical safety assessment
  - Uses of industrial fertilizer formulators and professional fertilizer end users
- Uses become described in the dossiers of different substances on a harmonized way
- Consistency between the Exposure Scenarios for communication of different substances will improve
- Manufacturers will get less complaints from DUs and avoid troublesome communication on uses with them
- Realistic use descriptions allow proper exposure & risk assessment
  This will ensure the proper, realistic safety instructions in the eSDS

Reetta Puska, Yara International ASA, on behalf of Fertilizers Europe

ESCom phrases – how to implement?

- Use name and CA name should be built by combining ESCom phrases
- Originally sectors were encouraged to use sector specific language – can ESCom fulfill the expectations and stay compact enough?

Example 1
- Use name: Professional use of fertilizers.
- CA name (PROC5): Handling of fertilizer in stages with significant contact.

Example 2
- Use name: Incorporation of ammonia into soil for fertilizing.
- CA name (PROC8a): Soil injection of ammonia for fertilizing without exposure controls in place.

Reetta Puska, Yara International ASA, on behalf of Fertilizers Europe
What to improve in Sector use maps?

- Standardisation of phrases has helped us to understand, what we are talking about
  - Ex. “formulation” is restricted to industrial setting only
  - Exposure scenario for communication refers to eSDS only
  - Exposure scenario refers to ES in CSR only
  - Use name = Exposure scenario name
- Still confusion and room for clarification
- More examples would be of help
- Use name = ES name → applicable for ESs in CSR only?
- ES short title for communication → is it the title of the ES in eSDS?
- If yes, how to list the Use names, belonging to this ES for communication? Concrete examples on lay-outs needed!
- Tools need to play together
- Full alignment with phrases between Uses map Template, IUS, R12, other guidances and presentations is crucial

Future work - fertilizer sector

- Adaptation with ESCom library
  - New phrases?
- Developments on specific assessment inputs
  - Environment – spERCs?
  - Human – SWEDs and SUMIs?
Thank you!
Reetta Puska, Yara International ASA

www.fertilizerseurope.com

www.facebook.com/fertilizerseuropepage
www.twitter.com/FertilizersEuro
http://www.youtube.com/user/FertilizersEurope
Group Fertilizers Europe