

## Chris Barrington

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**From:** Chris & Sue Barrington [ipia@pigiron.org.uk]  
**Sent:** 07 August 2009 19:23  
**To:** 'Rob.Versfeld@corusgroup.com'; 'Adriano Clary'; 'PEZENNEC Eric'; 'Erik Scholten'; 'Hans Butter'; 'Harry Fisscher'; 'Joaquim Eleuterio'; 'Lee Preziosi'; 'Augusto Mendonca Lessa'; 'Magnus Tottie'; 'Nikolay Zaboлев'; 'Ronald Jonckbloedt'; 'Sue Hubbard'; 'Ursula Eriksson'; 'Leonardo Wilken'; 'Yuri Mishin'  
**Subject:** RE: Pellets conference call - new time

All:

A summary of our call yesterday:

- Of those present at the time this point was discussed, Corus and Vale's laboratories are equipped to test pellets for crystalline silica [CS] content - XRD being the preferred test method. [Of course LKAB's R&D laboratory can also run these tests]. Rio Tinto has various laboratories across its group capable of testing for CS, but Sue was not sure if this included the iron ore laboratories.
  - It was agreed that as a first step several different pellets would be tested for CS content in "as is" form - one kg samples will be prepared and sufficient crushed for XRD analysis - at the Corus and Vale laboratories. The pellets to be tested will be: a pellet produced by one of the Metalloinvest plants [Mikhailovsky and Lebedinsky] with 8% SiO<sub>2</sub>; a 3.5% SiO<sub>2</sub> pellet produced by Corus for use in its own blast furnaces; a 5% SiO<sub>2</sub> pellet produced by Vale and sold in the EU; a 2% SiO<sub>2</sub> pellet produced by Vale and sold in the EU; a 1.5% SiO<sub>2</sub> pellet produced by Samarco and sold in the EU.
  - The point was made that the total SiO<sub>2</sub> content is not necessarily indicative of CS content - basicity plays a role. Also pellet aging can have an effect - there can be differences between pellets immediately after production and after shipment to eg Rotterdam.
  - If the results of these tests show that CS is <0.1%, then it is likely that no further action will be necessary. If as may well be the case, CS is >0.1%, it will be necessary to go deeper into the issue. The concept of trying to simulate and test pellet dust was discussed. Sue Hubbard talked about drum and drop tests being used in the industrial minerals industry and the conclusion was that the tumble test would probably be the best way to generate pellet dust - there is a CEM standard for this.
  - Costs of the tests would be borne by the Iron Platform and booked as part of the pellet programme.
  - Sue Hubbard spoke to her briefing note on the subject of CS - there is more water to pass under this bridge.
  - Eric Pezennec was unable to join the call, but submitted the following written comment:
    - The free SC issue is a general issue for a lot of sectors, in particular the glass industry. We should be follower, not at the front.
    - benchmark is needed to understand what IMA/Eurosil/NEPSI REACH is planning to do.
- My personal recommendation:
- Benchmark what the others are doing. We had some contact with the glass industry, and following what is happening.
  - Before that, I won't launch any action, except the collection of information available inside the mining industry.

Action points:

- Corus and Vale to advise the addresses for their laboratories and the addressees for the samples
- Corus and Vale to agree on the test method and parameters - starting by putting the relevant experts in contact with each other
- Metalloinvest, Vale, Samarco and Corus to prepare 2 x 1kg splits of a representative sample of their pellets for the analysis and send one each to Corus and Vale laboratories - these samples be from the steel mill or discharge port stockpiles
- Results to be reported to the pellets group as soon as possible
- Sue H to update her briefing notes as appropriate
- All to give thought to additional tests and test methods in the event that CS is >0.1%.

*As an afterthought from the Secretariat: perhaps LKAB could test one of its pellets for CS to add to the data base [very low SiO<sub>2</sub> content, produced from magnetite] - in which case, please include Ursula or her delegate in the dialogue on test methods. Ursula: would you be able to do this?*

Next call: October 1<sup>st</sup> 2009 at 16.00 hrs European time, 15.00 hrs UK time - call details to be advised nearer the time.

Comments/corrections welcome!

Best wishes

**Chris Barrington**

**IPIA Secretariat**

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**From:** Rob.Versfeld@corusgroup.com [mailto:Rob.Versfeld@corusgroup.com]

**Sent:** 05 August 2009 18:27

**To:** chris@papillon-minerals.com; 'Adriano Clary'; PEZENNEC Eric; 'Erik Scholten'; 'Hans Butter'; 'Harry Fisscher'; 'Joaquim Eleuterio'; 'Lee Preziosi'; 'Augusto Mendonca Lessa'; 'Magnus Tottie'; 'Nikolay Zabolev'; 'Ronald Jonckbloedt'; 'Sue Hubbard'; 'Ursula Eriksson'; 'Leonardo Wilken'; 'Yuri Mishin'

**Subject:** Re: Pellets conference call - new time

Dear all,

I would like to propose this draft agenda for our teleconf tomorrow about Crystalline Silica (CS):

1. Tour de table to see what info is gathered by each teleconf participant about:
  - testing facilities available
  - methods used for crystalline silica.
  - more?
2. Briefing note from Sue. Discussion based on conclusions from the note:
  - is CS classified under CLP? Answer: no, and Eurosil has an official statement that no Registration under REACH is required for the substance as such, so there is no central consortium that will decide under REACH about possible classification.
  - how do we classify Pellets in its REACH dossier (if CS>0.1%): dangerous or not? Because CS is in a lot of substances that will be registered under REACH, we should have 1 approach. Sue, all: do you know the IMA/Eurosil/NEPSI REACH approach on this?
  - more?
3. What should we measured? I would like to propose to measure Free CS (=quartz content of pellets (do we form cristobalite because of 1400 Celcius?)) and not have the discussion yet about Respirable CS.
4. What pellets should be tested? We concluded last time to take the high SiO<sub>2</sub> pellets. Is this Canada, Russia and Brazilian? Should we test more?
5. How should we test? XRD seems to be the right way forward. Everybody agrees? Do we have a standard (EN 481 & IMA dust monitoring protocol & ISO 24095 are only useful for RCS, not FCS in a substance, aren't they)? What about size (PM<sub>5</sub>, PM<sub>10</sub>, something else)? Report by weight %? Detection limit problems?
6. Way forward:

- who will test
- who will pay the tests
- deadline

7. Next meeting?

Kind regards,

Rob Versfeld

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REACH on internet: [www.corusgroup.com/reach](http://www.corusgroup.com/reach)

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05/08/2009 15:47

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cc

SubjectPellets conference call - new time

1. Please join my meeting, Thursday, August 6 at 4:00 PM W. Europe Daylight Time.

<https://www2.gotomeeting.com/join/154039851>

2. Join the conference call - please dial in by phone only in order to maximise call quality.

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