

**NFA ENVIRONMENT BULLETIN
JULY 2013**

WATER FRAMEWORK DIRECTIVE ACTIVITY

UK Water Industry Research, the research arm of all the UK water companies, is working closely with Environment Agency on water framework issues, in particular meeting EQS and discharge conditions. Discussions between the two are kept between the two.

UKWIR has funded with Environment Agency, Atkins Consultants and University of Plymouth the SAGIS model. SAGIS is 'Source Apportionment of mass of pollutants into the aquatic environment' Geographic Information System that gives special dimensions on pollutants and their effect on EQS objectives. This model is being used by Environment Agency to develop the next range of River Basin Management Plans. The second stage plans are now being consulted on as the next steps in application of EU Water Framework Directive.

These plans have the potential to impact on metals producing and using sites as well as on the uses of metals.

After much badgering of Environment Agency, NFA was invited to attend the working group of UKWIR and EA. This meeting took place on the 4th July in London. A note on the meeting has been circulated.

ENVIRONMENT AGENCY CONSULTATION ON ' WATER FOR LIFE'

As reported in the June Bulletin, this consultation runs from 21 June to 22 December 2013. The consultation is in two sections. This first part is an over-arching consultation, based on a science report (May 2013) of the key problem areas to address in the UK under WFD.

These are- abstraction and river flow rates/ chemicals (including metals) faecal and sanitary issues/fine sediment/invasive non-native species/nitrate pollution/ammonia, Biochemical Oxygen Demand/ oxygen levels in water/phosphates/physical modification to river courses.

In chemicals considerations the prime concerns for metals are:- mercury/tributyl tin/Lead and compounds/Nickel and compounds/Copper and compounds/Zinc and compounds.

In addition compliance with Cadmium EQS targets is also of concern.

Proposed issue management proposals so far include:- controlling activities that release substances of concern, contaminated land remediation, use of/funding of Sustainable Urban Drainage Systems or SUDS, trading estate effluents into water courses/reduction of inputs from permitted sources or contaminated storm water in trade effluent drains (loading of pollutants into waste water treatment works)/catchment permitting/ air deposition of contaminants.

In the overarching consultation for England four questions are posed. The responses for these questions are asked for by 22 September.

The second part of the consultation is on the next phase of the individual river basin plans and responses are asked for by 22 December 2013.

The consultation contains many links to other documents and this complicates evaluation and therefore potential impact on the non-ferrous metals.

Proposed NFA response to the over-arching or first part of the consultation

Q1- What do you (NFA) consider to be the significant issues facing waters in England?

NFA- feels that compliance with the Water Framework Directive is the most significant issue but that ensuring the targets for EQSs for metals are realistic, achievable, not over conservative and that the dynamics of the aquatic environment are accurately understood in order to set practical methods in order to achieve the targets.

Q2- Do you agree with our description of the issues affecting the water environment and society?

NFA- broadly speaking, NFA feels that the description of the issues has been developed well but that given the tight timescales of the various steps along the WFD pathway that insufficiently deep understanding of key aspects is being developed. In particular that the water monitoring programmes for chemical quality may not be adequate for a proper understanding of the variations in chemical status and trends.

Q3 – How do you think these issues should be tackled?

NFA- NFA notes that recent research publications such as Mayes et al 2008, 2010, 2011 and 2013 (in press) highlight the variations in the flux of metals in rivers especially from geological sources, whether as historic mines or geology itself giving rise to significant variations in concentrations as result of the flux and water flow rate changes that require deeper understanding before remedial actions are proposed in order to achieve WFD EQS compliance for metals. Work by CEH on the long term frequent monitoring of the Plynlimon catchment demonstrates how important it is to understand and quantify the variability of the flux and consequences. NFA is well are of the proposals by DEFRA and Environment Agency to take action over former mines but believes the same principles apply to other anthropogenic sources. The SAGIS model developed by UKWIR is an important step forward but NFA believes that its scientist should also have free access to this model given its importance and use in developing River Basin Management Plans. The global non-ferrous metals industry has been very active in developing models such as the Biotic Ligand Model and the AVS/SEM model to help understand the behaviour of soluble metal ions in water and sediments. These have been shared with Government Agencies quite freely and NFA feels that the same freedom of access to all scientific fora and the SAGIS model should be made for industry and its scientific advisors.

Q4 – What could your organisation do better to protect and improve England’s waters?

NFA will continue to engage with its scientific advisors and the academic community in the UK to seek the greater understanding it feels is necessary, as outlined above. The non ferrous metals industry has invested heavily in the science of metals behaviour in the aquatic environment, is very pleased to note the take up of these developments to date by UK Government bodies such as DEFRA and the Environment Agency but feels very strongly that further development is required and so will pursue appropriate lines of investigation.

Could NFA Directors/members of Environment Committee please review the above and discuss and recommend amendments as they see fit?

DEFRA

Priority Substances Stakeholders Meeting

NFA was invited to and attended this meeting. A meeting note has been circulated.

Consultation On Noise Action Plans

DEFRA is consulting on the 5 yearly review of noise action plans under EU Directive 2002/29/EC. This obliges member states to review noise action plans for railways, major roads and urban environments for populations of over 100,000 people. No action is required by NFA unless the review is extended further into industrial activities that create or have the potential to create and therefore statutory nuisance claims.

W.Piatkiewicz
26th August 2013