

Chairman – Lester Hicks Secretary – Chris Waite

amended **DRAFT**

Minutes of 22nd Meeting of the UK Minerals Forum, held at The IoMMM HQ, 1 Carlton House Terrace, London SW1Y 5DB on Thursday 14 November 2013 at 11 00am.

Present: -

Lester Hicks - Chairman

Ruth Bradshaw - CNP

Andy Tickle – CPRE Ruth Chambers – Independent Mick Daynes - Hanson Jim Davies – EA Tony Cook – POS/LGA Nick Horsley - Sibelco David Highley – Independent Jon Humble - EH Lonek Wojtulewitz – POS/LGA Prof. Mike Stephenson - BGS Jane Chelliah-Manning - BIS

Simon van der Byl – CBIMG/MPA Jo Mankelow – BGS Keith Duff – former Chairman Bob LeClerc - CBIMG Mark Plummer – DCLG Peter Huxtable – CBIMG/BAA/IoM3 Darren Moorcroft - RSPB Joanne Smith – Welsh Assembly Ken Cronin – UKOOG Chris Waite – Secretary

1 Welcome and Introductions

1.1 The Chairman welcomed Prof. Mike Stephenson, Director of Science and Technology at the British Geological Survey and Ken Cronin for the item on Oil, Gas and Shale Prospecting, and Jane Chelliah-Manning and Tony Cook to their first UKMF meeting. Andy Tickle was representing CPRE.

2 Apologies for absence

Apologies were received from:

Bob Brown - CPRE

Ken Hobden - MPA Alan Everard - Tarmac Bob Fenton – CBIMG/MAUK Brian Marker - Independent Peter Day – POS/LGA

Nigel Jackson – CBIMG/MPA Hugh Lucas – Aggregate Industries Mark North – Kier Minerals Ltd

2.1 The Chairman reported that Defra had decided that it did not have the resources to attend UKMF meetings, but would wish to continue receiving the papers. He had sought to persuade Jonathan Tillson for Defra to continue to take part in UKMF because of the range of its policy interests relevant to mineral working, but to no avail. SvdB regretted this withdrawal. He would like to see a further effort to persuade Defra to change its mind. This raised a wider concern as to who in government was now responsible for areas of importance to industry, UKMF, and hence the economy, such as the responsibility for resource efficiency and resource security. The Chairman agreed to return to this under AOB.

3 Minutes of the Last Meeting (27 June 2013)

3.1 The minutes were agreed.

4 Action Points from the last meeting not dealt with elsewhere

4.1 <u>Mineral planner training (from the 2010-2011 Working Groups)</u>: the Chairman said that discussions were continuing with IoQ/MPQC on developing a distance learning module. A draft had now been prepared and sent to him, but he had not had time to read it or check whether the draft had been subjected to peer review by industry and mineral planners. It was proposed to market the module at some £50 a user, and there would be opportunities to bolt on extras such as site visits and face to face tuition. **Action: Chairman**

4.2 <u>UKMF public information material about minerals on web sites (from the 2010-2011</u> <u>Working Groups)</u>: It was not clear at the meeting whether the material had been placed on MPA website. SvdB said he would follow up.

Post meeting Note: Nigel Jackson confirmed that the community outputs had been placed on both sides of the MPA website. On the public side access under 'News' then 'Publications' at <u>http://www.mineralproducts.org/news_publications01.htm</u> (scroll to the bottom of the third table)

4.3 <u>Minerals awareness in revised school curricula (from the 2010-2011 Working</u> <u>Groups)</u>: Brian Marker had provided an update on progress in paper UKMF/22/01. A specification of what might be included in school curricula is awaited, and a possible invitation to UKMF to provide a presentation to representatives of relevant examining boards in the second half of 2014. BM will pursue the initiative.

For the benefit of those new to UKMF and unfamiliar with the issue, the Chairman said that this initiative, aimed at informing school students about the significance of UK-won minerals to the economy and society, was important to tackle the disconnect in the public's mind between mineral workings and their everyday use of the mineral products. PH said that Heritage Lottery Funding might be able to contribute, and he would email the Secretary on that. NH recalled an Aggregates Levy funded project some years ago and would send copies of this to the Secretary if he could find the papers. **Action: PH, NH**

5 Future Scenarios Working Group

- 1. JM said that the Past Trends report had been drafted in March, reported to UKMF and CBIMG, and changes had been made arising from the small number of comments received from UKMF members. He now asked what UKMF to decide what to do with the report. The options were:
 - issue it now ie web access with a suitable introduction to UKMF, a cover, and appropriately badged, or
 - to delay until the middle of next year and publish it as a background paper in support of the Group's report. To be credible this would probably mean revisiting the data to bring it up to date by a further year.

5.2 SvdB said that MPA was about to issue a report following a survey of its members on trends. This confirmed the Past Trends report that reserves of aggregates had continued to fall, and replenishment of sand and gravel in permissions was now at 45% or less. The lack of up to date Development Plans was a problem and applications were now taking even longer, on average 32-34 months for a decision. All this was happening at a time when the economy and demand for aggregates appeared to be picking up.

5.3 Summing up a short discussion, the Chairman said the Forum's consensus favoured issuing the Past Trends report now as a background report for LWM5, but it would need a short executive summary highlighting the key messages, and an introduction setting the context. BleC noted that the timing (in practice early in 2014) would fit in well with the initial publicity for LWM5. Andrew Bloodworth would need to be contacted over putting the report onto UKMF website. JM said that he would prepare the necessary summary and introduction for approval at the WG1 meeting in December, and JM/DH would liaise with the Chairman and BleC about issuing the Past Trends report early in the new year. Action: JM/DH

5.4 UKMF then moved to the substantive issues in the report. RC asked what WG1 intended to do now to looking forward at minerals supply in the UK over the next 30 years? JM said that a successful workshop had been held on 5 November as set out in his paper on the Agenda. This looked at three future scenarios, modified for the UK minerals context from broader international economic scenarios prepared by the World Bank. Participants from both UKMF and a wider net had attended. The facilitator was currently collating the responses and would report to WG1 at its meeting on 3 December. WG1 would then seek to draw out common themes and make recommendations for the conclusions to be set out for LWM5 and the wider world. DH said that it was also intended to interview or at least contact all mineral sectors of industry for their views on prospects in their sector over the next 30 years.

5.5 In discussion LW said that the workshop scenarios were thought provoking, and that on 'Insular Britain' did not seem quite so unrealistic as one might first think. NH said the scenarios were polarized into black and white, whereas a more realistic scenario would have been grey. As drafted all had some merits. It was also important to recognize that the origin of the World Bank's scenarios had been 'an apologetic' report drawn up by the oil and gas mining group..

5.6 DM said that the future scenarios need to be presented to politicians in a challenging manner that identified the unpalatable as well as the palatable consequences of a plausible range of future developments. The problem was whether future governments would face up to necessary action that might be unpalatable to the public, or defer it until too late – given the often long lead times to bring minerals into supply. The Chairman agreed; for example green options could increase materials costs and 'brown' options could have greater environmental impacts.

5.7 Summing up the points made in discussion, the Chairman said that the WG1's conclusions for LWM5 and its final report needed to be succinct. They should draw out a central set of plausible outcomes by 2050 rather than stick uncritically to the World Bank scenarios. To gain the attention of politicians, the media and commentators not steeped in the world of minerals, the report should focus on the core issues. WG1 would therefore be most effective if it concentrated on the majority minerals in terms of tonnage: on shore energy and construction materials. Issues on the future access and supply of the UK's 'minority minerals' such as fluorspar could be covered in an Annex. An opportunity to engage with the wider audience would be missed if WG1 gave them equal attention in the main report. The report should aim to provide a realistic but challenging policy context out to 2050 for politicians to address.

5.8 There was limited time to complete the work between now and LWM5 in November 2014. The Chairman said that WG1 would need to put firm propositions to the UKMF March 2014 meeting. The June meeting could sign off the final report for LWM5, but it would by then be too late to discuss its possible conclusions. **Action: JM**

5.9 BleC said that CBIMG has agreed to provide funding for BGS to provide technical evidence for CBIMG to produce a UK Minerals Strategy, but this was to be done over an 18 months period and would not be completed by LWM5. However, JM noted that the WG1 work for UKMF could feed into it.

6 Oil, Gas and Shale Prospecting and extraction by Hydraulic Fracturing: Presentation by Prof. Mike Stephenson (BGS)

1. MS said that government had issued planning guidance on unconventional onshore oil and gas in July and he knew that local authorities were being inundated with enquiries following the recent protests at Balcombe. BGS were seeking to establish how exploitation of these minerals may/will affect the environment. MS illustrated his presentation with slides. These outlined the area in northern England within which BGS had estimated the potential resource (not reserve); the hazards to be managed if exploitation is to be safe; the recent dramatic increase in the level of exploitation in the USA; potential reserves around the world (on a very different pattern to conventional oil & gas); and included images of a recent frack at Fox Creek in Alberta, Canada.

2. In the USA production from shale beds was expected to provide more than 1/3rd of

supplies by 2035. The Fox Creek extraction site is about half a football pitch in size. Power for injecting the frack 'propant' at high pressures atmospheres was delivered by some 10 trucks. The operation is comparable to a noisy, very busy construction site. Water storage tanks were needed to hold flowback water for re-use or treatment. Drilling/injecting only required a limited period. Once fracking had taken place and oil or gas was flowing, the site would be scaled back to a well head valve and collection tanks or a pipeline to remove the product gas. Fracking operations would however resume if the flow dropped below a certain level.

6.3 The impacts that concern people and which BGS are investigating are: Ground water contamination: in Pennsylvania methane is already contained in ground water and more prevalent in river valleys. Poor well construction and management had caused problems. In 2010 the Pennsylvanian Department of Environment Protection (DEP) issued 90 violations for faulty casing and cementing on 64 Marcellus shale gas wells: 90 similar violations were issued in 2011. Radioactivity: shale has an extremely low reading, (below the background levels in granite districts in Cornwall and around Aberdeen), but, in common with all oil and gas drilling, low level radioactivity is brought to the surface in well cores, drill cuttings and drilling water. The main problem is with accumulated pipe scale and sludge in drilling equipment, but this can be dealt with by good management. Earthquakes: these have received much attention after the Cuadrilla incident in Fylde, though that was no greater than from a typical old mine collapse. However, the industry has brought in a 'traffic light' system to monitor movements and halt works where tremors exceed magnitude 0.5, - well below the threshold that can be felt by

the public or cause any damage to buildings. <u>Waste water disposal:</u> untreated disposal in rivers in UK is not an option; disposal by reinjection into a deep saline aquifer needs care or it might trigger a minor earthquake

<u>Water usage</u>: the operations require a massive volume of water. While small in relation to total licensed UK extraction, in parts of the resource area local water shortages could limit the potential for viable shale gas.

BGS was carrying out base line studies across the UK to establish the present position on each of these physical parameters so that any future impacts caused by shale gas extraction can be isolated.

4. MS concluded by saying that reliable underground information in real time was potentially a good way to reassure the public and regulators about the safety of shale gas extraction. BGS was therefore looking at the possibility of developing an 'Energy Test Bed' to demonstrate that the potential impacts were constantly being monitored, and adverse impacts rapidly dealt with. The State Government in Northern Alberta was taking this very seriously; for example, the public can log in at any time to see the latest air, ground water and seismic readings available to operators and regulators.

5. The largest potential shale gas resources in the world were in China and South America. The distribution was very different from that for conventional hydrocarbons and that would raise large geopolitical issues over time. GB had a relatively significant resource but with much of the country subject to constraints of National Parks/AONBs, built up areas, or good farmland, and with a much higher density of population than in the pioneer areas of America, there may turn out to be only a limited extractable reserve.

6. In discussion, TC (from neighbouring East Sussex) noted that the Balcombe site was perhaps too near a fault line for fracking. It was actually only an oil drilling site. Only two protesters remained at the site. Local people were now better informed, and were more concerned at local issues such as traffic generation on rural roads rather than ground water contamination. He asked whether the SE was more or less subject to faults than other parts of the country. MS replied that he could not say whether the SE was more or less faulted, but BGS was very good at pin pointing faults and steering companies away from them. What he could say was that shale in UK was very thick in depth, much thicker than in the USA.

6.7 KC said that to put Balcombe in context, whilst the activities there were hitting the headlines, 6 other exploration wells had been drilled without protest, and 5 more planning permissions were granted.. Of the 2000 protesters at Balcombe, only 100 were local. The rest were there for a combination of reasons not all connected with shale gas. However, the

incident showed that public perceptions of shale gas needed improving. Trust in assurances from the industry, government and academics was at its lowest level; the BBC was the most trusted source.

8. LW said that based on PINS at the beginning of February, some 48% of the Bowland Shale MPAs had adopted up to date mineral planning policies although such plans were particularly important for economic development in a plan led procedure. Public engagement was part of this process, but authority members found when an application for exploration was submitted there was not enough information available to them to reassure people. Local mineral planning authorities were in the front line – the initial grant of a PEDL was just a formal step, and detailed regulation of the drilling process, pollution control and mining waste by the Environment Agency came later. The first time the issue of fracking at a particular site was properly discussed was when a planning application for exploration was submitted. Authorities were now putting out full briefing notes for the public, but the industry needed to up its game considerably by organizing much better public communications. The present starting position of most of the public, and therefore many Councilors representing them, was "How can we stop this?"

6.9 RC asked what were the implications for restoration of extraction sites? MS said that once the drilling had been completed the site normally reverted to a grassed over field with a well cap and pipeline valve or a small tank compound for compressing and transporting liquefied gas.

6.10 DM reminded UKMF that an increase in use of fossil fuels through exploiting oil and gas extraction would affect climate change, and that effort should be concentrated in developing renewable energy sources. Despite the simple view that the use of shale gas yielded lower carbon emissions relative to coal, there should be a proper peer-review scientific debate (as in the case of the debate on GM crops) on the overall environmental balance before the Government rushes into supporting yet more fossil fuel use.

6.11 MS recognized that, but pointed out that shale gas yielded less CO2 per kWh, and there was merit in using it in the transition from coal and oil towards a lower carbon energy mix. It was also noted that since the UK was increasingly committed to burning gas for energy, at least in the medium term, development of domestic shale gas reserves improved national energy security, helped the UK's adverse trade deficit and helped sustain hydrocarbon tax revenues.

6 12 The Chairman thanked MS for his presentation which had enabled UKMF to have a better grasp of both the spatial geography of resources word-wide and also some of the practical issues at an extraction site. He felt that in such a densely populated country it would be difficult for industry readily to find sites which were beyond a standoff distance from people and property, and he agreed that local surface issues such as road access and traffic were likely to figure highly in objections as much if not more than impacts within the subsurface geology. This promised to be an active area for planning appeals and legal challenges. MS agreed to make the presentation available for the Secretary to issue with the minutes

Action: MS, CW

Post meeting note: copy of the presentation received and circulated withy the minutes

7 Verbal Report by DCLG

7.1 Mark Plummer updated the meeting on the following :

<u>Autumn Statement:</u> dominating current work. Expect something on the planning aspects of shale gas development.

<u>Red Tape Challenge: Planning:</u> results announced last week. There will be a 57% reduction in the number of "technical" regulations; existing regulations on Permitted Development rights (PDRs) will be consolidated; more effort will be devoted to streamlining planning procedures; the engagement of the Environment Agency and Natural England in planning matters (e.g. where they interface with their regulatory responsibilities) will be improved (an outcome of the triennial review of Defra's NDPBs, which has concluded they should nor be merged).

<u>Poorly performing planning authorities:</u> one District has been placed in special measures. No Counties have been designated though 26 have been listed as of concern, and the Chief Planner has written to them about the need for improvement. (In effect on a "watch list").

Extension of scope of Major Infrastructure Project (MIPS): Regulations laid to allow business and industry to opt in for direct Planning Inspectorate/Ministerial decision for their projects if qualify by type and scale. This will apply to extraction of aggregates and industrial minerals, with thresholds to be set out in a ministerial statement. (Details of thresholds and timing of statement not yet available). Will not apply to energy minerals.

<u>Revision of the EU EIA Directive:</u> Has been making rapid progress. The European Parliament voted in October on its proposals. Will now become involved in the "trilogue" process with the Commission and Member States. Only its vote to extend the EIA regime to shale gas fracking attracted UK press attention but it also dealt with 80-90 other matters. The Dossier is currently being handled by the Lithuanian Presidency of the Council of Minsters. This will pass to Greece in January 2014 and it remains to be seen what priority it will be given.

<u>AMRI (Annual Minerals Raised Enquiry)</u>: raw data has been received from ONS and after verification by BGS it is hoped to publish by the end of 2013.

<u>Next 4-yearly AM (Aggregate Minerals) Survey</u>: Money has been secured for 2014-2015 and it is hoped the contract for the work will go out to tender and be let in early 2013 so that work can start promptly in April.

<u>Draft (Beta) National Planning Policy Guidance</u>: the comments are currently being evaluated, including on the minerals section: on format everyone wants a printable paper version; there were some comments on the content of the minerals section, e.g. on coal and safeguarding; when the "final" version goes live it will need to be integrated with the Oil and Gas practice guidance issued in July 2013; it is also hoped to add some material on the planning aspects of underground gas storage;

DCLG and the Environment Agency are looking again at <u>the classification in the flood</u> management section of sand and gravel as development compatible with the <u>functional lood plain</u> (the highest flood risk classification);

Outside the Minerals section, but relevant to minerals development, it is hoped to add some material on development on <u>unstable land</u> formerly in PPS 14 (Development on Unstable Land).

6.2 MD said that government had issued the NPPG guidance without consultation, contrary to its normal practice. MP responded that there had been a selected group including an industry representative that had assisted in the preparation of the guidance. The Chairman said that he felt in places that the text blurred the government's aim to separate guidance and policy, and in a number of instances the guidance appeared to be stronger than the policy – such as for oil and gas issued in July, which was due to be brought into the NPPG.

3. RB was concerned at the lack of reference to protected landscapes and the major development test in the planning guidance on fracking.

4. NH asked whether DCLG was monitoring whether MPAs were following up the new legislation regarding Prohibition Orders. How many 'stalled' ROMPs remained? MP said that DCLG was not monitoring this, but POS and individual authorities could respond with details of any problems they encountered.

8 UK Territorial Administrations

1. <u>Wales</u>: Joanne Smith introduced the update paper that had been issued with the agenda and said that consultation on the draft Planning Bill Wales was due to begin on 4 December 2013.

2. <u>Scotland</u>: Graham Marchbank had sent a note which had been sent out as a late

paper for the meeting

8.3 No issues were raised on these two papers and their contents were noted. No report had been received from Northern Ireland.

9 Environmental Update

9.1 A paper compiled by John Humble from contributions by from CPRE, CNP, NE, EH and RSPB was issued as a late paper. No issues were raised, and the contents were noted. The Chairman thanked JH for collating the Update.

10 Any Other Business

10.1 AT said that the British Mountaineering Council (BMC) was using some former quarries with exposed rock faces suitable for climbing. Their Project Officer Neil Hewertson and was interested in contacting mineral operators in order to discuss restoration that would assist their interests. BMC will be holding a conference in June and he asked for UKMF contacts. Those interested should contact:

Neil Hewertson, Project Offoicer, Quarry Development and Restoration, 177-179 Burton Road, Manchester M20 2BB. Tel: 0161 445 6111 and <u>www.thebmc.co.uk</u>

Action: UKMF industry members

10.2 SvdB returned to the issue of Defra not attending UKMF meetings and the need for a DECC replacement for Clare Harding. UKMF needed both to be represented to provide the balance between developments for energy and the environmental impacts. The Chairman said that the assurance given by Baroness Andrews on the involvement of government departments when UKMF was formed was now fading away. He would discuss with Nigel Jackson what approach might be taken to put this right. **Action: Chairman**

10.3 MD said that the Environment Agency was restructuring, and would concentrate more on its statutory role rather than its regulatory role, looking at the long term higher level, strategic policy aspects. EA was looking at the flood plain issue. However, Defra had told EA and NE 'not to do policy'. The Chairman noted that this conflicted with Defra's view that EA and NE could cover policy interests at UKMF.

10.4 AT reported that long term 'stalled' ROMPS in the Peak District at Longstone Edge/ Backdale and Stanton Moor, for two years subject to Suspension Orders, would be considered for Prohibition Orders by the National Park Authority on 15 November 2013.

11 Date of Next Meeting

11.1 The next meeting will start at 11am at the IoMMM, 1 Carlton House Terrace on **Thursday 20 March 2014**. Coffee will be served from 10 30am and a buffet lunch at 1 30pm. To avoid over catering, BleC asked members to indicate 7 days in advance of the meeting if they could not attend or would not be staying for lunch.

11.2 The other 2014 Forum dates for your diary are 11am at IoMMM on Thursday 26 June and Thursday 20 November LWM5 is on Monday 17 November 2014.