

MID ULSTER DISTRICT COUNCIL

DfE RESPONSE TO PREFERRED OPTIONS PAPER

MINERALS

The Department for the Economy (DfE) and Geological Survey of Northern Ireland (GSNI) met with Mid-Ulster District Council (MUDC) officials on 9th June 2016 to discuss the importance of mineral development to the local economy, the planning issues to be considered in relation to mineral development and consideration of the risks and management of abandoned mines.

In response to MUDC Planning Options Paper the Department has commented below on the planning policies proposed in relation to Minerals.

The Department would also recommend that MUDC reference that due consideration is given to the location of abandoned mines within their broader planning policy.

Do you agree with the suggested wording of the subject policies MIN1, MIN2 and MIN3?

The Department would recommend that the Planning Options Paper (POP) is revisited to reflect more fully the minerals strategy in the Strategic Planning Policy Statement 2015 (SPPS) and the Planning Strategy for Rural Northern Ireland (PSRNI) in relation to high value minerals. The attached DfE/GSNI Information Paper provides information on 3 categories of mineral – the planning approach should be considered for each category. In relation to the geological data available from MAPB/GSNI we are keen to work with MUDC and advise how best to tailor the input/information to the specifics of the MUDC area as required.

Min 1 – Mineral Development

It would appear that the POP is based on an understanding of the aggregate industry which is to be expected given there is a long history of extraction from hard rock quarries and sand & gravel pits in the Council area. However, the POP should also be future-proofed and reflect the position for exploration and extraction of high value minerals as the potential for new minerals in the future and the data available will be ever evolving. In addition, the paper briefly mentions extraction of unconventional hydrocarbons but provides little information about this potential resource. There may also be potential within the council area for conventional oil & gas resources. Again, a distinction should be made between exploration for, and extraction of, unconventional hydrocarbons, such as shale gas, and conventional oil & gas because the scale and methodologies of these are quite different and raise quite different sustainability issues.

As a result the Department considers that the preferred policy options would benefit from modification to take account of the differences in the exploration and development in three main mineral categories set out in the attached DfE/GSNI Information Paper i.e. low-value aggregates, high value metalliferous minerals and energy minerals.

The **attached paper** (see Annex B) sets out more fully the Department's position on mineral development to inform planning authorities and aid understanding of the types of mineral that may be found, their likely distribution, and the techniques used in the exploration and development of the main different mineral resource types. This paper should be considered as an integral part of our response.

Min 2 - Areas of Constraint

The Department welcomes the consideration which the Council has given to its planning policy for mineral development. While the Department understands the Council consideration of Areas of Constraint we would suggest that the Council consider the proposals in the light of the minerals strategy established in SPPS or PSRNI. For example, Paragraph 6.155 of the SPPS states that:

“However, where a designate area such as an Area of Outstanding Natural Beauty (AONB) covers expansive tracts of land, the LDP should carefully consider the scope for some minerals development that avoids key sites and that would not unduly compromise the integrity of the area as a whole or threaten to undermine the rationale for the designation.”

In addition, regard should be had to the minerals policy as set out in the PSRNI (MIN 4) and in relation to mineral deposits of high value. To that end, Paragraph 6.157 of the SPPS states that there will not be a presumption against their exploitation in any area as follows:

“From time to time minerals may be discovered which are particularly valuable to the economy. Their exploitation may create environmental effects which are particular to the methods of extraction or treatment of that mineral. There will not be a presumption against their exploitation in any area, however in considering a proposal where the site is within a statutory policy area, due weight will be given to the reason for the statutory zoning...”

In addition, the Department wishes to seek clarity on the reference in Policy Min 2 (a) to short-term extraction as an exception in Areas of Constraint. DfE believes that each proposed mining development for high value minerals should be assessed on its own merits through the planning process. If a mine development receives planning permission it seems illogical to place an arbitrary time limit on mining operations which could be well below the economic lifespan of that mine. For example, the Tara mine in Navan, County Meath, which is the largest zinc mine in Europe, has been in production since 1977. This mine has 586 employees and indirectly supports many more jobs in the local area and further afield.

The Department also recommends that the Council discusses the extent of the areas proposed as Areas of Constraint with the Geological Survey of Northern Ireland and the extractive industry. The POP advocates the areas shown in Map 3 as the 'more

agreeable' of the approaches to quarrying and vulnerable landscapes because it excludes areas subject to significant active quarrying from the proposed Areas of Constraint. However, it may be appropriate to modify the boundaries of the proposed Areas of Constraint (AoC) further to exclude additional important areas of both hard rock and sand & gravel resources from the AoC without significant detriment to the identified vulnerable landscape areas within the MUDC. The MUDC holds the main areas of sand and gravel resources within Northern Ireland and consideration should be given to any future requirement for increased production from pits within MUDC within the life of the LDP.

Min 3 - Mineral Reserve Policy Areas

Minerals are essential to support sustainable economic growth and quality of life. It is vital that there is a sufficient supply of raw materials for manufacturing, construction, power generation, transportation and agriculture. Minerals are a finite natural resource and can only be worked where they are found. It is important to make the best use of the mineral resources and to secure their long-term conservation through the mechanism of mineral safeguarding.

The Department welcomes your proposal for mineral reserve policy areas and DfE/GSNI would be keen to engage with you to consider the available data and potential mineral reserve policy areas for valuable minerals both in terms of those identified and other potential valuable minerals.

Do you agree that there should be exceptions made within Areas of Mineral constraint where the proposal involves a minor expansion of existing works or where a benefit will be provided to the local community?

The Department agrees that there may be merit for exceptions in Areas of Mineral Constraint where minor expansion, or extension, of an existing mineral development (mine, quarry or pit) extends the life of that development, helps to sustain the local community, or meets a demand that could not readily be satisfied by other existing operations elsewhere in the local area.

The Department, as set out above and in the attached Information Paper, would recommend that exceptions are also made for high value metalliferous and energy minerals. Consideration should be given to the benefit to the NI economy as a whole of such developments as well as the local community.

In such cases Council may wish to consider each application on its merits taking account of new data as and when it becomes available as new mineral resources are identified in the future for use, for example, in modern technologies. At present the extraction of many such 'critical' minerals are concentrated in a small number of

countries and the discovery of indigenous sources could be of strategic importance to Northern Ireland.

Should the minerals policy for Mid-Ulster include a specific policy on the extraction of valuable minerals?

As indicated in the responses above the Department would recommend that the minerals policies of all Councils should include a specific position on high value metalliferous and energy minerals, which is consistent with the position set out in the regional planning policy framework of the PSRNI and SPPS. See Information Paper attached for further information.

Should the extraction of valuable minerals be treated as an exception within Areas of Constraint?

The Department would strongly recommend this approach to reflect the SPPS minerals policy position.

Do you think that on site processing of materials should be allowed within an Area of Constraint, if it can be demonstrated that there will be limited environmental impacts?

As indicated in the responses above the Department would recommend that the minerals policies of all Councils should include a specific position on high value metalliferous and energy minerals and this would include treatment of on site processing of materials. See Information Paper attached for further information.

ANNEX B – MINERALS RESOURCE POTENTIAL IN MID-ULSTER

- 1. Aggregates** – MUDC has extensive sand and gravel resources as recognised by MUDC in the POP and the earlier Minerals Position Paper. There are three areas in Northern Ireland that provide the bulk of sand & gravel production, namely the eastern flanks of the Sperrin Mountains (within MUDC), the southern and northern flanks of the Sperrins (mostly within the Londonderry & Strabane Council area) and dredged from the bed of Lough Neagh (within MUDC but also landed at sites within two other council areas). Other areas of extraction near Kilkeel, Newtownstewart and Strabane are locally important. With two of the three main extraction areas lying within MUDC, the need for this supply to meet future demand both within MUDC and more widely across Northern Ireland will be a major consideration for the LDP. Within Lough Neagh the main sand deposits are restricted to a relatively narrow zone up to 3km wide running offshore from Ballyronan to Ardboe. The continued extraction of sand and gravel from Lough Neagh is subject to legal challenge and the outcome of a planning application. Onshore in the MUDC area there are extensive sand and gravel resources associated with glaciodeltaic and glacial outwash deposits which have been worked in a localised manner. According to the mapped distribution of sand and gravel deposits the remaining resources should be sufficient to meet future demand but the availability of these resources would be subject to economic, planning, land use and environmental assessments. There is limited quarrying of hard rock in MUDC for use as crushed rock aggregates but there is substantial resource potential in the Tyrone Igneous Complex, Antrim Lava Group and various Carboniferous limestone, sandstone and conglomerate units which have high PSV (Polished Stone Values). There may also be potential for quarrying of selected limestone and sandstone units for use as building stone and dimension stone. Most of the mapped resources are located outside the proposed Areas of Constraint (AoC) for minerals although the slight modifications to the boundaries might make more resources available if needed.
- 2. Valuable Minerals** – Within the MUDC area metalliferous minerals are known to occur in three geological settings – the Pre-Cambrian Dalradian metamorphic rocks, the Tyrone Igneous Complex (TIC) and Carboniferous sedimentary rocks. Gold may occur as gold-bearing quartz veins, as stratabound mineralisation (both in the Dalradian), or in igneous rocks of the TIC. The Curraghinalt gold deposit, near Gortin, is located near the southern boundary of the Dalradian rocks marked by the Omagh Thrust Fault. The Omagh Thrust extends into MUDC towards The Six Towns and there may be potential for the discovery of gold deposits in this area (which is within a proposed AoC). The Tyrone Igneous Complex is highly prospective for gold and other metalliferous minerals and is considered to have potential to host VMS (Volcanogenic Massive Sulphide) deposits. The northeastern part of the Tyrone Igneous Complex extends into one of the proposed AoC. There may be additional potential for lead, copper and zinc deposits within the Clogher Valley where the Carboniferous sedimentary rocks occur in a geological setting analogous to that of the Irish Midlands where large deposits of base metal minerals have been discovered and developed. The Clogher valley has been proposed as an AoC. The valuable minerals discussed in this section would all be developed by underground mining so the surface impacts of such developments could be relatively small, in contrast to the obvious visual impacts of quarrying for low value aggregates.
- 3. Energy Minerals & Hydrocarbons** – the MUDC area includes the Dungannon, Coalisland and Annaghone coalfields where the coal was first worked in the seventeenth century and mining

ceased completely by the middle of the twentieth century. Very little workable coal is believed to remain in these coalfields although there may be potential to extract heat from the abandoned workings (such geothermal resources are currently being evaluated for the disused mine workings in central Scotland). Coal resources may exist at much greater depths towards and beneath Lough Neagh although these would not be considered to have any current commercial potential value. However, deeply buried organic-rich rocks such as coals can form excellent source rocks that can produce gas if buried deeply enough for millions of years. There is potential for conventional oil and gas to be trapped within the rocks of the Lough Neagh sedimentary basin which is centred on present-day Lough Neagh (but extends beyond its shores). Several deep boreholes provide evidence that there are suitable rocks to contain and seal accumulations of hydrocarbons, and seismic reflection surveys indicate that there may be geological structures capable of trapping oil and gas at depth. Most of the exploration potential in the MUDC area is located in rocks lying beneath Lough Neagh and areas close to the shore. The same sandstone rock units that could, under certain circumstances, contain oil or gas would also have deep geothermal energy resource potential where they contain water which is the more likely scenario. Modelling indicates that the sandstone units would be buried deeply enough to be used for direct heating purposes and potentially for Combined Heat and Power (CHP) production. Within the MUDC area the greatest deep geothermal energy potential is likely to be located east of Dungannon and south of Toome. Lignite deposits are located at relatively shallow depth within the area between Coagh and Lough Neagh although the resource potential has not been quantified and the moratorium on lignite extraction means that these can be discounted for the purposes of the LDP.