

## UK Construction Materials And Import Substitution BAA June 2001

It is becoming clear that one of the most serious side-effects of Aggregate Tax will be the destruction of a substantial part of the UK quarry industry . Construction aggregate is already being imported on a regular basis from Norway, France and Eire due to various factors.

- All the major UK conurbations, with the exception of Birmingham, are readily supplied by sea, which is by far the cheapest form of transport available
- UK quarries are mostly located in rural areas some distance from the major markets meaning that the price of their products is artificially inflated by the ever increasing cost of road and rail delivery
- The emergence of extremely cost effective large coastal quarries, often referred to as super-quarries.

We can in fact take a UK coastal quarry as an example, Glensanda.

Glensanda is located on the Morvern Peninsula in the Scottish Highlands. It is a massive reserve of good quality granite with its own deep water, high speed, ship loading facility. Originally targeted towards the North American market it quickly refocused on Northern Europe and the UK, when the American market became uneconomic, due to competition from places like Mexico, Glensanda has proved that it is commercially viable to deliver aggregates using large self discharging vessels, into Forth, Tyne, Humber, Thames, Solent, Severn, Mersey and the Clyde. It is therefore sustainable to argue that Aggregate Tax will bring about an immediate, substantial and permanent increase in imports, for the following reasons:

- Although imported aggregate will have to pay the £1.60 levy, merchants will only import saleable products and will not have to apply tax to waste, dust or other by-products
- There are already a great number of ready-mix concrete and asphalt coating plants located in all major UK ports due to cost effective materials being delivered by companies such as Foster Yeoman, sea-dredged aggregates and existing imports
- Overseas producers will continue to sell their by-products and less popular sizes, without tax, in their domestic markets
- Overseas producers will not have to make provision for Aggregate Tax compliance costs
- UK production capability will be permanently damaged. Due to intense pressure from lobbying groups such as FOE and CPRE, redundant quarries will be landscaped and lost with permissions for new quarries almost an impossibility
- Even in the unlikely event of the remainder of the EEC signing up to Aggregate Tax, cost effective supplies of aggregate are readily available from other, non EEC countries, many of whom hold Free Trade Agreements with Britain.

Even Glensanda with its well established site and excellent facilities will not be able to withstand this degree of unfair competition. It is also important to remember that once aggregates are placed in large, modern, self-discharging bulk carriers they can be transported vast distances at relatively little cost.

### **Shipping Costs : Open Market Quotations**

In an effort to evaluate the cost of shipping aggregates from nearby countries, quotations were obtained from different agents and form part of this report.

These quotations show clearly that even using open market figures and non dedicated vessels there is likely to be a substantial problem.

The figures were arrived at using self discharging vessels which do not require expensive dock labour to discharge. This gives enormous savings not just on labour but, equally important, on time. The cost of shipping aggregates from France to the Thames Estuary is given at £3.55 per tonne which includes all port fees and discharging. Similarly from Eire, £4.25. To Edinburgh from Norway is quoted at £4.60 However it is important to note that these figures will reduce even further as a market develops and bespoke vessels are dedicated to the work. Even if only 25% of the UK requirement is imported, that represents over 50 million tonnes and shipping costs will be trimmed accordingly.

### **Shipping Costs : Dedicated Vessels**

It costs around £23,000 per day to time charter a 70,000 tonne self discharging vessel. However with a load and discharge rate of some 5,000 tonnes per hour and a steaming rate approaching 20 knots we can see that dedicated shipping will be particularly effective.

### **Example**

Commence loading France 8am, complete 10pm Sail for Thames arriving 5am and commence discharge, complete 7pm and return in ballast arriving load port midnight latest. Obviously provision will have to be made for tides, docking and pilots but with a 40 hour turnaround a two day allowance with one way traffic gives a base shipping rate of only £0.66p per tonne!

### **Overseas Prices**

Due to the highly regulated and bureaucratic nature of the UK Construction Materials Industry we find that aggregates are often cheaper in other countries. This has also come about as a result of an enormous amount of industry consolidation with substantial areas now suffering from a lack of meaningful competition. Quarrying has an unusually high entry level due to the difficulty and cost of obtaining planning permissions, high cost of capital equipment and a restricted marketplace. Recent quotations show 'free on board' prices ranging from £3 - £4.50 for single size aggregates, £1.50 - £3.00 for sub-bases and even less for bulk fills.

### **Concrete Products**

There will be particular problems with pre-cast concrete products. Although made up of 95% aggregate and sand, no duty will be payable on import. However domestic producers will have to pay a large premium on top of Aggregate Tax as almost all concrete products require good quality

aggregates and sand. There is a growing import / export market in concrete products with exports rising slightly faster than imports. However this situation is likely to change very quickly as a direct result of Aggregate Tax. There is also the vexed question of Northern Ireland. It is now recognised that special provision will have to be made to protect the province. However between 4,000 – 5,000 tonnes of pre-cast is shipped over to the mainland every week and mainland producers will be even worse off if NI is given such a competitive advantage.

### **Importers**

To understand just how quickly this situation will develop it is important to consider which companies are most likely to become involved. Five large companies, referred to as the majors, Tarmac, Hanson, Aggregate Industries, RMC and Lafarge between them control 90% of the market in ready-mix concrete and asphalt. They also control a substantial part of the UK pre-cast concrete capability. ( 98.48m tonnes used in asphalt and concrete therefore majors have in house requirement of about 85m tonnes) These companies also claim 80% of all UK quarry production of 206m tonnes = 164m tonnes, a substantial part of which they use 'in house.' All these companies own or control substantial dock facilities which they already use to service major markets. Although this activity is most pronounced in the South East it also occurs in most other ports. Therefore it is plain that these five companies will not have a problem switching to imported material. With the possible exception of Aggregate Industries the majors collectively operate quarries in Norway, Poland, Germany, France, Belgium, Spain and Portugal. Lafarge is a French company with substantial production capacity within striking distance of several Channel ports.

### **The Disadvantages of Importing Aggregates.**

Although it is plain that the demise of a substantial part of the UK quarry industry would please a number of people including the more extreme environmental pressure groups such as FOE and CPRE we need to consider the disadvantages.

- **Balance of Payments.** The most immediate and obvious result will be the effect on our balance of payment as we switch from domestic to imported aggregates and concrete products. Although the total value of the aggregate market is relatively small at just over £1bn there will be substantial collateral damage. We must also consider the additional cost of importing concrete products
- **Employment.** Almost 30,000 people are directly employed in the quarry industry. A further 15,000 people are employed in supply and service companies such as engineering, fabrication, plant manufacture, plant hire and plant repair, to name but a few. A substantial number of jobs will also be at risk in the pre-cast concrete sector
- **Loss of Production Capability.** As quarries are closed down the machinery is liable to be sold off and the sites used for landfill, amenity or agriculture. This trend will be difficult to reverse as new permissions are difficult to obtain. It can take several years to bring

a new site on stream and it will not be easy to get venture capital when capital costs are so high and the market is so restricted

- Inferior Quality and Selection. Imported aggregates are often of inferior quality with a restricted product range. Much degeneration takes place during the rapid loading and unloading as well as inter-particle comminution during passage. However this is no longer such a major problem as a great deal of client control has been eroded. Many projects are now completed using DFBO schemes ( Design, Finance, Build and Operate ) which means that contractors are able to use any materials they wish and the choice is all too often dictated by price
- Environmental Damage. At this point it is perhaps relevant to consider that although Aggregate Tax was borne out of a stated aim to protect the environment the opposite will be the case. The UK quarry industry is the most tightly regulated in the World with the highest standards of health and safety and the best staff welfare, however, aggregates will now be shipped in from countries with much less control and lower standards.

#### **Notes**

1. Although UK materials have to conform to BS specifications and European materials to DIN standards this will not pose any real problem as product curves are similar
2. Concrete uses 18.6m tonnes of crushed rock and 56.2m tonnes sand & gravel annually = 74.8m tonnes
3. Asphalt uses 21m tonnes of crushed rock and 2.5m tonnes of sand & gravel annually = 23.5m tonnes combined total 98.3m tonnes
4. The five major quarry companies Tarmac, Lafarge, RMC, Aggregate Industries and Hanson control 90% of the ready-mix and asphalt industries
5. A number of UK quarry companies also have quarries in Northern America