Appeal No. VA88/0/056

AN BINSE LUACHÁLA

VALUATION TRIBUNAL

AN tACHT LUACHÁLA, 1988

VALUATION ACT, 1988

Pfizer Chemical Corporation **APPELLANT**

and

Commissioner of Valuation **RESPONDENT**

RE: Chemical Factory (pt of) and land at Lot 1AD, Ballybricken, E.D. Carrigaline, Co. Cork
Rateability of tanks

B E F O R E

Paul Butler	**Barrister (Acting Chairman)**
Mary Devins	**Solicitor**
Brian O'Farrell	**Valuer**

JUDGMENT OF THE VALUATION TRIBUNAL
ISSUED ON THE 13TH DAY OF FEBRUARY, 1990

By notice of appeal dated the 12th day of August 1988, the appellants appealed against the determination of the respondent fixing the rateable valuation of the above described hereditaments at £1,327.40 (of which land is £7.40).

The grounds of appeal as set out in the Notice of Appeal are as follows:-

1. The valuation is excessive and inequitable and bad in law.

2. The rateable valuation is bad in law, in that rateable valuations have been allotted to, or attributed to, items which are not rateable hereditaments or alternatively, in arriving at the

net annual value, the Commissioner of Valuation erred in law in including therein the value or values of items which are not rateable hereditaments.

3. The Commissioner of Valuation has erred in law in including in the valuation or assigning any annual value or rateable valuation to non rateable plant and machinery.

In his written submission dated 13th October, 1989, Mr Desmond M. Killen, F.R.I.C.S., A.R.V.A., who is a Fellow of the Society of Chartered Surveyors in Ireland and a Director of Messrs Donal O'Buachalla & Co Ltd., set out that the appellant company is a large industrial undertaking at Ringaskiddy in Cork Harbour, about seven miles from Cork City. The undertaking comprises two plants, viz:

(1) Foods Chemical Plant,

and

(2) Bulk Pharmaceutical Plant.

The former manufactures citric and associated acids from molasses by a process of fermentation and refining. The latter manufactures bulk pharmaceuticals from chemicals, solvents, acids and liquified gases, by process of mixing and blending.

As the undertaking lies in two separate townlands, viz. Ballintaggart and Ballybricken, there are in effect two separate rateable hereditaments.

This appeal is concerned with that part of the premises known locally as the "Tank Farm" at Ballybricken Point, consisting of five molasses tanks. It adjoins the main chemical factory at Ringaskiddy in Cork Harbour and is referred to at Map Ref. 1AD Ballybricken. These tanks are valued at £1,180 in total.

The operation of these plants and the construction and function of the various installations were described in the written precis of Mr Patrick Forristal B.E.C.Eng., Project Engineering Manager

and Mr John M. Burnett B.A. (Bacteriology) Fermentation Plant Manager, which were submitted to the Tribunal prior to the oral hearing.

The subject premises, comprising both hereditaments, were the subject of a number of Circuit Court appeals from the period 1973 to 1982. The Commissioner of Valuation accepted the decision of the Circuit Court Judge. The appellant company appealed further by way of case stated to the High Court and Mr Justice Costello upheld the decision of the Circuit Court Judge.

The subject hereditament was inspected and revised in June 1987. In November 1987 after the Valuation Lists issued, the appellants appealed to the Commissioner of Valuation. Mr Thomas Stapleton, B.Agr.Sc., District Valuer, inspected the premises on behalf of the Commissioner of Valuation, and on receipt of his report, the Commissioner transferred the valuation of £1,320 from the building column to the miscellaneous column of the lists. In August 1988 the appellants lodged their appeals to the Valuation Tribunal.

At the oral hearing which took place in Dublin on the 27th October, 1989, Mr Marcus Daly S.C. (instructed by Matheson Ormsby & Prentice, Solicitors) appeared on behalf of the appellants. Mr Aindrias O Caoimh, Barrister (instructed by the Chief State Solicitor) appeared on behalf of the respondent and further submissions were made on the 5th February, 1990.

The food chemical plant produces food chemicals from crude beet molasses which is a by-product of the sugar industry. Molasses is delivered to the factory site by ship and pumped into the five molasses reception tanks which are identified at A on the site plan which is attached hereto as Appendix "A".

At the oral hearing Mr Burnett elaborated on his written submission dated 18th October, 1989. He explained that the food chemicals plant is a base loaded plant, which means that it is designed for maximum output at all times and that the factory is in operation for 48 weeks in the year.

Molasses is a vegetable by-product of the sugar industry which is based upon both sugar beet and sugar cane crops. It is the end product of sugar manufacturing from which no more sugar may be crystallised by conventional methods. Its composition is highly complex and is influenced to a large extent by such factors as climate, soil conditions and the operations used in the sugar factories. In broad terms, molasses may be described as a thick, viscous, solution of sugars, inorganic and organic compounds. Variations in composition have significant effects on the production of citric acid in both the fermentation and refining processes.

The preferred molasses source for citric acid production is beet molasses. The composition of molasses from different countries and more specifically from different factories in the same country, is highly variable. For example, sugar levels will vary according to the efficiency of the extraction process. This factor will also directly influence other physical and chemical properties including viscosity, alkalinity or inorganic metal levels. The latter always has significant effects on citric acid production performance.

There are both known and unknown factors in the composition of molasses which will influence production performance. For example, colour has a major impact on refining, whilst magnesium and phosphorous will affect fermentation performance.

There are also other influences which either singly or in some particular combination will also impact on performance even though major criteria are within acceptable ranges.

Every potential molasses factory source from within a specific country is pre-screened before a decision is made to purchase. Selection is made against a specification which incorporates as

broad a range of parameters as is practical and involves its evaluation in small-scale laboratory fermenters and refining rigs. This requires receipt of small samples of individual factory molasses (5 litres). However, molasses quality can and does vary throughout the beet processing campaign (October to January). Thus, pre-screening will never guarantee that acceptable quality molasses is always purchased. The procedure simply represents the best approach available for the selection of large consignments of molasses.

Molasses consignments purchased for use at the Ringaskiddy plant are received throughout the year. A consignment is generally composed of molasses from a number of different sugar factories. Size may range from 2000 - 18000 MT. Because of demand and reduced availability of molasses of the required specification, the trend has been towards smaller more frequent consignments, originating from both traditional and non-traditional sources. For example, so far during this production year (1989) eight cargoes have been received in December (3), March, April, August, September and October, in sizes ranging from 2300 to 18000 MT.

Molasses is stored at ports in the country of origin until a full consignment is collected. It is transferred to these tanks by road, rail or barge. These tanks act solely as storage vessels and will not routinely have any facility for mixing or blending. They generally contain molasses from more than one factory which in turn may be collected over the whole processing campaign (dependent on factory output and tank capacity). Molasses will layer in these conditions. When transported to Ringaskiddy by ship, the only movement that molasses is subjected to will be as a result of the loading operation and/or ship's movement. Each molasses consignment is held in multi-compartmented holds.

On arrival at Ringaskiddy unloading begins with the connection of a flexible hose to the ship's manifold with the help of a jetty crane to lift the hose. This hose leads to a 24" mild steel jetty pipeline and molasses is pumped by the ship's pumps along the line at a temperature of 110°F

and at a pressure of 40-80 lbs. per square inch, into the five shore tanks. These tanks are designed so that the molasses is pumped into them at the bottom through a 12" inlet pipeline.

The tanks were fabricated on site from pre-curved mild steel plates which were welded together. Each tank stands on a concrete base and is covered by a conical roof which has a vent pipe and four dip hatches allowing samples of molasses to be taken for quality control and for visually checking the volume contained. Access to the roof is by way of a stairway on tank S4 from which access is gained by catwalks to the roofs of the other four tanks. Each tank is also furnished with a pneumercator system which is a special type of tank contents gauge whereby the volume of the contents is indicated on a gauge sited at ground level.

As molasses is unloaded, it is sampled by continuous drip at the jetty head. This sample (generally 10-40 gallons) represents the first opportunity to evaluate the whole consignment. This is well mixed before any material is taken as it is also used for sugar agreement and compared with small pre-load samples. Information on the sequence of collecting molasses from the various factories or the order in which they are loaded and discharged is not routinely available. The only certainty should be that the consignment will not contain molasses from any factory previously rejected at the pre-screening phase.

It is essential at this stage that the quality and performance of the drip sample is ascertained as soon as possible. This will be checked against specification.

The molasses as it is pumped into the shore tank will settle into its different components (i.e. factories) with the degree of homogeneity solely determined by the movement encountered during its transit. Almost without exception, fresh molasses will be unloaded into a shore tank which is partially full.

When discharge is completed, shore tanks contents are sampled both at top and bottom. This will determine the extent of settling when compared with the drip sample previously referred to. All samples are checked against specification and are evaluated in the laboratory for both fermentation and refining performance. This evaluation represents the best indicator of the extent of homogenisation, standardisation and blending that will be necessary to produce molasses of the specification which will achieve optimum production performance. This procedure (which takes two to four weeks to complete) commences as quickly as possible after preliminary investigation is completed and can only be achieved by the use of these tanks with the special facilities with which they are equipped.

The facilities are as follows:-

1. Each tank also contains a steam ring sparger which is a circular pipe close to the bottom of the tank with holes pierced in the underside of the pipe so that live steam is forced into the molasses, to heat and agitate it. This is necessary for three purposes, viz:

   (a) To homogenise the crude or raw molasses from the different locations from which it has been purchased and the different molasses from the various holds of the delivery ships.

   (b) To prevent crystallisation of the sugar content of the molasses.

   (c) To prevent impurities which tend to settle on the bottoms of tanks.

   These steam spargers must also be used when emptying the tank through its central outlet pipe which is occasionally necessary.

2. A distinctive feature of molasses tanks is the sampling point on the wall of the tank whereby samples of molasses are taken at regular intervals; this is very necessary because

the molasses quality must be checked regularly; a sampling point is also shown on diagram X. (Diagram X is attached hereto as Appendix "B".)

3. An outflow heater on each tank which heats the molasses in the region of the heater to a temperature of 110°F so that the molasses will flow and can be pumped either to the fermentation plant or into another tank for blending purposes. Outflow heaters work in the same manner as a domestic immersion heater and diagram X shows how they work and the arrangement of the steam ring sparger described in 1 above.

4. There is a system of pumps and pipelines interconnecting these five tanks. When the raw molasses has been homogenised in the shore tanks, the quality of the contents of the tank is checked and analysed. If it does not conform precisely to the specification required for the fermentation process and the particular market for which the ultimate product is required, the molasses will have to be blended, mixed and homogenised with molasses from other shore tanks until the desired specification is achieved.

Blending is carried out by a system of tanks, pumps, motors and pipes. Molasses is extracted from the tank through the outflow heater and then pumped into any other tank, either via the normal low level inlet or via the special 4" pipeline which can feed the molasses into the tank at roof level. This system has assumed an even greater importance due to the variety and size of consignments now received.

The need to achieve homogeneity in shore tanks is absolute. A biological system such as citric acid fermentation requires a consistent starting material. The refining operation also has the need for an optimum level of citric acid together with any unavoidable undesirable elements being present at a steady level.

This is only achieved with the facilities on the shore tank described.

This processing in on-going from shortly after the time of receipt of molasses until the shore tank is next charged. In some instances, the requirement of the citric acid customer is such, that they will influence the type of molasses specification to be used for their order. This necessitates additional blending and processing to the normal routine procedures described.

It is also extremely important to detect the onset of potential adverse effects and this is achieved by regular monitoring and by taking such action as is necessary in the form of further heating and agitation and homogenisation. This is considered an essential part of the fermentation and refining process. It cannot be achieved without the application of force such as pumping and the injection of live steam.

These shore tanks were designed and are used to induce a process of change in the raw crude molasses coming from the various sources and locations of supply so that molasses of the precise specification required can be made available for the further processes carried on by the appellants at Ringaskiddy and they could not function without them.

The molasses as required for production purposes is pumped to the Fermentation plant.

Mr Burnett explained that without these shore tanks the raw material brought in by ship would be inconsistent and the entire process would be impossible. Without these tanks, he said, fermentation would suffer and the degree of refining would be reduced. He also pointed out that even if the molasses from the shore tanks is not used immediately, the 'conditioning' of the molasses i.e. the mixing, blending and sampling, continues all the time.

In reply to a question from Mr O Caoimh, Mr Burnett pointed out that the mixing and blending carried out in the shore tank was essential so that the molasses would meet the range of chemical parameters and specifications required for optimum performance. He instanced the sugar content, the colour and the amount of inorganic solids as examples of those specifications.

The Law

What are rateable hereditaments are described in section 12 of the Valuation (Ireland) Act, 1852, as extended by section 2 of the Valuation Act, 1986 and, therefore, the categories of rateable valuation are those set out therein.

The original section 7 of the Annual Revision of Rateable Property (Ireland) Amendment Act, 1860 was as follows:

> In making the Valuation of any Mill or Manufactory, or Building erected or used for any such Purpose, the Commissioner of Valuation shall in each Case value the Water or other Motive Power thereof, but shall not take into account the Value of any Machinery therein, save only such as shall be erected and used for the Production of Motive Power.

The amendments made to that section by section 7 & 8 of the Valuation Act, 1986, are as follows:-

7. The following section is hereby substituted for section 7 of the Act of 1860:

"7. (1) (a) In making the valuation of any mill or manufactory, or building erected or used for any such purpose, the Commissioner of Valuation shall in each case value the water or other motive power thereof, but shall not take into account the value of any machinery therein, save only such as shall be erected and used for the production of motive power.

(b) For the purposes of this subsection, machinery erected and used for the production of motive power includes electrical power connections.

(2) The Commissioner of Valuation shall value plant falling within any of the categories of plant specified in the Schedule to this Act (inserted by the Valuation Act, 1986).

(3) In valuing plant referred to in subsection (2) of this section, the Commissioner of Valuation shall not take into consideration a part of any plant which moves (or is moved) mechanically or electrically, other than a telescopic container."

8. (1) The Act of 1860 is hereby amended by the insertion after section 15 of the following Schedule:

"SCHEDULE

(1) Reference Number	(2) Categories of Plant
1.	All constructions affixed to the premises comprising a mill, manufactory or building (whether on or below the ground) and used for the containment of a substance or for the transmission of a substance or electric current, including any such constructions which are designed or used primarily for storage or containment (whether or not the purpose of such containment is to allow a natural or a chemical process to take place), but excluding any such constructions which are designed or used primarily to induce a process of change in the substance contained or transmitted.
2.	All fixed furnaces, boilers, ovens and kilns.
3.	All ponds and reservoirs.

"

Prior to the enactment of the 1986 Act there were a number of cases which set out to define what was meant by "machinery". The Tribunal finds of particular assistance (and has found in the past) the judgment of Finlay P. (as he then was) in the Beamish & Crawford Case (8th May, 1978 (unreported) and approved by the Supreme Court on the 23rd July; (1980) ILRM 149. In

particular the learned judge held that it was inappropriate in considering, to use a neutral term, any piece of equipment used in a manufactory to consider its component parts piecemeal for the purpose of designating some parts as machinery and some as not.

Submissions

Mr O Caoimh's first submission was that the object of the Valuation Act, 1986 is not to remove from rateability what was previously rateable. He referred the Tribunal to the final paragraph of Mr. Justice Costello's judgment in Pfizer Chemical Corporation v. Commissioner of Valuation in the High Court, where he stated that the "creation of a homogeneous mix should not exempt these tanks from rateability".

He argued that it was essentially raw molasses both entering and emerging from these tanks and that these tanks were used primarily for storage purposes.

Mr Daly argued that these tanks are manifestly items of plant and as such fall to be considered under Sections 7 and 8 of the Valuation Act, 1986. He relied on the principles of Beamish & Crawford Ltd v. Commissioner of Valuation and stated that each one of the tanks is essential to the overall process carried on. He maintained that they are therefore, items of non-rateable plant.

Findings

As regards the decision in the Pfizer case before the High Court which was issued on the 9th May, 1989, the Tribunal would of course be bound to follow it if that case had been heard at the 1st instance, after the enactment of the Valuation Act, 1986. The position is that the Tribunal has reached a certain conclusion in the past in relation to the effect of the Valuation Act, 1986 (c.f. Mitchelstown Co-op Creameries Ltd, North Kerry Milk Products Ltd. and Premier Molasses).

It is satisfied that these tanks were not designed or used primarily for storage or containment. As in the Premier Molasses case the Tribunal finds that the only element of storage here is the obvious one that the molasses has to be kept somewhere once it is discharged from the ship and before it is ready for the next stage of the process.

Taking these tanks as one integrated operation or viewing each construction on its own, the Tribunal feels that in these tanks a process of change is induced and that each tank is designed and used primarily for that purpose.

Accordingly, the Tribunal finds that these constructions are entitled to exemption from rateability.