Chief Assessor and Another v First DCS Pte Ltd
[2008] SGCA 15

Case Number : CA 77/2007

Decision Date : 27 March 2008

Tribunal/Court : Court of Appeal

Coram : Chan Sek Keong CJ; Andrew Phang Boon Leong JA; V K Rajah JA

Counsel Name(s) : Ong Keng Loon and Joanna Yap (Inland Revenue Authority of Singapore) for the appellants; Leung Yew Kwong and Tan Kay Kheng (WongPartnership) for the respondent

Parties : Chief Assessor; Comptroller of Property Tax — First DCS Pte Ltd

Revenue Law – Property tax – Annual value – District cooling machinery on subject property – Pipelines carrying chilled water to customers outside subject property – Whether machinery assessable – Whether pipelines part of machinery – Section 2(2) Property Tax Act (Cap 254, 2005 Rev Ed)

Statutory Interpretation – Construction of statute – Purposive approach – Provision excluding machinery used for "making", altering" and "adapting for sale" of articles from annual value assessment of premises – Provision drafted 140 years ago – Purpose of provision to encourage investment in machinery – Whether broad interpretation should be adopted – Section 2(2) Property Tax Act (Cap 254, 2005 Rev Ed)

Words and Phrases – "Made", "alter" and "adapt for sale" – Section 2(2) Property Tax Act (Cap 254, 2005 Rev Ed)

27 March 2008

V K Rajah JA (delivering the grounds of decision of the court):

1 The respondent, First DCS Pte Ltd, owns a district cooling plant ("the Cooling Plant") on the subject property, which is located in Changi Business Park ("the Business Park"). The respondent's business involves the distribution of chilled water to its customers ("the Customers"), other businesses on neighbouring properties in the Business Park, for the purposes of their air-conditioning needs. Water is first chilled by district cooling machinery ("the Cooling Machinery") located in the Cooling Plant, and then distributed via a network of underground pipelines ("the Pipelines") to the Customers. The chilled water becomes heated in the Customers' buildings, and returns to the Cooling Plant for re-chilling via the Pipelines.

2 For the purposes of determining the property tax payable on the subject property, the appellants, namely, the Chief Assessor and the Comptroller of Income Tax, had assessed the annual value of the subject property to include: (a) the Cooling Machinery located on the subject property, as well as (b) the Pipelines, which extended beyond the boundaries of the subject property into neighbouring properties in the Business Park.

3 The question before us was whether the appellants were right to include these two items in the assessment of the subject property's annual value. The respondent appealed against the appellants' decision to the Valuation Review Board, which agreed with the appellants (see *First DCS Pte Ltd v Chief Assessor* [2006] SGVRB 2). On further appeal by the respondent, the High Court judge ("the Judge") took the contrary view and held that the Cooling Machinery and the Pipelines should not have been taken into account (see *First DCS Pte Ltd v Chief Assessor* [2007] 3 SLR 326 ("the

Judgment")). After hearing arguments, we agreed with the Judge, except for one particular aspect of his decision (see [28] below), and dismissed the appeal. We now give our reasons for that decision.

The issues on appeal

4 We will consider the following issues in these grounds of decision:

(a) whether the Cooling Machinery fell under the exemption for certain kinds of "machinery" in s 2(2) of the Property Tax Act (Cap 254, 2005 Rev Ed) ("PTA"), such that the Cooling Machinery ought not to have been considered in assessing the annual value of the subject property; and

(b) if the Cooling Machinery was exempted under s 2(2) of the PTA, whether the Pipelines were part of the Cooling Machinery, such that they too were exempted from inclusion in the annual value assessment.

Whether the Cooling Machinery was exempt under section 2(2) of the PTA

5 To answer this question, it is very important to understand the distinct processes occurring in the Cooling Plant. The Cooling Machinery consists of generators, transformers, centrifugal chillers, switchgears, switchboards, pumps and a cooling tower system. As alluded to earlier, it is disputed whether the Cooling Machinery also includes the Pipelines.

6 In the Cooling Plant, water is chilled in the centrifugal chillers to a temperature of 4ºC, which is the temperature at which water reaches its maximum density. The chilled water is then channelled to the bottom of a concrete storage tank ("the Storage Tank"), where it remains because of its high density. The chilled water at the bottom of the Storage Tank is then pumped out of the Cooling Plant by reticulation pumps to the heat exchangers in the Customers' buildings via the Pipelines. This chilled water is supplied at a slightly higher temperature of 7ºC. In the heat exchangers, the water then becomes heated to a temperature of 14ºC, whereupon it returns to the Cooling Plant via the Pipelines. The heated water is then pumped into the top of the Storage Tank, but, because water has a lower density when it is at a higher temperature, the heated water does not mix with the chilled water at 4ºC, which remains at the bottom of the Storage Tank. The water in the Storage Tank is thus stratified according to temperature and density, and this phenomenon is essential for the efficient and proper functioning of the Cooling Plant and for the supply of water to the Customers at 7ºC.

A purposive interpretation of section 2(2) of the PTA

7 Section 2(2) of the PTA reads:

> In assessing the annual value of any premises in or upon which there is any machinery used for any of the following purposes:
>
> (*a*) the making of any article or part thereof;
>
> (*b*) the altering, repairing, ornamenting or finishing of any article; or
>
> (*c*) the adapting for sale of any article,
>
> the enhanced value given to the premises by the presence of such machinery shall not be taken

into consideration, and for this purpose "machinery" includes the steam engines, boilers and other motive power belonging to that machinery.

8 It was undisputed that the relevant "article" here for the purposes of s 2(2) of the PTA was the chilled water. It was also undisputed that the Cooling Machinery was "machinery". The only question was whether the Cooling Machinery was used for any of the purposes listed in ss 2(2)(*a*)–2(2)(*c*).

9 The Judge found that although the chilled water could not be said to have been "made" under s 2(2)(*a*) (see the Judgment at [29]), it had been "altered" and "adapted for sale" under ss 2(2)(*b*) and 2(2)(*c*) respectively by the Cooling Machinery (*id* at [36]–[37]). We agreed that there had been an "adaptation for sale".

10 When construing statutory provisions, it is important to consider the purpose for which Parliament enacted the provision in question. It would be incorrect to read the provision as if it existed in a vacuum. Indeed, by virtue of s 9A of the Interpretation Act (Cap 1, 2002 Rev Ed), the courts must prefer an interpretation which supports the intended purpose of a provision over an interpretation that does not. The effect of that section is to make the purposive approach the paramount rule of construction in our jurisprudence: *PP v Low Kok Heng* [2007] 4 SLR 183.

11 In coming to his conclusions, the Judge took the right approach in considering the purpose behind s 2(2) of the PTA. He noted that while there was no express indication of Parliament's intended purpose, "it seem[ed] to be likely that the object behind s 2(2) was to encourage investments in plant and machinery for manufacturing, processing and other industrial purposes" (see the Judgment at [28]). We agreed that that appears to be the likely purpose of the subsection.

12 The three terms used in s 2(2) of the PTA – *viz*, "making", "altering, [*etc*]" and "adapting for sale" – have a long history. The terms first appeared in UK legislation which had nothing to do with property tax at all. These words were used in statutes which arose as a reaction to the Dickensian smog-and-smokestack hell of Britain's Industrial Revolution, and were the result of growing humanitarian efforts to improve the lot of the most vulnerable in society. The first of such Acts was the Preservation of the Health and Morals of Apprentices Act 1802 (c 73) (UK), which regulated the working conditions of children (and later women) in the textile industry. Subsequent Acts provided varying degrees of protection to these vulnerable groups. For our purposes, the most significant Act was the Factory Acts Extension Act 1867 (c 103) (UK) ("the 1867 UK Extension Act"), which further extended the existing laws to, *inter alia*, all factories employing over 50 persons.

13 Section 3 of the 1867 UK Extension Act defined the term "[m]anufacturing [p]rocess" as:

> [A]ny Manual Labour exercised by way of Trade or for Purposes of Gain in or incidental to the making [of] any Article or Part of an Article, or in or incidental to the altering, repairing, ornamenting, finishing, or otherwise adapting for Sale [of] any Article.

By virtue of s 12 of the same Act, "any Premises in or on which a manufacturing Process is carried on shall, until the contrary is proved, be deemed to be a Factory". These provisions constituted the first legislative usage of the terms "making", "altering" and "adapting for sale".

14 The terms were then re-enacted, with few changes to the phraseology thereof, in a series of consolidating Factory and Workshop Acts, culminating in s 149(1) of the Factory and Workshop Act 1901 (c 22) (UK) (see the definition of "non-textile factory" in that subsection). This was where the laws aimed at improving the lives of workers intersected with the law on property tax. The Rating and

Valuation (Apportionment) Act 1928 (c 44) (UK) ("the 1928 UK Rating Act") sought to provide relief from rating to certain classes of hereditaments, including "industrial hereditament[s]". By s 3(1) read with s 3(2)(*b*) of that Act, an "industrial hereditament" was defined as, *inter alia*, a "factory or workshop" under the Factory and Workshop Acts enacted between 1901 and 1920, provided that certain conditions were satisfied. (The 1928 UK Rating Act has since been repealed by s 33(2) of the Local Government and Rating Act 1997 (c 29) (UK).)

15 The Factory and Workshop Act 1901 was repealed by s 159(1) of the Factories Act 1937 (c 67) (UK), but s 159(3) of the latter Act provided that nothing in that Act should affect the definition of the expressions "factory" and "workshop" for the purposes of the 1928 UK Rating Act. When the Factories Act 1937 was repealed by the Factories Act 1961 (c 34) (UK) ("the 1961 UK Factories Act"), a similar savings provisions was contained in s 184(1) of the latter Act.

16 The terms "make", "alter" and "adapt for sale" were hence originally used in the UK to define what sort of premises needed to comply with the regulations set out in the various Factory and Workshop Acts and, consequently, which employees could benefit from the protection therein. The same terms were later adopted in the law on derating. It was this connection that led the English courts to adopt a generous interpretation of provisions containing the three terms. The rationale underlying the English courts' approach was succinctly summarised by Scrutton LJ in *Bailey v Stoke-on-Trent Assessment Committee and Potteries Electric Traction Company, Limited* [1931] 1 KB 385 at 493, as follows:

> It must be borne in mind that if you exclude a hereditament from derating because there is no manufacturing process carried on in it, you are depriving the workmen of the protection of the Factory Acts, as well as the employer of the benefit of derating. It must also be borne in mind that in construing the Factory Acts, the Courts have given a wide meaning to the words. … Putting chocolates into a decorated box, in *Fuller's Case* [[1901] 2 KB 209], and arranging flowers on a metal cross or circle to make a wreath, in *Hoare v Robert Green, Ld* [[1907] 2 KB 315], have been treated as "adapting for sale" to protect the workpeople employed in that occupation.

17 In Singapore, the terms are of almost equally great antiquity. Property tax legislation in this country originates from the Indian Acts Nos 25 and 27 of 1856, which provided for the assessment and collection of municipal rates and taxes in Calcutta, Madras and Bombay (as they were then known), as well as the Settlement of Prince of Wales' Island, Singapore and Malacca. Section 4 of the Indian Act No 25 of 1856 ("Indian Act No 25") is relevant for our purposes. This section, as modified by An Ordinance to amend the Indian Act No 25 of 1856 (No 3 of 1879) ("the 1879 Indian Ordinance"), stated:

> The estimated gross annual rent at which the houses, buildings, and lands liable to the rate might reasonably be expected to let from year to year shall, for the purposes of the rate, be held and deemed to be the annual value of such houses, buildings, and lands. The value of a house or building so estimated shall not include the value of any machinery contained therein, *but in estimating the annual value of any land on which machinery is employed for manufacturing the produce of such land, it shall be lawful to take into consideration the enhanced value given to such land by the presence of such machinery*. [amendments made by the 1879 Indian Ordinance in italics]

18 It can be seen that the position in 1879 was very different from the position today under s 2(2) of the PTA – previously, the enhanced value contributed by "machinery … employed for manufacturing" was expressly *included* in the annual value of property. For present purposes, it is important to note that Indian Act No 25 (as amended) did not contain any definition of "machinery".

19 The terms "make", "alter" and "adapt for sale" made their first appearance in Singapore in the Municipal Ordinance 1887 (No 9 of 1887), which was also Singapore's "first comprehensive municipal bill tailored to local conditions" (see Brenda S A Yeoh, *Contesting Space in Colonial Singapore: Power Relations and the Urban Built Environment* (National University of Singapore Press, 2003) at p 30). Section 3 of that Ordinance defined "annual value", along with a proviso which was virtually identical to its modern formulation in s 2(2) of the PTA.

20 The proviso to s 3 of the Municipal Ordinance 1887 was subsequently preserved in the Municipal Ordinance 1896 (No 15 of 1896), the Municipal Ordinance 1913 (No 8 of 1913) and the Municipal Ordinance 1936 (SS Cap 133) respectively. The Municipal Ordinance 1936 was superseded by the Local Government Ordinance 1957 (No 24 of 1957), which was in turn superseded by the Property Tax Ordinance 1960 (No 72 of 1960), the direct predecessor of our modern property tax legislation.

21 Although the terms have never been used in Singapore to delineate the ambit of social protection like in the UK, nonetheless, it is clear from the brief history we have outlined that the terms were adopted in our local legislation in 1887 as a conscious decision to depart from the position which pertained as a result of the modification of Indian Act No 25 by the 1879 Indian Ordinance. We can find no direct evidence of the reasons for this change, but it was most likely for the same rationale as that suggested by the Judge *vis-à-vis* s 2(2) of the PTA, *ie*, to encourage investments in manufacturing machinery.

22 Moreover, the terms were clearly adopted after the introduction of similar terminology in the 1867 UK Extension Act. That Act used the terms to define a "[m]anufacturing [p]rocess" (see [13] above), which is the essence of what the terms are trying to capture. We would take a broad view of the ambit of the terms so long as the process in question can reasonably be described as a "manufacturing process". In our view, it would be niggardly and pedantic to adopt an overly literalistic interpretation of the terms where such an interpretation would exclude machinery which is clearly used for manufacturing processes.

Whether the chilled water had been "adapted for sale"

23 The broad, purposive approach informed our construction of the phrase "adapting for sale" in s 2(2)(*c*) of the PTA. The chilled water in the present case had changed in both temperature and density. It was accepted by both sides in the court below that an "adaptation" had occurred because of this change and we think that this must be correct.

24 The difficulty which the respondent had to surmount was that ownership of the chilled water produced by the Cooling Machinery did not pass to the Customers. In other words, there was technically no "sale" of the chilled water. That being the case, even if the chilling process was an "adaptation" for the purposes of s 2(2)(*c*) of the PTA, the water could not have been "adapted for sale".

25 The Judge held that Parliament had made clear that a "district cooling service", which included the respondent's business, involved the "sale" of coolant, including chilled water, and that "the provision of district cooling service [was] considered a sale notwithstanding that property in the chilled water [did] not pass" (see [38] of the Judgment). This view was derived from the definitions contained in the District Cooling Act (Cap 84A, 2002 Rev Ed) ("DCA"). Section 2 of the DCA defines "district cooling service" as:

> … the sale of coolant for space cooling in a service area [which is defined in the same section as

"any area declared under section 7"] by a licensee operating a central plant capable of supplying coolant via pipe to more than one building in the service area ...

In the same section, "coolant" is defined as:

… chilled water or any other medium used for the purpose of providing district cooling services ...

26 It was not disputed that the DCA did not apply to the respondent as the Cooling Plant was not in the service areas covered by that Act. Still, the Judge held that there would be an "anomaly" (at [37] of the Judgment) if the DCA was not read together with the PTA, in that machinery used for district cooling services under the DCA would be entitled to exemption under s 2(2)(*c*) of the PTA whereas machinery used for similar services not under the DCA would not be so entitled.

27 The phrase "adapting for sale" must be taken in the overall context of the s 2(2) of the PTA. As we have discussed earlier, the subsection in its historical context was meant to identify "manufacturing processes" (see [22] above). We also agreed (at [11] above) with the Judge's suggestion that the purpose of s 2(2) was to promote investments in manufacturing machinery. The phrase "adapting for sale" must thus be construed with such considerations in mind. In the present instance, it is true that the chilled water itself was not sold. In a literal sense, it is the chilling effect of the water which was sold; in other words, there was a provision of "district cooling service". But, in our view, it would be undue carping to insist that the article itself be sold where it is clear that a vital and essential characteristic of the article (*ie*, the cooling effect of the water in the present case) is the real subject of sale. In a modern society, manufacturing processes and the manner in which industries exploit such processes have endless inventions and permutations completely out of the wit and ken of the drafters of legislation dating from 140 years ago. A restrictive interpretation is uncalled for in such an instance. Indeed, s 9A of the Interpretation Act now requires the court to adopt a purposive approach (see [10] above).

28 We should add, however, that contrary to the Judge's view as set out at [26] above, we did not think it either necessary or appropriate to read the PTA together with the DCA for the purposes of interpreting s 2(2) of the former Act. The two Acts govern entirely different spheres and are for entirely different purposes; the fortuitous commonality of the word "sale" in this case does not give rise to any helpful indication of how that word ought to be interpreted under the PTA.

29 We found that the process of chilling water in a district cooling service like the respondent's was indeed an "adaptation for sale" under s 2(2)(*c*) of the PTA. Having reached that conclusion, it was not necessary for us to decide whether the chilled water has been "altered" under s 2(2)(*b*). However, out of deference to counsel's efforts and diligence in attempting to clarify the meaning of "made" in s 2(2)(*a*), we decided to give our views on this particular issue.

Whether the chilled water had been "made"

30 The respondent argued before the Judge that the chilled water which it supplied to the Customers had been "made" by the Cooling Machinery within the meaning of s 2(2)(*a*) of the PTA. The Judge dismissed this submission, remarking (at [29] of the Judgment) that "this contention [could not] have been put forth with much conviction". The respondent raised the issue again on appeal.

31 We can obtain some indirect guidance through the examination of a series of somewhat eccentric Scottish cases involving chicken eggs, fish ova and unripe bananas, even though the meaning of "making" was not precisely in issue in those cases. In *Macduff-Duncan, Limited v Assessor for Perthshire* (1947) SC 346 ("*Macduff-Duncan*"), the Scottish Lands Valuation Appeal Court

considered whether a chicken egg hatchery was a "factory" or "workshop" for the purposes of the 1928 UK Rating Act. To that end, it was argued by the hatchery owners that the eggs had been "altered" into chickens by the hatching process, which involved, *inter alia*, the use of incubators, a "sexing" (*ie*, sex determination) process and storerooms. A similar argument was pursued in *Inland Revenue v Howietoun and Northern Fisheries Company Limited* [1930] SLT 240 ("*Howietoun*"), where it was argued that a fish hatching process had "adapted" fish ova into trout and salmon for sale.

32 As one might expect, the courts in both cases rejected these arguments. It was held that all that had happened was that the "processes of nature" had been facilitated by the activities of the hatcheries in question.

3 3 *Macduff-Duncan* and *Howietoun* were considered in *Assessor for Lanarkshire v Geest Industries Ltd* [1962] SLT 189. The question there was whether the process of allowing unripe bananas from the tropics to ripen in special "ripening rooms" in Scotland (as the bananas would otherwise not ripen in that climate) constituted an "adaptation" of the bananas for sale. Lord Sorn's speech is worthy of note. He referred to the above two cases and said (at 193):

> But the attempt, in these cases [*ie*, *Macduff-Duncan* and *Howietoun*], to represent the activities of the operators as an adaptation for sale was highly artificial. A fish is not an adapted *ovum* and a chicken is not an adapted egg. What the operators were doing was breeding – fish in one case, and chickens in the other. If they had had the full and logical courage of their convictions, they would have argued that they were manufacturing fish and chickens but, for understandable reasons, their courage failed them. Such being the facts in these cases, I do not think that the observations there made were intended to be of general application to proper cases of adaptation for sale; and I consider that they are not in point here. Here, the operators begin with bananas and end with bananas. When the respondent company receive[s] the bananas they are not in a marketable condition and, after they have been treated in the ripening rooms, they are in a marketable condition. [italics in original]

34 The passage above highlights the difference between the concept of "making" on the one hand, and the concepts of "altering" and "adapting" on the other. One "makes" an utterly new article out of various raw materials. However, when one "alters" or "adapts" an article, the end result must still be that same article, albeit somewhat changed in some respect. Thus, a chicken is not an "adapted" egg because it is utterly different in every respect from an egg. But, both a ripe banana and an unripe banana are still essentially bananas.

35 The question of whether an article has remained essentially the same article or whether it has changed into something different is thus a question of degree. This may be a very difficult exercise. In the instant case, the respondent raised the ingenious argument that the Cooling Machinery "made" chilled water at 4ºC because water at that temperature bore a unique property. At that temperature, water is at its densest. At other temperatures, both below and above 4ºC, water is less dense; and at 0ºC, water becomes ice. The respondent drew an analogy with machinery which distilled water by evaporating water and condensing the resultant steam. Such machines, according to the respondent, could be said to have "made" distilled water.

36 We did not agree that chilled water at 4ºC was "made" for the following reasons, which, we stress, must be taken as a whole rather than individually. Firstly, the water remained in its liquid state and did not change into a gaseous or solid form. Secondly, the water did not change chemically. Thirdly, the changes in density and temperature resulting from the chilling process were changes along a continuum of those properties rather than distinct changes between discrete conditions. Fourthly, the change in temperature from 14ºC to 4ºC did not change the character of water as a

liquid. These factors indicated that the degree of change involved in chilling water was not sufficiently great to constitute the "making" of a new article.

Whether the Pipelines were part of the Cooling Machinery

37 Having found that the Cooling Machinery fell under s 2(2) of the PTA, we now turn to the question of whether the Pipelines should be similarly exempted on the basis that they form part of the Cooling Machinery.

38 The Judge held (at [41] of the Judgment) that the Pipelines were not to be included in the assessment of the subject property's annual value because they were an integral part of the Cooling Machinery, which was exempt under s 2(2) of the PTA. Before this court, the appellants argued that the Pipelines were not part of the "machinery" of the Cooling Plant. They submitted that the plant comprised three different and distinct parts: the centrifugal chillers, the Storage Tank and the Pipelines. The centrifugal chillers, which were the only components directly related to the chilling of water, were the "machinery". The Pipelines, which served the purpose of distributing the chilled water, were not part of the centrifugal chiller system. In contrast, the respondent argued that the Pipelines were part of the Cooling Machinery in the same way that pipes in the engine of a car were part of the machinery of the car. The Pipelines, it was contended, formed an integral part of the machinery used for the chilling process.

39 The question here is how "machinery" in s 2(2) ought to be defined. The appellants cited the Malaysian High Court decision of *Tenaga Nasional Bhd v Majlis Perbandaran Seberang Prai* [2003] 4 MLJ 781 ("*Tenaga Nasional (HC)*"), which was affirmed by the Federal Court in *Majlis Perbandaran Seberang Perai v Tenaga Nasional Bhd* [2005] 1 MLJ 1) ("*Tenaga Nasional (Fed Ct)*"), as authority for the proposition that each item of machinery found on the subject property should be considered differently, with only the specific item of machinery which directly produced the article being excluded from the assessment of the subject property's annual value. These two Malaysian cases (collectively referred to as the "*Tenaga Nasional* cases") concerned the question of whether a local authority had correctly assessed the rates of the subject property, on which an electricity generating power station had been built.

40 In *Tenaga Nasional (HC)*, the Malaysian High Court held that in assessing the annual value of land and buildings under the Local Government Act 1976 (No 171 of 1976) (M'sia) ("the LGA"), all machinery attached to land and buildings was intended to be included in the meaning of "land" and "building", except for what the court termed "article production machinery" (*ie*, machinery exempted by proviso (*b*) to s 2 of the LGA ("the Malaysian proviso (*b*)"), which was *in pari materia* with s 2(2) of the PTA). "[M]achinery" in the Malaysian proviso (*b*) was defined as including "steam engines, boilers, or other motive power belonging to such machinery [*ie*, machinery used for the purposes listed in the proviso]". On that basis, it was held that the power generation units as well as the steam engines, boilers and other motive power belonging to the power generation units were not to be taken into account in assessing the subject property's annual value.

41 The Malaysian High Court also held (at [25] of *Tenaga Nasional (HC)*) that the cooling water and the boiler feed pumps were "no doubt pieces of machinery", but apparently distinguished them from the power generation units on the basis that the latter "directly produce[d] the product 'electricity'" (at [23]), whereas the former two items pumped cooling water and condensate in the de-areator storage tank into the boiler drum. Nevertheless, the pumps and the transformers were likewise not to be included in the annual value assessment because they did not fall under the definition of "building" in s 2 of the LGA.

42 The Federal Court affirmed the High Court's decision in the following words (see *Tenaga Nasional (Fed Ct)* at [30]):

> From the finding of the learned judge we can conclude that the machinery referred to in [the Malaysian proviso (*b*)] refers to 'article production machinery' that [is] not integrated with the 'land' and/or 'building'. The intention of the legislature in [the Malaysian proviso (*b*)] is to apply [that proviso] to all machinery [used] in the production of articles or goods ….

43 The appellants correctly cited the *Tenaga Nasional* cases insofar as the Malaysian High Court in *Tenaga Nasional (HC)* did indeed consider the power station as comprising different parts. This can be seen in the implied distinction drawn between the machinery which directly produced electricity and the machinery which performed functions that, we assume, were peripheral to that purpose (see [41] above).

44 But, with respect, we are wary of putting too much emphasis on the *Tenaga Nasional* cases for the following reasons. Firstly, unlike what the appellants claimed, the Malaysian High Court in *Tenaga Nasional (HC)* did not hold that only the power generation units were exempt from valuation. The pumps and the transformers were also exempt. This blew a hole in the appellants' argument that only machinery which directly produced the chilled water (in this case, the centrifugal chiller system (see [38] above)) qualified for exemption under s 2(2) of the PTA.

45 Secondly, the Malaysian High Court took an approach to the concept of "machinery" which we do not think reflects the approach in Singapore. The Malaysian High Court appeared to regard the Malaysian proviso (*b*) (which, as stated at [40] above, was the equivalent of s 2(2) of the PTA) as an exclusion to the definition of the term "building". This is evident from the following passage (see *Tenaga Nasional (HC)* at [24]):

> For clarity, the annual value of the holding in this case would comprise a) the value of the land, and b) buildings (if any) thereon, which term i) *includes* any house, hut, shed or roofed enclosure, whether used for the purpose of human habitation or otherwise, and also any wall, fence, platform, underground tank, staging, gate, post, pillar, paling, frame, hoarding, slip, dock, wharf, pier, jetty, landing-stage, swimming pool, bridge, railway lines, transmission lines, cables, redifussion lines, overhead or underground pipelines, or any other structure, support or foundation; and ii) *excludes* machinery for the production of electricity, and the steam engines, boilers or other motive power belonging to such machinery. [emphasis added]

Based on this premise, the Malaysian High Court proceeded to conclude that the cooling water and the boiler feed pumps were not rateable because they did not fall under the definition of "building".

46 The sequence in which the definitions of "annual value" and "building" appear in the Malaysian proviso (*b*) (which is similar to the sequence in s 2(1) of the PTA) does not support the suggestion that "article production machinery" should be excluded from the definition of "building" in s 2 of the LGA. Whether a particular piece of "machinery" may be excluded from annual value assessment by virtue of the Malaysian proviso (*b*) (or, correspondingly, s 2(2) of the PTA) has nothing to do with whether it falls under the definition of "building" in s 2 of the LGA (or, correspondingly, s 2(1) of the PTA). The two concepts are quite distinct under the LGA and the PTA. As pointed out by the Judge at [27] of the Judgment, for machinery on immovable property to be potentially assessable for property tax, it must first be affixed to the property such that it is part of the property. Even if the machinery does not come under the definition of "building", it could still be affixed to land so as to become part of the land and, thus, be potentially assessable. Whether or not the machinery in such a scenario is actually to be included when assessing the land's annual value will depend on whether the

machinery falls under s 2(2) of the PTA. This has nothing to do with the definition of "building" in s 2(1) of the PTA.

47 The third difficulty which we have with the *Tenaga Nasional* cases is the Federal Court's interpretation of *Tenaga Nasional (HC)*. It is simply incorrect to say, as the Federal Court did (see the passage quoted at [42] above), that the Malaysian proviso (*b*) applied only to "article production machinery" that was not integrated with the land or the building. Indeed, as we have just mentioned (at [46] above), the converse is true. If the machinery is not affixed to the land, the question of including it in the assessment of the land's annual value does not even arise. Even if the machinery is affixed to the land, it may still be excluded for assessment purposes by the Malaysian proviso (*b*) if it constitutes "article production machinery". In this context, we are of the view that *The Shell Company of the Federation of Malaya Ltd v Commissioner of the Federal Capital of Kuala Lumpur* [1964] 1 MLJ 302 states the correct position (at 304), namely, that "all machinery which are fixtures are rateable, saving only the express exceptions".

48 Given these reservations about the *Tenaga Nasional* cases, we prefer to consult the actual wording of s 2(2) of the PTA itself to ascertain the scope of the term "machinery". It is crucial to note that the exemption applies to "machinery" used for certain prescribed purposes – *ie*, for, *inter alia*, making, altering, and adapting for sale an article. A narrow view of the meaning of "machinery" would hold that only those parts of the machinery in question which directly contribute to the prescribed purposes can be considered "machinery". There is some support for this in s 2(2) itself, which states that "'machinery' *includes* the steam engines, boilers, and other motive power belonging to that machinery" [emphasis added]. F A R Bennion*, Statutory Interpretation: A Code* (Butterworths, 4th Ed, 2002) at p 489 states:

> An enlarging definition is designed to make clear that the term includes a matter that otherwise would or might be taken as outside it.
>
> …
>
> The typical form of an enlarging definition is 'T includes X'. This is taken to signify 'T means a combination of the ordinary meaning of T plus the ordinary meaning of X'. In other words the mention of X does not affect the application of the enactment to T in its ordinary meaning.

49 Applying that principle to s 2(2) of the PTA, one could argue (although the appellants did not do so) that by expressly including "motive power belonging to that machinery" in the definition of "machinery", Parliament indicated that "machinery" would ordinarily *not* include such "motive power". The "motive power" element of a piece of machinery can be said to be peripheral to those elements used for the direct purpose of that machinery, which is the making, altering, adapting for sale, *etc* of an article. It follows that "machinery" in s 2(2) similarly does not include other elements used for purposes peripheral to the direct purpose of the machinery, such as elements used for distribution and storage, where there is no express inclusion of those peripheral elements by means of an enlarging definition.

50 The respondent cited three cases which it said supported the contention that the Pipelines were part of the Cooling Machinery: *The Mayor & Councillors of Perth v Perth Gas Company, Ltd* (1903) 5 WAR 28 ("*Perth Gas Company*"), *Chief Assessor & Comptroller of Property Tax v Van Ommeren Terminal (S) Pte Ltd* [1993] 3 SLR 489 ("*Van Ommeren*") and *Air Products Ltd v Case* (1970) 16 RRC 194 ("*Air Products*").

51 A close reading reveals that these cases can be divided into two groups decided on different

bases: *Perth Gas Company* and *Van Ommeren* on the one hand, and *Air Products* on the other. To the latter group, we would add the case of *Edwards v BP Refinery (Llandarcy), Ltd* (1974) 19 RRC 223 ("*Edwards*").

52 In *Van Ommeren*, Chao Hick Tin J considered the question of whether pipelines connected to certain storage tanks on the subject property were "necessary adjuncts" (at 497, [39]) to the storage tanks so as to be rateable together with them. (The storage tanks were rateable because they fell within the definition of "building" in s 2 of the Property Tax Act (Cap 254, 1985 Ed).) He held that the pipelines were such adjuncts for the following reasons (*ibid*):

> I do not think the pipelines should be considered in isolation and separate from the storage tanks. The pipelines cannot be viewed otherwise than as an integral part of the tanks without which the tanks in themselves cannot be of any functional use. The pipelines serve as conduits in the transportation of the petroleum products from vessels to the tanks and vice-versa. They are necessary adjuncts to the storage tanks.

One should note that Chao J's rationale for considering the pipelines as part of the storage tanks was that the storage tanks would not be of any use without them. It is also significant that the court held that the pipelines served the purpose of transportation.

53 In *Perth Gas Company* ([50] *supra*), a gas company which produced gas for sale to consumers had pipes that extended for several miles beyond the land occupied by the company. Under the Municipal Institutions Act 1900 (WA), all land was rateable, but the definition of "land" was expressly stated "not [to] include any machinery, whether affixed to the soil or not, for the purposes of the valuation of the annual value". The question was whether the pipes were "machinery". Stone CJ said at 31:

> If these pipes and mains were standing alone, separated from the machinery, I do not think I should be inclined to go so far as to hold that, under those circumstances, they constituted machinery, but as they form part of the machinery of the Gas Company, where the gas is manufactured, and are used for the purpose of conveying the gas from the factory to the consumers, I think that they do come within the meaning of this clause, and are machinery.

The main point to note here is that the pipes were not actually used in the manufacture of gas, which was done in the gas company's factory, but were used for the transportation of gas to the company's customers.

54 For the second group of cases, we would discuss principally the case of *Edwards* ([51] *supra*), heard by the English Lands Tribunal ("the Tribunal"), as it referred comprehensively to *Air Products* ([50] *supra*) and other significant cases in this field.

55 The statutory background to this case is significant and bears mentioning in detail. Under the Plant and Machinery (Rating) Order 1960 (SI 1960 No 122) (UK) ("the 1960 Order"), the plant and machinery which were deemed to be part of a hereditament for rating purposes included "pipeline[s]", which were defined in Class 5 of the 1960 Order as follows:

> 5.(1) A pipeline, that is to say, a pipe or system of pipes for the conveyance of any thing, not being:
>
> …

(*c*) a pipe or system of pipes forming part of the equipment of, and wholly situate within, a factory or petroleum storage depot or premises comprised in a mine, quarry or mineral field;

and exclusive of so much of a pipe or system of pipes forming part of the equipment of, and situate partly within and partly outside, a factory or petroleum storage depot or premises comprised in a mine, quarry or mineral field as is situate within, as the case may be, the factory or petroleum storage depot or those premises.

(2) In this paragraph:

(i) "factory" has the same meaning as in the [1961 UK Factories Act] …

56 The definition of "factory" in s 175(1) of the 1961 UK Factories Act was as follows:

Subject to the provisions of this section, the expression "factory" means any premises in which, or within the close or curtilage or precincts of which, persons are employed in manual labour in any process for or incidental to any of the following purposes, namely:—

(*a*) the making of any article or of part of any article; or

(*b*) the altering, repairing, ornamenting, finishing, cleaning, or washing or the breaking up or demolition of any article; or

(*c*) the adapting for sale of any article …

5 7 *Edwards* concerned an oil refinery with many pipelines connecting its different parts. One of these pipelines, known as the "SCOW line", conveyed fuel oil from a pump-house on the main site of the refinery to a foreshore compound, where the oil was then pumped through another pipe (which was not the subject of the case), which in turn was linked to the customer. The oil was kept at a pre-determined temperature to ensure that it flowed through the SCOW line. The particular question before the Tribunal which is pertinent to the present appeal was whether the SCOW line formed "part of the equipment of … a factory" so as to be excluded from rating under Class 5(1)(*c*) of the 1960 Order

58 It was not disputed that the refinery produced oil such that it was a "factory" within the meaning of s 175(1) of the 1961 UK Factories Act 1961. It was argued by the ratepayers that the SCOW line contributed to the functionality of the refinery in that the SCOW line was of no use without the refinery and the refinery was similarly useless without the SCOW line. Thus, the SCOW line was part of the equipment of the refinery. The Tribunal rejected this argument and held that the SCOW line was rateable.

59 In reaching this conclusion, the Tribunal considered and applied *Air Products* ([50] *supra*). In that case, pipelines carrying pressurised oxygen and nitrogen manufactured in the ratepayer's factory to the ratepayer's customer were held to be part of the equipment of the factory because the oxygen and the nitrogen were continuously being "made" or "adapted for sale" while in the pipelines. The final article sold to the ratepayer's customer was oxygen and nitrogen of a specified pressure, and the pipelines were instrumental in the creation of the requisite pressure. *Air Products* held that pipes which conveyed an already finished article for the mere purpose of transportation or distribution were not "part of the equipment of … a factory", while the contrary position pertained where the pipes were part of the manufacturing process itself.

60 With regard to the SCOW line in *Edwards*, the Tribunal held that the temperature maintained therein was for the purpose of transportation (by easing the flow of the oil) and not for the purpose of manufacture. As such, the Tribunal concluded (at 241) that the SCOW line was "*solely* used for some purpose other than the processes carried on in the refinery and accordingly [was] not to be deemed to form part of a factory" [emphasis added].

6 1 *Van Ommeren* ([50] *supra*) and *Perth Gas Company* ([50] *supra*) take a much broader approach than *Edwards* and *Air Products*. In the former cases, the emphasis was on whether the machinery would be "useful" without the pipes in question. If the test for whether pipes form part of the machinery is considered from this perspective, then even pipes used merely for the purpose of transporting the finished article to consumers would be "useful" in the sense that the article would otherwise not be able to reach the consumers. In the latter cases, the test applied was whether the pipelines were used as part of the manufacturing process. Pipelines used merely for the purpose of transportation were held *not* to be used for the manufacturing process.

62 We have set out the statutory background to *Edwards* in some detail because it shows the close links between the background of that case and that of the present appeal. The definition of "factory" in *Edwards* (which was based on s 175(1) of the 1961 UK Factories Act) is pertinent to s 2(2) of the PTA insofar as "factory" in the former Act was defined as premises used for the purposes listed in ss 2(2)(*a*)–2(2)(*c*) of the PTA. There is some literal difference in approach in that in *Edwards*, the Tribunal was asking itself whether the SCOW line was "part of the equipment of … a factory", whereas, in this appeal, the question is whether the Pipelines were part of the Cooling Machinery. But, we do not think that the distinction is a crucial one.

63 In view of the similarity between the statutory context in *Edwards* and that in the present case, we would prefer the approach taken in *Edwards* (and likewise *Air Products*) to the broader approach taken in *Van Ommeren* and *Perth Gas Compan*y. The narrower reading advocated in *Edwards* is also in accord with the reading of s 2(2) of the PTA which we described earlier at [49]. It preserves the definition of "machinery" as one confined to machinery directly involved in, *inter alia*, "making", "altering" and "adapting for sale" an article while excluding machinery involved in peripheral processes such as the transportation and distribution of finished articles.

64 In the context of the instant case, the article (chilled water) had undergone an "adaptation for sale". The centrifugal chillers in the Cooling Machinery were doubtlessly part of the machinery by which this process took place. It might appear, on a first impression, that the Pipelines, which transported chilled water to the Customers, should not be considered as part of the Cooling Machinery. But, we preferred the opposite view. The instant case is distinguishable from cases like *Edwards* in one important respect: the pipelines in that case transported the finished article to consumers – and that was that. However, in the instant case, the chilled water at 7ºC goes out to the Customers via the Pipelines, becomes heated to 14ºC and returns to the Cooling Plant. As found by the Judge at [7] of the Judgment, the difference in temperature (and, hence, density) of the outgoing and the incoming water, which resulted in stratification of the water in the Storage Tank, was *essential* to ensuring that the chilled water was supplied to the Customers at the requisite temperature of 7ºC. The SCOW line in *Edwards* only carried the finished product for distribution, but, here, the Pipelines could not be considered merely as a distribution network for the finished product. Rather, the Pipelines carried both the output and the input of the manufacturing process in a *closed circulatory system* which included the Cooling Machinery and the heat exchangers in the Customers' buildings. The system was not entirely hermetic in the sense that water from the mains was also added to replace water lost through evaporation, but we did not regard this fact as detracting from the centrality of the Pipelines to the chilling process itself. Without the Pipelines, the chilling process could not have worked at all. For this reason, we concluded that the Judge was correct in holding

that the Pipelines were part of the Cooling Machinery. Thus, as we had earlier held that the Cooling Machinery fell under the exemption in s 2(2) of the PTA, the Pipelines were also excluded for the purposes of annual value assessment.

Conclusion

65 The purposive approach to construction governed our understanding of s 2(2) of the PTA. Applying that approach, it was clear that the subsection ought to be construed generously so as to grant exemption from inclusion in annual value assessment to all machinery used for manufacturing processes. Following this construction, we concluded that the Cooling Machinery had caused the chilled water to be "adapted for sale" so as to fall under s 2(2)(*c*) of the PTA. Additionally, the Pipelines, which ran outside the Cooling Plant, were part of the Cooling Machinery. Thus, the Pipelines also fell under s 2(2) of the PTA. The appeal was therefore dismissed with costs and the usual consequential orders.

Copyright © Government of Singapore.