

**REFERENCE RELATING TO THE COMPLETED ACQUISITION BY
NUFARM LIMITED OF AH MARKS HOLDINGS LTD**

Summary

1. On 29 August 2008, the Office of Fair Trading (OFT) referred to the Competition Commission (CC), for investigation and report, the completed acquisition of the phenoxy herbicides business of AH Marks Holdings Ltd (AH Marks) by Nufarm Crop Products UK Limited, a wholly-owned subsidiary of Nufarm UK Limited whose ultimate parent company is Nufarm Limited, a company listed on the Australian Stock Exchange (together, Nufarm). The reference requires us to determine whether a relevant merger situation has been created; and if so, whether the creation of that situation has resulted in or may be expected to result in a substantial lessening of competition (SLC) within any market or markets in the UK for goods or services.
2. We are required to report by 12 February 2009.
3. There is a wide variety of herbicides based on different chemicals used for the prevention and control of weeds in crops. This case relates to phenoxy herbicides, used as a low-cost method of broadleaf weed control in grasslands and cereals. The leading phenoxy herbicides globally are 2,4-D, MCPA and MCPP/MCPP-p. In the UK MCPP-p is used most frequently, followed by MCPA and then 2,4-D.
4. MCPA, 2,4-D and MCPP-p have similar supply chains and manufacturing processes. A technical acid is produced either as a flake or as a molten liquid,

both of which are used to make a manufacturing concentrate, either by reacting the technical acid with alcohol ('esters') or an alkali ('aqueous solution'). The manufacturing concentrate is further diluted (with water, solvents or alkali) and, in some cases, mixed (using the same equipment used to convert the technical acids to manufacturing concentrates) with other chemicals to produce formulated products. Nufarm and AH Marks overlap in the production of technical acid, manufacturing concentrates and formulated products.

5. AH Marks manufactured and supplied six phenoxy technical acids (MCPA, 2,4-D, MCPP/MCPP-p, 2,4-DP/2,4-DP-p, MCPA and 2,4-DB) and also sold manufacturing concentrates and formulated products in bulk to third-party intermediaries which sometimes process the products further (making their own formulated products) before branding, packaging and selling to distributors. It did not sell direct to distributors. AH Marks operated from a single plant at Wyke, near Bradford in Yorkshire.

6. Nufarm is a manufacturer and worldwide supplier of generic crop protection products based in Australia with plants also in the UK, Austria and the Netherlands. Nufarm manufactures and sells a variety of herbicides, insecticides, fungicides and other related products. Herbicide products include the manufacture of 2,4-D (in Austria) and MCPA (in the Netherlands). Before the merger, Nufarm sourced its MCPP-p, MCPB and 2,4-DP-p requirements for UK use (and 2,4-DB requirements for non-UK use) from AH Marks. Nufarm sells branded products direct to distributors.

7. Nufarm purchased the AH Marks business from AH Marks' shareholders on 5 March 2008. We found that this created a relevant merger situation and no party disputed this during our inquiry.

8. We considered what was likely to have happened in the absence of the merger (ie the 'counterfactual') which provides a benchmark against which we can assess the effects of the merger. We found that, absent the acquisition by Nufarm, it was likely that AH Marks would have been sold to United Phosphorous Ltd (UPL) which would have supplied UK customers with phenoxy herbicide products at all levels of the supply chain, either from the Wyke site, or possibly with imported products.

9. We next considered the definition of the relevant markets. We found that there were:
 - three separate markets for the supply of 2,4-D, MCPA and MCPP-p technical acids to UK customers, due to a lack of demand-side substitution and regulatory requirements which prevent supply-side substitution in the short term;
 - three separate markets for the supply of 2,4-D, MCPA and MCPP-p manufacturing concentrates to UK customers, due to a lack of demand-side substitution, regulatory requirements and lack of easy access to the required inputs which prevent supply-side substitution in the short term; and
 - six separate markets for the supply of 2,4-D, MCPA and MCPP-p formulated products to UK customers for use on (a) cereal crops and (b) grassland. This was due to lack of demand-side substitution, regulatory requirements (both for switching between production processes and separate testing requirements for cereal crops and grassland) and lack of

access to the required inputs which prevent supply-side substitution in the short term.

10. For each of the 12 markets identified above, we considered that the ability to supply the UK (ie the ownership of the relevant UK and EU licences) is a part of the product market separate from the geographic market definition. It was not necessary to be located in the UK or the EU to obtain those licences and phenoxy herbicides are regularly transported around the world, with transport costs a low proportion of total costs. Given the limited number of actual and potential competitors, we considered the constraint imposed by each one individually and therefore did not find it necessary to conclude on the relevant geographic market definition.
11. We considered it appropriate to assess the impact of the merger at the technical acid level of the supply chain. The main barrier to producing manufacturing concentrates and formulated products in the UK is access to technical acids approved for use in the UK. Even if there was some competition in the supply of manufacturing concentrate and formulated products, the price was affected by the ability to purchase competitively-priced technical acids. An SLC and therefore increased prices at this level of the supply chain would cause an increase in the prices of relevant manufacturing concentrates and formulated products.
12. We found at the technical acid level that access to protected data was the key barrier to entry. Under Directive 91/414/EEC, manufacturers of technical acids must register their product with data demonstrating environmental and biological safety. Generating this data is costly and can take a significant period of time. Suppliers that have submitted this data benefit from a period of

'data protection' and the data can only be obtained at low cost once this period has expired. Where data protection is in force, the barriers to an entrant are sufficiently high to mean that it is more likely to wait until the data protection expires than incur the expenditure otherwise necessary.

13. In 2,4-D, where data protection had expired we found evidence of several manufacturers looking to supply the UK market. While we identified one alternative source of MCPA within the EU following the merger, we found no evidence that it was likely to seek actively to enter the UK market and found no evidence of other potential entry in the period before data protection expired in May 2011. In relation to MCPP-p, we found no evidence of potential entry in the period prior to the expiry of data protection (June 2009), or of any possible entrant looking to enter the market immediately following its expiry.
14. We did not find transport costs or quality concerns to be an entry barrier to imports. Likewise we found that there was sufficient spare capacity for 2,4-D and MCPA either currently in existence or as a result of the ease with which production assets could be switched between the production of some phenoxy technical acids, to satisfy UK demand. However, with respect to MCPP-p, we found the limited number of worldwide producers, the relatively large use of MCPP-p in the UK compared to the global market and the uncertainty regarding the ease of switching production from MCPA indicated that capacity might make entry to this market less likely.
15. We found that any buyer power would be insufficient to countervail possible anti-competitive effects of the merger. Despite the presence of six large distributors which act as an important route to the market, individually they did

not have sufficient buyer power, due to a lack of alternative suppliers and substitutable products. Formulators might, however, be able to encourage entry into the UK supply of 2,4-D and MCPA where, in each case, there was one alternative source of technical acid with the necessary approval under Directive 91/414/EEC.

16. We found that Nufarm and AH Marks were competing in the relevant markets before the merger. As noted, both Nufarm and AH Marks supplied phenoxy products at the technical acid, manufacturing concentrate and formulated product levels of the supply chain. AH Marks and Nufarm were competing directly in the supply of technical acids and manufacturing concentrates. AH Marks did not sell formulated products direct to distributors, but sold bulk formulated product to packagers, such as Headland Agrochemicals, which were then sold to distributors or sold acids and concentrates to formulators, such as UPL, which then sold to distributors. Customers were aware that they were purchasing AH Marks products via companies such as Headland Agrochemicals and UPL. We therefore found that the bulk formulated products sold by AH Marks were in the same market as the packaged products sold by Nufarm to distributors.

17. Nufarm purchased its MCPP-p technical acid from AH Marks through a toll manufacturing agreement. However, we found that the agreement allowed Nufarm to compete with AH Marks for the supply of MCPP-p technical acid in the UK. Further, Nufarm has previously manufactured, and holds the relevant registrations to restart manufacturing, MCPP-p, and we consider that this threat might have acted as an additional competitive constraint on AH Marks.

18. We assessed the competitive effect for each of the relevant technical acids, 2,4-D, MCPA and MCPP-p.
19. Prior to the merger there were three manufacturers of 2,4-D technical acid supplying UK customers: Nufarm, AH Marks and Dow AgroSciences (Dow). In the counterfactual, there would still be three (Nufarm, UPL and Dow). Following the merger, Nufarm and Dow were the only suppliers and the merger therefore removed one of Nufarm's closest competitors. However, we found that Nufarm would still face competition from Dow. Further we found that there was a sufficiently high likelihood of entry (since data protection for 2,4-D had expired) to ensure the markets are competitive. In particular we were aware of one potential entrant capable of supplying UK customers and other companies taking active steps to enter. We therefore consider that post-merger Nufarm would face sufficient competitive constraints to prevent it from sustaining price increases.¹
20. Prior to the merger Nufarm and AH Marks were the only manufacturers of MCPA supplying UK customers. In the counterfactual, there would still be two: Nufarm and UPL, with competition at least as strong as that between Nufarm and AH Marks. Post merger, Nufarm was the only manufacturer and supplier of MCPA technical acid to UK customers. MCPA will remain under data protection until 2011 and we found sufficient entry to replace the loss of constraint from AH Marks to be highly unlikely until after that time. Consequently there was one supplier of MCPA technical acid to UK customers post-merger. We therefore considered that Nufarm might be

¹We note that Nufarm increased 2,4-D prices post merger, but it is not clear to what extent these price increases were driven by Nufarm's expectations of future cost increases or whether these price increases will be sustainable.

expected to be able to increase prices at each level of the supply chain until at least one year after the loss of data protection in June 2011.

21. Prior to the merger there was one manufacturer of MCP-P, AH Marks, but as noted above, the toll manufacturing agreement allowed AH Marks and Nufarm to compete in the supply of MCP-P to UK customers. In the counterfactual, we consider that UPL would have continued to operate the agreement and so there would still be two companies competing in the supply of MCP-P technical acid to UK customers while it remained in force. UPL might also be constrained by the threat of Nufarm re-commencing manufacture of MCP-P. The effect of this merger is the loss of the only competitive constraint on Nufarm in the supply of MCP-P technical acid to UK customers. We therefore considered that Nufarm might be expected to be able to increase prices of MCP-P at each level of the supply chain. MCP-P was data protected until June 2009 and entry was highly unlikely until after that time.
22. On the basis of our competitive assessment, we therefore found:
- insufficient evidence to find that the merger may be expected to result in an SLC for 2,4-D at the technical acid level of the supply chain or, therefore, at the manufacturing concentrate and formulated product levels;
 - that the merger may be expected to result in an SLC for MCPA at the technical acid level of the supply chain and, therefore, at the manufacturing concentrate and formulated product levels. We considered that this would last until at least a year after MCPA lost data protection in May 2011; and

- that the merger may be expected to result in an SLC for MCPP-p at the technical acid level of the supply chain and, therefore, at the manufacturing concentrate and formulated product levels. We considered that this would last until at least a year after MCPP-p lost data protection in June 2009, and possibly significantly longer, as unlike for MCPA, we found no evidence of likely entrants.

23. The markets in relation to which we have identified concerns are small, at least as regards the UK, and the detriment resulting from the SLC for individual farmer customers in the UK may also be small. However, cumulatively, that detriment may be significant, and may persist, giving rise to appreciable harm to consumers. We shall take account of these matters in our consideration of the proportionality of the remedies that may be required to address the SLC we have found and any resulting detriment.