COMPETITION TRIBUNAL
REPUBLIC OF SOUTH AFRICA

Case No: 55/LM/Aug02

In the large merger between:

Rustenburg Platinum Mines and Eastern Platinum Mines Ltd "Pandora Joint Venture"

and

Rustenburg Platinum Mines Ltd

Reasons for Decision

APPROVAL

On 16 October 2002 we unconditionally approved the joint venture between Rustenburg Platinum Mines and Eastern Platinum Mines Ltd "Pandora Joint Venture and Rustenburg Platinum Mines Ltd. The reasons for our decision follow.

Background

The Transaction

1. RPM and EPL are to establish a joint venture, (the "Pandora Joint Venture" or "JV") which will exploit the UG2 Reef on portions of 3 farms near Brits in the North West Province. Both parties will have 45% each in the J.V. while the two black empowerment companies, Newco and Northam, will have 5% each.

The parties

2. The acquiring firm is a joint venture, (the "Pandora Joint Venture or J.V."), between Eastern Platinum Mines Limited ("EPL") and Rustenberg Platinum Mines Limited ("RPM"), who will jointly control the J.V. The Pandora J.V. is being formed to mine and concentrate platinum group metals ("PGM's") – namely Palladium, platinum, iridium, osmium, rhodium and ruthenium.

3. EPL is ultimately controlled by Lonmin Plc[1] and engaged in smelting, base metal refining and precious metal refining.

4. Rustenberg Platinum Mines Limited ("RPM"), is ultimately controlled by Anglo Platinum, ("AngloPlat") the world's leading producer of Platinum. RPM is engaged in mining, smelting, base metal refining and precious metal refining.

5. Northam is 22.5% owned by Anglo Platinum and 22.5% held by Mvelaphanda Resources, a major black economic empowerment group. It mines and mills ore and is responsible for smelting and base metal refining up to PGM concentrate state.[2]

6. Newco, likewise an empowerment company, represents the communities of some 20 000 people surrounding EPL and the proposed Pandora mine. They are members of the Bapo Ba Mogale ("Bapo") tribe. The company they formed is known as the Bapo Bamagale Mining Company (Pty) Limited, and the shareholders of that company will be the Bapo tribe.

7. RPM and EPL are committing assets into the joint venture and as such they may be regarded as the target firms.

Rationale for Transaction

8. The transaction will facilitate the establishment of a large mine (Pandora Mine) to mine the entire area of the UG2 Reef more efficiently than having to mine each area separately. The parties state that it is not feasible for RPM (which owns the mineral rights to two of the mines and has secured mining rights of the third farm from the state) to mine the entire area on its own, as it would require much infrastructure investment. EPL already has shafts adjacent to the three farms and it is more economical to upgrade existing EPL infrastructure, rather than erecting an entirely new plant. In addition to having the requisite infrastructure, EPL also has the experience to manage this project. Generally, the acquisition would permit better utilization of RPM's mineral assets – leading to lower costs in extraction and in management.

The relevant market

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1 Along with its sister company, WPL, through LSA (UK) Limited, a wholly owned subsidiary of Lonmin Plc.

2 Northam have a base metal refinery, not a precious metal refinery. The parties stated at the hearing that Implats has a shareholding in Northam too although it is not clear what stake they actually do have.

9. Platinum group metals – PGMs – comprise platinum, palladium, rhodium, ruthenium, iridium and osmium. The properties of this group of metals are such that substitution of PGMs with metals outside of this group is not commercially or technically viable over an important range of uses. There is a certain degree of substitutability *between* the members of the PGM. However the 1996 European Commission report on the proposed merger of the platinum interests of Gencor (viz. Implats) and Lonrho (viz. LPD) (henceforth 'the Gencor-Lonrho report') found that PGMs do not constitute a single relevant market but rather six relevant markets, each comprising the various members of the platinum group of metals.[3] Although subsequent developments may indicate a greater degree of substitutability between platinum and palladium in the manufacture of auto-catalysts than that suggested in the EC report, we are confident that the relevant markets identified by the European Commission remain valid.[4]

10. Although the range of PGMs is implicated in this transaction we will, by and large, restrict our comments to platinum itself. It is here that the parties to the transaction – RPM, Lonmin and Northam Platinum Limited - are most active. Indeed South African PGM ores are particularly richly endowed in platinum. Hence while Russian producers have a strong presence in the mining of PGMs generally, they appear, because of the character of their ore bodies, to hold a particularly strong position in palladium. Stillwater, the US PGM mining and refining company active in the US, also mines ores richly endowed in palladium.[5] Hence, of the six relevant markets identified above, it is the platinum market that is particularly implicated by this transaction.

11. As noted above there is a degree of substitutability within the PGM range of metals. For example, both platinum and palladium are extensively used in the manufacture of autocatalysts, an important

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3 <u>Commission Decision of the 24 April 1996 declaring a concentration to be incompatible with the common market and the functioning of the EEA Agreement</u> (Case No IV/M.619 – Gencor/Lonrho). Note that we shall refer to this report at other points in this decision. The EC report is particularly apposite because both analyses deal with the same geographical market populated by the same participants.

4 The parties pointed out that in 2001, the autocatalyst sector accounted for approx. 40% of platinum demand and 71% of palladium demand. They remarked that this demand substitutability signified that platinum and palladium could indeed constitute a single product market, especially as fabricators become more price sensitive.

5 See Gencor-Lonrho Para 80: 'The individual PGM metals are produced in fixed ratios, determined by nature, which depends on the particular ore body. Indications from official sources are that the ratio of platinum/palladium/rhodium is about 100:42:21 at the Merensky reef and 100:83:54 at the UG2 reef. In other countries palladium occurs in higher concentrations relative to platinum. In the main Russian mine, in Noril'sk, the ratio is about 100:284:16, at the American mine in Stillwater 100:350:73 and at the Canadian mine in Sudbury 100:110:73. This production structure often results in some stocking or over-supply of the minor metals. It also means that palladium makes up a larger part of Russian production than platinum. However, in the South Africa mines platinum is by far the most important metal which accounts for more than 80% of the sales revenue.'

market for PGMs, although this substitutability does not extend to other important markets, for example jewellery.[6] We repeat then the six relevant product markets correspond to the members of the PGM and our analysis will focus on one of these – the market for platinum.[7]

12. The Gencor-Lonrho report includes a careful analysis of the platinum market. It's conclusions are worth citing at length and speak for themselves:

> *'The portion of platinum demand accounted for by industrial processes and autocatalysts is price-inelastic, probably with a very low price elasticity, since there are basically no substitutes for platinum for these purposes, apart from limited substitution possibilities between platinum and palladium for certain types of autocatalysts. The price elasticity for jewellery demand on the Japanese market was found to be price-inelastic with an elasticity of –0,6. Since autocatalysts and industrial processes account for about 51% of the market, and the Japanese jewellery market for about 34%, this means that the price-elasticity of 85% of the global platinum market is highly inelastic. The remaining 15% of demand is for jewellery outside Japan (5%) and investment (10%). The jewellery market outside Japan is likely to have an inelastic demand, since platinum jewellery is a special, up-market product. Furthermore, the effect of investment demand, on overall price elasticity, is limited. All in all, it can therefore be concluded that the price elasticity for the total market is inelastic (numerically smaller than 1).'*[8]

13. We recognise that these conclusions are based on research concluded some 9 years ago. However, little has changed since then - certainly, the overall composition of demand is unchanged. As noted the degree of substitutability of palladium for platinum in certain autocatalysts appears somewhat greater than predicted in the Gencor-Lonrho report

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6 The parties insisted on the substitutability of gold with platinum in the jewellery market. This, together with the substitutability of platinum and palladium in the autocatalyst market would, according to them, decrease any possible market power on behalf of Anglo Platinum. See paragraph 12 below.

7 Note an August 2001 Schroder Salomon Smith Barney report on precious metals: 'On the question of substitution potential *within* the PGM group, in simplistic terms, autocatalysts address three different emissions – carbon monoxide (platinum best for that); hydro-carbons (palladium best for that); and nox (rhodium best for that). Future autocatalysts are therefore likely to need all three in different combinations. Mix will be affected *to some degree by current prices (*i.e. if PD becomes very competitive) but automakers are also concerned about longer-term supply issues and price volatility. The reality is that for technical reasons, platinum is the only possible choice for diesel catalysts. So a number of industry players are now suggesting demand within five years could more closely replicate the production profile of the SA mines (i.e. 60%Pt; 30% PD; 10% Rhodium).'

8 Gencor-Lonrho Para 56.

but even in this limited area the tide – driven largely, it appears, by technical considerations – seems to be turning platinum's way once again. The conclusions of the Gencor-Lonrho report are appropriately qualified by the observation that the demand for platinum is only price-inelastic over its current price range. Against that, though, it is clear that, even in response to significant price swings, the possibilities for substitution are highly limited even over the medium term and particularly for platinum's industrial applications. Nevertheless this may seem an important qualifier in the case of a volatile commodity market – however, as we shall elaborate below, the peculiar structure and pattern of interactions in this market may be seen as part of a strategic approach that is precisely intended to check price volatility through control of supply.

14. South Africa, as already noted, is particularly richly endowed in PGMs and South African ore bodies are particularly richly endowed in platinum. This has enabled South African based companies – notably, although not exclusively, Angloplats, though RPM, a party to this transaction, and Implats – to assume a dominant position in the mining and refining of platinum. Lonmin, through EPL, also a party to this transaction, is a British owned participant in the PGM market which also controls a significant share of the mining and refining of PGMs in South Africa. Russia is the other area in which PGMs are extensively mined. PGMs are also actively mined in the US and Canada.

15. PGMs are homogenous products with no apparent barriers to international trade.[9] While it appears that mining activities are generally served by refineries located in the countries in which the PGMs are mined (this accounting for the strong position of South African companies in the refining of PGMs) we are not aware of any insurmountable barriers to exporting the raw material resource from countries where no refining capacity is located to those countries in which established refining capacity is located. Indeed, according to Schroder Salamon Smith Barney, Implats – the only PGM company engaged in refining mining output belonging to independent PGM mining companies – refines, at its South African refinery, the metals of twenty groups from five continents.[10]

16. Accordingly the geographic market for the mining and refining of PGMs is international. This view is supported, although not necessarily determined, by the existence of internationally quoted prices for PGMs.

17. World shares of the platinum market are calculated by measuring

9 'PGMs are fungible assets, are easily transported, are refined to the same purity standards throughout the world and readily traded without tariff barriers. PGMs are sold on a worldwide basis either under long-term contracts or on the metal market' (Gencor-Lonrho - para 68).
10 In addition, Northam exports concentrate to Heraeus in Germany.

shares of the refined product. Data submitted by the parties reveals the following market shares are attributable to the major producers:

Party	Share of Refined World Production in 2001
Angloplats	38.4%
Implats	21.6%
Lonmin (Lonplats)	12.4%

18. Note however that Implats also owns a 27% share of Lonmin. Lonmin Platinum[11] is a UK registered company, whose South African-based mining and refining activities accounts for 12.4% of world output. Implats is party to a shareholder's agreement which appears to give it significant influence over this company. If Lonmin's output is counted as part of Implat's output, its market share in 2001 would increase somewhat. However, Implat's stake in Lonmin is, in our view, noteworthy, not because of its implications for Implats' market share, but because it evidences widespread co-operation amongst the participants in the market for mining and refining PGMs. Note also that Angloplats has a significant stake in Northam, one of the smaller South African platinum producers and one of the black empowerment partners in this project.[12]

THE IMPACT ON COMPETITION

19. This transaction has both a horizontal and a vertical dimension. Angloplats and Lonmin, both established miners and refiners of PGMs, are entering into an agreement that will result in the exploitation of PGM resources. As already noted this will involve mining on three tracts of land. On two of these, RPM hold the mineral rights while the state holds the mineral rights on the third. EPM is mining on territory immediately adjacent. Effectively, mineral rights held by the state and RPM are being acquired by a joint venture controlled by RPM and EPM. This gives the transaction its horizontal dimension.

20. The transaction may also be viewed as an act of backward integration by refiners acquiring additional sources of input. This provides a vertical dimension to the contract.

21. The market in question is highly concentrated. The two largest South African producers – Angloplats and Implats - stand astride the world market, the more so if, for the purpose of evaluating this transaction, the Implats and LPD market shares are consolidated. Moreover the two largest companies are clearly taking steps to consolidate their

11 This is the trade name for Western Platinum Limited and Eastern Platinum Limited. Lonmin has 73% in EPL.

12 See above discussion in paragraph 2.

powerful position in the world market. Angloplats has a massive ore reserve and is in the process of establishing a second refinery in South Africa.

22. We are enjoined by the Act to determine whether or not the transaction substantially lessens competition. This transaction, on its own, does not impact significantly on market shares. Angloplats already owns the rights to most of the resources that will be exploited by the joint venture. The additional market share that accrues to it by virtue of its acquisition of the state's rights is minimal. Indeed, in terms of market share the largest gain is recorded by Lonmin, the smallest of the three large PGM mining companies active in South Africa. Viewed collectively, however, these small transactions are the mechanism that account for steadily increasing concentration levels in the market for PGMs. However, we cannot find that the horizontal dimension of this single transaction is 'likely to substantially prevent or lessen competition', the test provided for in the Act.

23. What of the vertical dimension? In *Two Rivers*[13] we examined the vertical aspect of the transaction in some detail. We will not repeat this analysis in detail here – suffice to say that the present transaction confirms our concerns. In *Two Rivers* we showed that the steady accretion, largely by Implats, of small pockets of ore reserves either for the purpose of mining or simply refining, combined with Angloplats' massive reserves, effectively foreclosed entry into the capital intensive refining stage. Angloplats, Implats and Lonmin controlled sufficient of the present ore output and reserves to deter any would-be entrant at the refining stage. Hereaus, the German refiner, indicated that it was considering establishing refining capacity in South Africa. The Commission also indicated that several other companies were considering setting up refining activities in South Africa, however we consider this unlikely, indeed it is made all the more unlikely by the steady accretion of mined and reserve ore in the hands of the established refiners. Again, the present transaction on its own is too small to constitute a foreclosure sufficiently significant to represent a substantial lessening or prevention of competition.

24. However, from a competition perspective the most striking and disturbing aspect of any examination of the PSG markets is the extraordinary degree of co-operation between the various producers. This transaction is a yet another case in point: it is a joint venture between the largest (Angloplats) and third largest (Lonmin) platinum producers in the country. The second largest producer (Implats) has a very large stake in the Lonmin – indeed the agreement in place between Lonmin's shareholders would require that Implats approve the

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13 Two Rivers Platinum Limited and Assmang Limited 54/LM/Sep01

JV. One of the black empowerment beneficiaries, Northam, is a small, but growing player in this market. Angloplats owns a 22.5% stake in Northam and, so, it appears, does Resources Limited.

25. We have been presented with evidence suggesting that there are exceptional production efficiencies to be derived from the JV. We have not found a substantial lessening of competition and hence there is no reason for us to examine the claims for increased efficiency. However, on the face of it the efficiencies to be derived from the JV do appear to be unusually significant. Much has been made of the fact that this is a production JV, and that refining and marketing will take place independently under the control of each of the shareholders. Again, in the ordinary course, this aspect of the arrangement is not without significance in a competition assessment. However, neither the efficiencies claim, nor the limited nature of the JV address the concern that this transaction, and, it appears many others like it, further cement the structural ability of the key players in the platinum market to engage in anti-competitive co-operation.

26. The parties appear to concede that there is no price competition to speak of. This, they aver, reflects the fact that all the producers are 'price takers' with price set by supply and demand conditions on the international market, implicitly suggesting the existence of a perfectly competitive market. However, reality is at odds with this suggestion – far from a market characterised by large number of producers, each incapable of influencing aggregate output, it is common cause that the market is dominated by a small number of very large players.

27. In the *Two Rivers* matter we pointed to evidence that precisely suggested tacit collaboration in influencing supply. The parties to that transaction denied that they co-operated in determining supply and these denials have been re-iterated here. We naturally made no finding on this point in the *Two Rivers* decision and we will not do so here. However we simply point out that the extraordinary web of interactions between the key South African platinum producers provides wide-ranging opportunity for collaboration. Had these structures of potential co-operation been established through this transaction, we may well have concluded that competition had been substantially lessened. However, the structures of the industry are well established and are not unduly strengthened by this transaction. Our conclusion in the *Two Rivers* matter is apposite and we emphatically restate it here:

> *It is now for the competition authorities in South Africa as well as other jurisdictions to ensure that this anti-competitive market structure is not abused, in particular to ensure that the oligopolistic structure of this market does not permit its small*

number of major participants to manipulate the supply, and hence effectively set the price, of these important products.

CONCLUSION

We therefore conclude that the merger will not lead to a substantial lessening of competition. The Tribunal therefore approves the transaction unconditionally. There are no public interest concerns which would alter this conclusion.

_______________ 6 December 2002

D. Lewis Date

Concurring: N. Manoim, M. Holden

For the merging parties:	Deneys Reitz Attorneys
For the Commission:	A.Coetzee, Competition Commission