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Attention: Mr. Phakade Sicwebu
Email address: tariffcomments@portsregulator.org
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(Pages: 10, including this page)

Date: 20 March 2017

Dear Sirs,

Submission to the National Port Regulator regarding the Port Tariff Methodology for Tariff Years 2018/19 – 2020/21

1. We refer the *Invitation to Comment on: The Proposed Tariff Methodology* ("***Invitation***") by the Port Regulator of South Africa (the "**Regulator**") regarding the *draft Tariff Methodology* (the "**Tariff Methodology**"). Both of these documents were published on the Regulator's website on 3 March 2017. The Tariff Methodology calls for the submission of comments by all interested parties, by no later than Monday, 20 March 2017.

2. Richards Bay Mining Proprietary Limited and Richards Bay Titanium Proprietary Limited (collectively "**RBM**") herewith accepts the Regulator's *Invitation*, has reviewed the Regulator's Tariff Methodology and has set forth its comments thereto below.

3. RBM has structured its response to the Regulator as follows: (i) Section A provides an overview of RBM's mining activities and sets out details pertaining to its interest in the matter; (ii) Section B sets forth RBM's queries, comments and responses to the Regulator's Tariff Methodology; and (iii) Section C details RBM's present company-specific challenges with the current port tariffs of the National Port Authority ("**NPA**").

Section A: Overview of RBM's business activities and its interest in commenting on the Tariff Methodology

4. RBM is a South African mining company and forms part of the Rio Tinto group. Rio Tinto is a British-Australian multinational mining corporation. Rio Tinto and its global subsidiaries engage in the mining of certain minerals and the production of a series of metals and commodities, which include aluminum, iron ore, copper, uranium, coal, and diamonds. Although focused on the extraction of minerals, Rio Tinto and several of its international subsidiaries also concentrate on refinement.

5. In South Africa, Rio Tinto operates through its subsidiary RBM (through a 74% shareholding). RBM's principal product is titanium dioxide in the form of an 85% (eighty five percent) pure titanium dioxide slag. RBM also produces higher-purity 95% (ninety five percent) titanium dioxide by-products namely, rutile, pig iron and zircon. RBM's mining activities is conducted over a 2 km (two kilometer) wide by 17 km (seventeen kilometer) long strip of mineral-rich sand dunes in Richards Bay, KwaZulu-Natal, South Africa. RBM uses a system of ponds and floating dredges to mine the ore body, where heavy valuable minerals such as ilmenite, zircon and rutile are recovered from the sand. The heavy mineral concentrate is then transported to the mineral separation plant. Upon arrival at the mineral separation plant, located at the smelter site, the heavy mineral concentrate is re-slurried and pumped into the feed preparation circuit. The non-magnetic materials, including zircon and rutile, are concentrated for further processing in the dry mill. Roasting, smelting, slag and iron processes are used to extract the final products.

6. Richards Bay has the largest industrial harbour in South Africa with a vast majority of economic activity being situated in Richards Bay and Empangeni, KwaZulu-Natal. The Port of Richards Bay comprises a natural, deep water harbour which accommodates large cargo vessels, and is integral to a variety of imported and exported goods into and from South Africa. RBM represents a significant portion of KwaZulu-Natal's mining output as well as South Africa's national mining sector output.

7. RBM is a significant exporter of metals and related commodities, namely pig-iron, zircon, rutile, sulphate and chloride slag. It exports approximately 97% (ninety seven percent) of its metal and commodity output, with the remainder being locally distributed in South Africa. RBM also imports small amounts of raw materials from various international sources around the world, when required. For convenience and due to its close proximity, RBM primarily uses the dry-bulk terminal and multi-purpose terminal at the Port of Richards Bay for its exports and imports. RBM is therefore a stakeholder in this matter and displays a material interest in sharing its perspectives and providing its comments on the proposed Tariff Methodology to the Regulator.

Section B: RBM's responses to the Tariff Methodology

8.   *Multi Year Methodology*

   8.1   The "multi-year" tariff methodology in the current instance refers to the calculations of tariffs for the period 2018/19 - 2020/21 based on a single methodology with an extended treatment of the Capital Works in Progress ("**CWIP**") in the Regulated Asset Base ("**RAB**") calculations.

   8.2   The multi-year tariff application has different calculations for each tariff year in the tariff period, consisting of forecasts and calculations of each of the components of the Required Revenue ("**RR**") approach. Annual adjustments to the values of the components will be taken into account through a claw-back (or give-back) mechanism.

   8.3   In simple terms, tariffs will be based on forecasted metrics within the scope of the calculations and after review of actual data, the calculation will be amended by means of an over- or under accrual, referred to as claw-backs or give-backs depending on whether actual metrics as higher or lower than the forecasted metrics.

   8.4   The Regulator has previously allowed for an annual review and an annual adjustment of tariffs within a three-year period as opposed to fixing the prices for the period; this is intended to protect users from possible large step changes in the tariff. In addition, unlike other regulated industries such as electricity or oil and gas pipelines, there are large variations in the users and usage of port infrastructure and services.

   8.5   Therefore it is RBM's view that, an annual review allows a more efficient and appropriate allocation / distribution of prices to port users rather than an adjustment after three years.

9.   *RBM's commentary on the Mechanics of the Methodology*

   9.1   Kindly note that RBM has summarised certain portions and/or components of the Regulator's Tariff Methodology that it seeks to comment upon in "**Appendix 1**" to this letter. This paragraph 10 should therefore be read in conjunction with Appendix 1.

   9.2   RBM's view is that the RR Model can be regarded as a rational approach for revenue security.

   9.3   The formula has measures in place that mitigate risks to both the users and the NPA, by means of the claw-back mechanism that is applied to restate the formula to actual numbers as opposed to the initial forecasted numbers when the tariff is initially calculated.

9.4   RBM notes that gathering all of the required information in order to obtain the tariff numbers correctly could be time consuming and costly. Analysing the operating expenses on a line-by-line basis would for instance definitely be a time consuming and costly exercise.

9.5   It is also noted that the formula takes into consideration the average anticipated capital expenditure for the year and applies the 40 (forty) years to that.

9.6   This in essence would in our view tend to cause the claw-back for the next year to have a decreasing element resulting from actual depreciation versus forecasted depreciation. According to accounting principles, depreciation only starts when assets come into use and not when the capital expenditure is incurred. The depreciation forecasting formula would therefore tend to result in an overstatement of forecasted depreciation.

9.7   It is proposed that some mechanism be brought into place in the formula to bring into account the average period that assets would be regarded as CWIP before coming into use to attempt to alleviate the potential overstatement of depreciation in the initial calculation of the tariff.

9.8   In line with RBM's previous discussions with the Regulator, RBM is also of the view that the following excerpt from a Research Paper, by Gardner D. '*An Investigation into the Cost of Logistics in the South African Macro Environment and in the Bulk Mineral Industry*' is relevant to its submission herein:

"South African ports are under the sole control and operation of the state-owned entity, Transnet Ltd, and as such operate a complete monopoly. Gumede and Chasomeris (2015)[1] identified that the NPA uses the required revenue (RR) model in order to generate profit, and to recover port investment and operating costs. In simple lay terms they are allowed to calculate their total costs and simply add a percentage on to establish the required profit, although the Port regulator has the duty to monitor and limit annual price increases. They note that this method of operating provides no incentive for cost reductions or increased productivity. Of serious concern is that South African ports are considered to be among the least efficient or most unproductive ports in the world, whilst also being among the most over-priced (Gumede and Chasomeris, 2015). This would imply that apart from being heavily overpriced, the lack of efficiency or productivity would suggest that there must be a significant negative indirect effect on other logistics costs, notably on required inventory levels and the costs associated with this, such as increased storage. Gumede and Chasomeris (2015) comment further that South

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[1] Gumede, S. & Chasomeris, M. (2015). '*South Africa's port pricing methodology and financing investments*'.

African ports, being state owned, should contribute to economic growth and on this basis should not be driven by profit objectives. If this were the case, it could be argued that direct port costs would decrease and indirect logistics costs would also decrease, since a contribution to economic growth could reasonably be expected to imply further supply chain efficiencies.

Liston (1993, as cited by Gumede and Chasomeris, 2015) identified that the RR model, as currently used by TNPA, had already by 1993 become unsatisfactory in a changing technological and consumer demand environment, and instead proposed Price-cap (PC) regulation. With the PC model the regulator fixes price ceilings based on price indices. One could expect that with such a pricing method in place the TNPA would logically seek to maximise profit through efficiency and cost reduction, which would theoretically lead to a reduction in both direct and indirect costs. Amongst others, one of the downside risks identified by Liston (1993, as cited by Gumede and Chasomeris, 2015) is that port service quality levels may be lowered in a PC environment (to reduce operating costs for example by reducing working hours), which could potentially increase indirect costs along the supply chain."

10. *Timelines for submission of comments*

Whilst the Regulator has prescribed that interested parties shall submit their comments by **Monday, 20 March 2017**, RBM submits that this timeline may not necessarily provide interested parties the adequate time to properly respond and comment on the draft Tariff Methodology. In order to adequately and effectively respond thereto, interested parties must conduct a detailed consideration of each and every component of the Regulator's proposed method in conjunction with its financial, logistical and economic position. Such an exercise requires time and contemplates an elaborate analysis of the interested parties' relevant internal information and resources as well as an intricate assessment of external market factors to ensure that valuable recommendations are proposed to the Regulator by interested parties for the determination of proportional and justifiable tariffs.

Section C: RBM's company-specific challenges with the NPA's current port tariffs

11. RBM further proposes that the Regulator potentially considers amending its practice in relation to the application of the tariff rates, as set out in the *Port Tariffs, Fifteenth addition, 1 April 2016*, (the "**NPA's tariff book**"). Details of RBM's proposals are more fully set out in the paragraphs below.

12. With respect to port services at the Richards Bay Port for RBM's ilmenite and slag, there appears to be significant differences between the tariff rate schedules and tariff rate per tonne schedules; with respect to cargo dues on RBM's dry bulk commodity products such as: (i) titanium slag at ZAR 36.29/ metric tonne (*mt*); (ii) zircon at ZAR 24.20/mt; and (iii) rutile at ZAR 29.04/mt and RBM's break bulk commodity, pig-iron at ZAR 12.88/mt as opposed to

other dry bulk commodities such as: (i) coal at ZAR 3.37/mt and (ii) magnetite at R3.22/mt, as depicted on pages 42, 43 and 44 of the NPA's tariff book. It is not clear how the Regulator applies this distinction.

13. RBM seeks to understand the reasoning behind the seemingly significant disparity between cargo dues as compared to that of coal and magnetite, which are of low value, earn lower revenues and comprise lower beneficiation processes.

14. RBM proposes that (zircon, rutile, ilmenite and titanium slag (includes chloride and sulphate slag)), should fall into a single category of mineral sands and that a single tariff rate should apply consistently to all such mineral sands falling within this category. It seems that different mineral sands (such as zircon, rutile, ilmenite and titanium slag (includes chloride and sulphate slag)) attract different tariff rates. It is not clear how and why the Regulator distinguishes between different types of mineral sands in its application of tariff rates. As a worst-case scenario, RBM should receive the benefit of a reduction of ZAR 12.09 to equalize the dry bulk mineral sands products, comprising zircon, rutile, ilmenite and titanium slag (includes chloride and sulphate slag).

15. RBM proposes that certain of its export products (comprising titanium slag, zircon, rutile and pig-iron) should be subject to a lower tariff rates, as these products have been subjected to further beneficiation, refinement and processing, all of which processes have taken place in South Africa. The Regulator currently treats RBM's exports (comprising titanium slag, zircon, rutile and pig-iron) as genuine (or normal) exports for purposes of tariff application and disregards the fact that such products have been further beneficiated and processed within South Africa. Accordingly, RBM proposes that it should be charged lower tariffs for such products in these circumstances. Further, RBM proposes that the Regulator should consider adjusting its historical determination of cargo dues with modern and current market and economic factors, and tariff reviews should align to the Government's strategy of promoting and benefiting South African businesses for their value-add and further beneficiation of export products.

16. RBM proposes that it should be charged a lower tariff rate for beneficiated products, such as ilmenite exports, especially if compared to the coal rate, the difference is in the density of the product which, with respect to ilmenite means: (i) the weight to handing ratio; versus (ii) the coal density to handling ratio; of its coal imports due to the lower tonnage of such imports. The Regulator seems to be applying a tariff rate for coal without considering its variations in tonnages. RBM further proposes that tariff applications must be applied proportionally. In other words, a lower tonnage of coal imports should attract a lower tariff application, based on volumes rather than density.

Conclusion

17. RBM thanks the Regulator for the Invitation and the opportunity to comment on the Regulator's Tariff Methodology. Since obtaining clarity on all of the abovementioned issues is of utmost importance to RBM's business and commercial operations, we kindly request that the Regulator provide RBM with a formal and detailed response to these matters as well as the anticipated dates upon which it can expect such a response.

18. Alternatively, kindly advise if the Regulator's response hereto will form part of its current public participation process. If so, a timetable in this regard and details of the next steps in the process will be of value.

19. We look forward to receiving the Regulator's response.

Yours faithfully,

Luke Colton
Chief Financial Officer
Richards Bay Minerals
Rio Tinto

This letter has been sent via an electronic transmission. A fully signed version will be provided to the Regulator upon request.

Appendix 1

Regulator's proposals on the Mechanics of the Methodology

1. The Regulator is proposing a continuation of the Revenue Requirement approach for the current period.

2. The formula applicable is the following:

   ### *Revenue Requirement*
   =   Regulated Asset Base
   x   Weighted Average Cost of Capital (WACC)
   +   Operating Costs
   +   Depreciation
   +   Taxation Expense
   +-   Claw-back
   +-   Excessive Tariff Increases Margin Credit ("**ETIMC**")
   +-   Weighted Efficiency Gains from Operations ("**WEGO**")

3. The RAB can be further delineated as follows:

   ### *Regulated Asset Base*
   =   Value of assets used in regulated services
   -    accumulated depreciation on such assets
   +   working capital

4. The RAB represents the value of those assets the NPA is allowed to earn a return on. Each year, the estimated capital expenditure ("**CAPEX**") and depreciation is added to the closing balance for the previous year to arrive at an updated closing balance for the current year. The expected working capital balance is added to arrive at a total RAB estimate, which is averaged over the year to account for the progressive spending of CWIP over the period.

5. In the previous tariff determinations, the Regulator accepted the Depreciated Optimised Replacement Cost ("**DORC**") method used by the applicant for certain assets to determine an opening RAB. However, the Regulator continues to retain a low level of confidence in the RAB determined through the 2008 DORC method. Whilst this method gave rise to a steep increase in the asset values, regulatory certainty was required in the absence of any alternative. The Regulator, in addressing these concerns, has since commenced an independent process that will form subsequent RAB assessments. The process is intended to analyse and assess the application and appropriateness of these valuations for major assets.

6. RAB is determined on an average basis by determining the average of the year's opening balance and the year's closing balance and adding the forecasted average working capital number to it.

7. For operating costs, the Regulator currently analyses the cost estimates for the period on a detailed line-by-line basis. The NPA is requested to provide a detailed and complete motivation for each of the expenses applied for, especially on large items such as labour and energy costs.

8. In addition, the NPA shall provide an externally and independently audited financial report (with all supporting documentation and detailed explanations including the basis of allocation and policy documents that support such allocation) on all line items that form part of the group costs that have been expended for the NPA each year. This shall be provided in the year after the close of the financial year or until an alternative methodology or amendment of this methodology is published.

9. Depreciation is determined as the average RAB added to the average capital spent for the year and divided by 40 years.

10. Taxation is at 28% adjusted for an effective Transnet Group taxation rate for the period.

11. For the claw-back the following is relevant:

    The key purpose of applying claw-backs is to ensure that the NPA or any port user is fairly treated and is not subjected to unfair gains or losses that are the result of incorrect forecasting, inaccurate information and system shocks. This includes the reducing and the sharing of risks faced by all port system participants including the NPA.

12. The following variables that are estimated (in line with the Regulatory Manual) on an annual basis, prior to the start of the following tariff year, for claw-back purposes are the:

    a. RAB (excluding CAPEX): RAB is adjusted annually to reflect actual working capital requirements in line with AFS numbers and inflation trending;

    b. Depreciation: Depreciation is recalculated based on the adjusted RAB;

    c. Volumes: Actual volume numbers are used to calculate the claw-back; and

    d. Inflation (Consumer Price Index): Whilst the return on equity does not change, the actual inflation rate is used in the recalculation of a number of variables, including the trending of the RAB, working capital forecasts, and other latest estimates during the assessment.

13. The forecast or estimation of these variables is conducted annually and actual data is used in determining the claw-back pertaining to the previous tariff year where the 50% rule applies. The final claw-back is determined in the following year when actual numbers are available.

14. With regards to the ETIMC, note the following:

15. The Regulator regulates in the long term interest of the industry. This requires that the Regulator not only confine itself to the immediate tariff decision, but also considers ways to ease any future shocks to the system. It is generally accepted that capital expenditure may spike at some point in the foreseeable future, but that these projects have not as yet been specified to a level of detail that allows for accurate

prediction. In addition, external market related factors such as unexpected (or expected) fluctuations in volumes, inflation, the Risk Free Rate etc. may result in significant spikes to the tariff as well.

16. As such, the Regulator has, in the past, considered it prudent to avoid excessive future tariff changes by retaining and increasing the NPA's ETIMC, in order to allow the smoothing of unaffordable tariff spikes over multiple periods in the future.

17. A new element came into the formula, being the WEGO element.

18. RBM's view is that the incentives built into the RR methodology do not favour increased efficiency or competitiveness as the claw-back mechanism takes away the gains from higher efficiency with additional market volume effects. This must therefore be addressed in an integrated way through the inclusion of an efficiency measure within the RR methodology. Whilst the introduction of efficient pricing through the Tariff Strategy will have positive effects, these will only impact over the long term. An approach is then required, on a more urgent basis, to identify and differentiate between volume gains (or volume 17 Draft Port Tariff Methodology for Public Comment losses) due to efficiency impacts and market effects.

19. The introduction and continued evolution of the Terminal Operator Performance Standards, Rail Operator Performance Standards, Road Operator Performance Standards, as well as the Marine Operators Performance Standards, is of high interest to the Regulator. The measurement and monitoring role that the operator performance standard systems play will produce an input for the tariff system in order to establish more transparent and concrete incentive targets with benefits to both the port owner as well as port users.

20. WEGO is calculated as follows:

$$WEGO_t = EG_{t-1} \times 0.05 \times Ret_{-1}$$

*Where: Efficiency Gain ("**EG**") = Agreed efficiency gain through operations, excluding the effect of market driven volume growth. The efficiency gain (or loss) is a number between -1 and +1 based on the composite ports system efficiency gain percentage as calculated. EG will be a weighted average growth rate of a selected group of audited performance results on a port by port basis.*