

5th November 2009

Corporate Communications Department
Hong Kong Exchanges and Clearing Limited
12th Floor, One International Finance Centre
1 Harbour View Street
Central
Hong Kong

Dear Sirs,

Re: CONSULTATION PAPER ON NEW LISTING RULES FOR MINERAL AND EXPLORATION COMPANIES - September 2009

My name is Dr David Robson and I am Chairman, President and Chief Executive Officer of Tethys Petroleum Limited ("Tethys" or the "Company"), an oil and gas exploration and production company currently listed on the main board of the Toronto Stock Exchange ("TSX") in Canada and with a secondary listing on the Regional Financial Center of Almaty ("RFCA") Special Trading Floor of the Kazakhstan Stock Exchange ("KASE").

I can see from the obvious thought and hard work which has gone into the preparation of these potential new rules for mineral and exploration companies, the HKEx is keen to establish itself as a major international exchange for such companies, and although I have some specific comments which I detail below, in my view these proposed rules provide a very good base on which to build such a reputation offering a consistent and technically well



thought out approach, putting all such companies on a "level playing field" in terms of technical disclosure.

By way of background on myself. I am a geologist by training, holding a first class honours B.Sc degree and Ph.D in geology. I also hold a MBA. I am a Fellow of the Geological Society (FGS), a member of the Society of Petroleum Engineers (SPE) and a member of the European Association of Geoscientists and Engineers (EAGE). I have spent the last 26 years working in operating oil and gas exploration and production companies including Britoil plc (now BP plc), Mobil Oil (now ExxonMobil) and Hamilton Oil Company (now BHP Petroleum) spending much of my time in reserve determination and field development activities and with numerous in-house and on-the-job training in petroleum engineering, risk analysis, prospect evaluation and reserve determination. I have been involved in major field unitisation exercises where clear, detailed and technically justifiable reserve and production allocation is critical to what percentage of a field a company may own, and in the detailed application of monte carlo risk analysis on large exploration portfolios in order to rank prospects for drilling and evaluation.

I was also the Chief Executive Officer of JKX Oil & Gas plc, a main board London Stock Exchange company which I successfully listed in 1995 – this being one of the first listings of an exploration and production company with assets in the former Soviet Union, and Chairman, President and Chief Executive Officer of CanArgo Energy Corporation, a US public company and full SEC registrant listed on the American Stock Exchange in New York and on the Oslo Stock Exchange in Norway. As such I have much experience of working with the rules governing mineral and exploration companies on different stock exchanges and with different regulatory regimes.

Before I outline my detailed comments I think that it is worth pointing out that the determination of oil and gas reserves and resources is by its very essence an inexact science. Even on a developed producing field with numerous wells and modern seismic data there can be surprises - some positive, some negative. Seismic data and the definition of field limits. prospects etc can often be misleading and is affected by numerous factors, some real, some potential artefacts of the data with this uncertainty being effected by the acquisition environment, data quality, depth, faulting and the nature of the rocks above any potential reservoir. Even after a well has been drilled and hydrocarbons tested the picture is still Well test results need careful interpretation as there are often a number of multivarient factors at play, many of these not fully defined, and the determination of how much hydrocarbon might be in a cubic metre of reservoir rock is usually determined remotely using the electrical, nuclear and sonic response of the rock from instruments held on a cable which may be over 5 kilometres deep in the ground. Reservoirs are also often very variable in nature - reservoir sands may come and go and all the information may come from a 6-inch diameter hole several kilometres underground, yet being applied to several square kilometres of the reservoir.



The above situation applies to reserves as well as resources, but the "risking" applied to resources warrants special mention. "Chance Factors" as they were originally defined were the "chance of finding one drop of moveable hydrocarbons in a structure". Once one drop had been found the amount of potential hydrocarbons was estimated by the generation of an "expectation curve", usually by a technique called "Monte Carlo analysis" which effectively is a random number generator combining in a random fashion frequency curves for each of the reservoir parameters (sometimes with dependencies) needed to define the hydrocarbon in place. The definition of Chance Factors is very subjective and each geologist or team will tend to apply a different technique – there is no right or wrong technique here – some having more risk elements than others which obviously can then result in a different Chance Factor. Similarly (but to a lesser degree) the input to the Monte Carlo analysis can vary widely as can the correlation and relationships between the variables. One must understand that the original reason for determining the "risked potential" was to rank prospects within a large company with respect to drilling priority. The prospects were all ranked using the same methodology and QC'd by the same technical management to give a relative ranking, not absolute figures. For example whilst with Britoil (the British National Oil Corporation) we used a scheme called a QEPE (Quantitative Exploration Prospect Analysis) to rank prospects. There was no way we would assign anything other than a relative rank to these and certainly they would never be used for any valuation. Indeed the use of such techniques and the other factors which must be taken into account to work out the ultimate economic recovery of hydrocarbons are such that these techniques were never used to estimate a range of potential recoverable hydrocarbons, but only the hydrocarbons potentially in place in the ground. Today, when different companies, consultants and technical advisors produce such "risked" numbers for "recoverable oil or gas" one must be aware that they are the product of a subjective statistical analysis and that the techniques are such that another team working on the same project may produce numbers which are radically different and as such, although the potential can be noted many riders need to be applied as these are unlikely to be "apples and apples" between different firms.

Reserve definition is a different issue but once again I have seen huge variations in reserves on a particular field in work carried out by different reserve engineering firms using the same "rules". This can lead to significant confusion in potential investors minds with regard to the asset and its possible value. However this variation is much less than in resources and there has to be some way to assess these. The use of Monte Carlo methods (although suitable for estimating resources) is <u>not</u>, in my view suitable for the estimation of reserves. Deterministic reserve estimation forces a more defined set of rules on interpretation of data by the independent engineering firm and relates to specific development cases which is necessary when it comes to estimating development costs etc for the calculation of net present values. A Monte Carlo reserve distribution does not relate to any particular reserve case – it is purely a statistical analysis – there is no map of a P50 case for example, and as such <u>probabilistic methods should not be used for field reserve determinations and the rules should insist on</u>



deterministic methods being applied. Taken to the extreme when distributions of all development options, costs, prices etc are combined in a Monte Carlo model which also includes distributions of the reservoir and field characteristics then an Expected Monetary Value ("EMV") can be determined from the frequency distribution of possible values. However this purist approach is extremely time consuming and almost never followed by oil companies or independent experts.

Please find below my answers to the specific questions:

Question 3.1

I agree with the Exchange's proposal that new applicant mineral and exploration companies must demonstrate their adequate rights to participate actively in exploration and extraction of resources. However, the criteria by which this is demonstrated must be flexible enough to encompass the different fields of subsurface use contracts or agreements used in various international jurisdictions, and also the criteria in which the controlling interest is defined must reflect the nature of the asset and not be purely reliant on the valuation of the asset, as for example, with an exploration concession.

I welcome the approach taken with respect to Production Sharing Contracts ("PSC") and similar and use of the words "significant influence" and many contracts with the state entities the investing company often has certain obligations with respect to decision making and acquiring state consents, etc., or approvals.

I do not believe that contracts such as PSCs and similar contracts should only be considered on a case-by-case basis, but should be specifically included as internationally recognised contracts where the contractor party (the investor) has significant influence by definition. The same would apply to incremental production contracts, etc.

On a related point, your definition of mineral and exploration companies may exclude a number of active companies in this sphere who may not exercise direct control over assets but work in partnership with other companies. This could exclude a significant number of independent companies from your definition which some of these companies having a broad spread of oil and gas assets but not necessarily participating as "operator" in them. This could be restrictive with respect to attracting otherwise serious companies to the Exchange.

Question 3.2

The basis for this question is unclear as most exploration contracts and concession agreements have an automatic right to proceed or extraction in the event of a commercial discovery with the appropriate definition shown.



Exploration by its very nature can produce a variety of different outcomes and therefore it is speculative as to how any such discovery might be brought to production stage. It is however reasonable to state the appropriate the appropriate legislation in the country concerned for obtaining a production licence or contract after the exploration phase and any increase therein.

Question 3.3

I believe that the approach adopted is a sensible approach, effectively giving a contingency of 25% on the base case working capital needs over the next 12 months. To most exploration and production companies a time horizon beyond 12 months is often speculative and therefore your approach is a sensible one.

Question 3.4

The definition of operating costs is often the subject of much debate in oil and gas exploration and production companies. Some of the cost areas mentioned are reasonable whilst others do not really apply as what would normally be considered operating costs.

Operating costs must really be specific to the operation of a project and not to other costs for example relating to exploration forward planning or other in-country administration costs. Items which should be included are:

- Workforce employment on the operations site.
- Consumables at the operations site.
- Fuel, electricity, water and other services at the operations site.
- Any on-site administration costs specifically related to production and any off-site administration costs specifically related to production from the operations site but not included other factors.
- Environmental protection and monitoring at the operations site.
- Transportation of workforce to and from the operations site.

Product marketing and transportation are not normally included as operating costs but should be specifically identified.

Royalties and other governmental taxes are not normally included as operating costs but once again split out as separate items.

Contingency would not normally be included specifically but may be built into the cost projections if variability is an issue.



The inclusion of non-standard items skews the definition of operating costs relative to other companies and also potentially cause issues with respect to the definition of such in the company's audited accounts.

Question 3.5

I agree that the disclosure of operating cash cost per unit is a good idea. However, once again, this should be defined in accordance with my comments in Question 3.4 above. Marketing and transportation costs per unit production should also be specified as a separate line item.

Question 4.1

I agree that technical reports and valuations must be prepared by independent Competent Persons. This gives an independence to the process but it is clearly very important that the Competent Persons are suitably qualified and follow consistent rules.

As per my earlier discussion, particularly with exploration prospects, it is often difficult to have a consistent set of rules applied – this is less of an issue with respect to reserves. As such, appropriate warnings should be included as to different comparisons between different Competent Person Reports, particularly with respect to resources.

Once again, given the uncertainty with respect to resources definitions for resources prospects there should be nothing to preclude the company itself giving its own internal estimates providing that it is clearly shown that these estimates are not given by an independent Competent Person.

Ouestion 4.2

I agree that the Competent Person should be a member of an RPO. This should at least ensure some consistency and a certain level of professional standard with respect to definition of reserves and resources. However, the list of RPOs must be wide enough to ensure that one does not exclude reputable organisations which may not precisely fit all of the defined criteria.

Question 4.3

I agree with this proposal. I agree that this is necessary given the limited number of mineral and exploration companies listed on the Stock Exchange. However, I would suggest that the Exchange looks only to recognised exchanges which have a significant resource component rather than other regulators who do not have such a strict compliance with rules governing mineral and exploration companies:



I also do not think the Exchange should look to jurisdictions or rules from exchanges or OTC boards which are not the prime listing or regulatory authority for their location (in other words not junior markets such as AIM).

Question 4.4

I do not agree with this proposal as this is not the practice for an international oil and gas business and will incur considerable additional cost for the issuer. More normally, CPRs are done on an annual basis. However, in the event of a significant material change, an updated report may be a sensible option.

Question 4.5

Within the time frame of a CPR, I do not believe a "No Material Change Statement" is required. However, a "Consent to File" a CPR should be obtained from the appropriate independent CP prior to its inclusion in any prospectus or circular. This is normal practice.

Question 4.6

I do not agree that mineral and exploration companies should disclose a profit risk analysis and comprehensive risk factors in the CPR. This is not the job of the CP but the job of the company. The company should include appropriate risk factors in any prospectus or circular and take responsibility for this. Risks are very difficult to define and a risk analysis itself can be very misleading. It should not be the CP's responsibility. However, the CP should be able to comment on specific technical risk factors.

Question 4.7

See my answer to Question 4.6 above.

Ouestions 5.1 to 5.7

As these relate purely to minerals, I am not competent to comment on these questions.

Question 5.8

Although this question appears to relate to mineral and exploration companies, I note the point relating to oil and gas and will comment later.

Question 5.9

I agree with the proposal to adopt the PRMS as the accepted reporting code relating to oil and gas resources. This code has been developed over some years by the SPE and other international bodies and reflects, in my view, a fare and reasonable review for assessment of reserves and resources.



It also is the basis of Canadian National Instrument 51-101 reporting standards, which apply to the TSX (the world's largest natural resource exchange) and indeed to the US SEC. However, with respect to the estimation of "reserves" only deterministic methods should be allowed (not probabilistic). See my initial comments.

I think the recent development of the PRMS to encompass some broader definitions is extremely positive and this should be the accepted code used.

As a footnote: I do not accept the need to have a separate valuation for petroleum assets as CPRs are prepared in accordance with PRMS and in accordance with acceptable rules such as NI 51-101 include by definition a valuation of reserves. Another valuation is not only wasteful, expensive and time-consuming, but also confusing and potentially misleading to any potential investor. I do not believe this should be carried out.

Question 5.10

I agree that Net Present Values ("NPV") for reserves should be presented at various discount rates including 5%, 10%, 15% and 20%, on a post local tax basis (i.e. relating to the project specifically and not to the company as a whole).

In the calculation of these NPVs only capital and operating costs relating to the project should be included. Reserves is a definition relating to economically recoverable volumes of the project and in order to give a correct assessment for the investor of the spread of possible economic values from the project, the NPV should also be calculated and discussed for the 3P case as well as the 1P and the 2P cases.

It is difficult to define a minimum acceptable rate of return to the entity given different forms of definitions and therefore only standard NPV discount rates as mentioned above should be used.

Question 5.11

Due to the nature of reserve definition, proved, probable and possible reserves usually relate to each other in terms of the potential from a particular deposit. As such, it is impossible to analyse these separately. Obviously with a bigger reserve, capital and potentially operating costs will be higher but the basic geological and engineering information will relate to all reserve cases. I agree that whilst the particular reserve case is defined from the continuum of data available, it should be economically analysed separately and presented separately. Once again, your exclusion of possible reserves is potentially misleading and, as such, 1P, 2P and 3P reserves should be stated.

Question 5.12

I believe that the proposal is sensible, using forecast prices as a base case but with a sensitivity at a constant price.



Obviously this constant price is somewhat arbitrary but provided that this constant price is used as the basis for CPRs for all companies on the Exchange (i.e. to give a good comparison) then your proposal is a good one.

Question 5.13

I agree with this proposal as it gives a better view of the company's total potential and purely restricting disclosure to reserves. In many exploration and production companies, shareholders give vastly more value to the exploration upside than they do to the reserves.

Question 5.14

I agree that no economic values should be given to contingent or prospective resources which by definition can be potentially misleading. However, if the conversion of contingent resources into reserves are purely dependent on, for example, oil or natural gas prices, with respect to an economic threshold then I believe this price should be stated and a suitably couched view given on the possible economic value should this price be exceeded.

Question 5.15

I agree with your proposed definition. However, given the nature of oil and gas fields, I believe this definition should apply to professionals involved in oil and gas exploration and production activities including reserve determination for the appropriate field as quite frankly given the variability in oil and gas deposits, it would be very difficult to get a specialist who necessarily has experience on the specific oil and gas deposit being valued.

Question 5.16

I agree with this proposal which is in line with the consistent approach that the rules are outlining.

Question 5.17

I specifically disagree (as stated previously) with additional valuations of oil and gas reserves except those undertaken in the CPR as part of the economic analyses of the project and presentation of NPVs. These proposals are entirely inappropriate with respect to oil and gas properties and are at odds with other jurisdictions.

The economic analyses of the project carried out in the CPR includes production profiles, costs, product prices, transportation costs, government royalties and taxes which apply to that specific contract and a resultant set of cash flows. This is the correct way to value an oil and gas reserve, which does not necessarily follow any pre-defined rules as each deposit and contract is different.



Question 5.18

See my answer to Question 5.17.

Question 5.19

This is a decision for the company's management and would relate to the need for a CPR or not.

Question 6.1

I broadly agree with this approach provided that the definition of "major" is appropriate to an oil and gas exploration and production company. The current definition of "major" in Chapter 14 is not appropriate or reasonable for exploration companies where most of the value is often in the reserves or exploration upside rather than in the financial statements.

Question 6.2

In principle, I agree with this proposal. However, if the acquisition is from an already listed company either on the Exchange or on a recognised international exchange which already has an independent CPR, then it should not be necessary for the issuer to carry out a second CPR.

Question 6.3

I agree with this, which is in line with my answer to Question 6.2 above.

Question 6.4

I agree. This is common international practice.

Question 6.5

By definition any set of audited accounts will contain this information. However, if it is not included, then I agree that it should be.

Question 6.6

I do not agree with this proposal. Blanket disclaimers are often necessary as CPs need to obtain information from other sources outside their areas of expertise in order to complete their report. It is certainly well accepted in the international resource industry that this is the case. I believe that the prohibition of blanket disclaimers will significantly restrict the number of independent CPs prepared to submit CPRs for listed issuers.

Question 6.7

I do not agree with this proposal – reference my answer to Question 6.6. Ultimately it is the company itself which is responsible for any of its continuing obligations.



Question 7.1

If such disclosure is materially relevant (in the opinion of the company) to the business operations of the company, then it should be provided. However, where this is not the case I see no case for it.

Question 8.1

I do not agree that mineral and exploration companies which do not have reserves should be eligible for application for listing on the main board of the Exchange. Companies with purely resources are considerably more risky than those with reserves despite the fact that they may have considerable upside. The logical place for such companies would be on the GEM board and I believe that by allowing such companies to list on the main board would damage the credibility of the main board with respect to mineral and exploration companies.

Question 8.2

I agree with this approach. If even resources have not been defined for such companies certainly they should not be allowed to list on the main board. Once again, a junior board such as GEM may be ideal for these companies.

Question 8.3

I agree that a company which has reserves but is not yet on commercial production should disclose their plans to proceed to production with indicative dates and costs. This should be consistent with the contents of the CPR and, once again, reinforce the credibility of the main board.

Ouestion 8.4

Given the potential volatility of the market with respect to mineral and exploration companies, I do not think it is reasonable to impose a minimum market capitalisation if the company has reserves from its CPR. Obviously, if it does not, then I do not believe it should be able to list on the main board.

Question 8.5

I believe that this is a sensible definition but I believe that a mineral and exploration company that is also involved in the processing, refining and potentially marketing of its own products should have this taken into account when defining the 25% threshold.



I do hope that you find my comments useful. Please do not hesitate to contact me if you have any questions.

Yours faithfully

-Dr David Robson Chairman, President and Chief Executive Officer Tethys Petroleum Limited