



# HALLGARTEN & COMPANY

## Corporate Actions

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## MP Materials

(NYSE: MP)

Strategy: SHORT

MP Materials		Neo Performance	
Price (USD)	\$32.51	Price (CAD)	\$13.58
12-Month Target Price (USD)	\$12.50	12-Month Target Price (CAD)	\$17.00
Upside to Target	-62%	Upside to Target	25%
High-low (12 mth)	\$9.78 - \$32.80	High-low (12 mth)	\$5.55 - \$13.59
Market Cap (USD mn)	4,789.7	Market Cap (CAD mn)	510.3
Shares O/S (millions)	<b>147.3</b>	Shares O/S (millions)	<b>37.6</b>
Fully Diluted (millions)	<b>147.3</b>	Fully Diluted (millions)	<b>38.8</b>
Cash on Hand (USD mns)	\$500+	Cash on Hand (USD mns)	\$74
Liabilities (USD mns)	n/a	Total Liabilities (USD mns)	\$103

# MP Materials

## Embracing the Neo

- + The US government has shown a commitment towards reviving a Rare Earths supply chain independent of China
- + MP hopes to morph Mountain Pass from being a mere quarry supplying ore to China, and attempt to produce value-added Rare Earth products
- + Profits likely to rise on improved volumes and a move to the sale of separated Rare Earth Oxides rather than just concentrate
- + Rare Earths prices have moved higher in recent weeks on Chinese manipulation of sentiments
- + Enormous cash-on-hand of over \$500mn gives the company a good cushion and makes it immune from the vagaries of Rare Earth financing markets
- ✗ Insiders and strategic shareholders are furiously selling into strength
- ✗ The Biden Administration risks steering US back onto a course of China-dependency/sycophancy
- ✗ Those with long memories in the Rare Earth space will remember the fate of Molycorp at the start of the decade which collapsed due to various limitations
- ✗ Rare Earth prices are still at a mere fraction of what they were at the start of the decade
- ✗ MP is likely to need to merge with the likes of Neo Performance Materials (TSX:NEO) to have any chance of meeting its Stage III plans
- ✗ Shifting to a model of upgrading ore and then selling to US (or non-Chinese) buyers involves replacing Shenghe as the (almost) sole offtaker of MP's current sales of REE ore
- ✗ Appearance of Energy Fuels (UUUU) as a monazite sands processor removes MP's novelty value as sole US REE producer

### **This Time It'll Be Different....**

We called our initiation of MP Materials “Déjà vu all over again”. But now the temptation is to see everything this company does in the light of past history. The rise in the stock price almost puts a gun against the head of management to use a massively overvalued stock price to repeat history with a “logical” transaction with, almost, the same cast of characters.

In our initiation we argued that there were reasons why they needed to avoid unflattering parallels with their predecessor Molycorp, but now we cannot see any other way than for MP's management to replay a chess game that is well-documented and much lamented.

For MP to achieve its vaunted Stage III it needs to bolt on value-added processing of Rare Earths. With China (and to a much lesser extent, Japan) dominating the midstream and downstream of the magnet supply chain the only target that gives MP a slamdunk is Neo Performance Materials (TSX:NEO). Such a

deal would be “cheap” particularly compared to what Molycorp paid for a relatively smaller Neo Materials (which did not include Silmet back then). Such a deal would also be within MP’s financial scope without a debt blow-out or big share issuance. It would also look to be potentially earnings accretive, considering that Neo’s earnings have been battered by the virus crisis and relatively slack markets for Rare Earth magnets. This should improve.

We have long liked the potential of Neo Performance and hence its position in our Model Resources Portfolio, particularly due to it being a key chess piece in the global REE “game”. But we have also lashed it for being essentially trapped in the grip of the Panda and at the beck and call of its Chinese raw material suppliers (who would also long-term aim to eliminate it).

Thus a marriage with MP Materials makes sense for both sides but does not protect MP Materials from having risen to levels which make it very strongly overpriced.

In this note we at some of the implications and dynamics of such a union.

### **Molycorp Meets Neo Materials**

On July 29, 2010, Molycorp, Inc., made its (later to be controversial) debut on the New York Stock Exchange.

In April 2011, Molycorp bought 90% stake in the rare metals processing company Silmet in Estonia for US\$89mn. Silmet, which owned a Soviet-era plant, was renamed Molycorp Silmet, and remaining 10% was acquired by Molycorp in October 2011. For more on this transaction see our research note of July 2011.

Molycorp bought Santoku America for US\$17.5mn, also in April 2011, and the bankruptcy trustee sold it for \$1.5mn in 2017. Santoku produced Neodymium-Iron-Boron magnets, as well as for Samarium-Cobalt magnets. This allowed Molycorp to enunciate a strategy that it called “mines-to-magnets”. That was a much used mantra of those times.

In February of 2012, a Chilean company, Molibdenos y Metales S.A. (Molymet), the world’s largest processor of the strategic metals Molybdenum and Rhenium, agreed to invest approximately US\$390mn in Molycorp in exchange for 12.5 million shares of Molycorp common stock. The price of the Molycorp shares issued was based upon the 20-day VWAP plus a 10% premium. This was a transaction that Molymet came to bitterly regret.

In early March 2012, when the Rare Earth boom was already in its dotage, Molycorp announced a takeover of Neo Material Technologies (then NEM.TO) in a CAD\$1.3 billion (US\$1.31 billion) cash and share deal. Neo owned facilities in China, Thailand, Germany and North America, producing Rare Earth oxides, alloys and magnetic powders. The company also processed various minor metals like Gallium, Rhenium and Indium.

Neo also brought along Magnequench (in bonded Neodymium-Iron-Boron magnets). This was an entity that it had merged with in 2006, but this had actually been founded in 1986 by General Motors.

The agreed deal involved Molycorp paying CAD\$8.05 in cash, plus 0.122 of a share for each share of Neo Material, amounting to a total consideration of CAD\$11.30 per share (based on Molycorp's 20-day average). Molycorp's offer was 42% higher than Neo's closing price of CAD\$7.97 on the Toronto Stock Exchange. The offer was above Neo's peak of CAD\$10.67 in April of 2011 when the Rare Earth mania still had legs. In retrospect, the management of Neo chose a good moment to exit.

However, Molycorp was heading towards twin icebergs (one of its own making). One was the Chinese decision to sabotage the surge of REE wannabes by plunging the price of the whole suite of REEs and the other was the disastrous management of the Project Phoenix at Mountain Pass.

In December 2012, the mastermind of the Molycorp strategy parted ways with the company and, ironically, the respected former head of Neo Materials, Constantine Karayannopoulos, accepted the poisoned cup of leading the already stricken Molycorp.

In 2014, with the company facing heavy capital needs and lower prices in the China-dominated market, Oaktree Capital Group had won the bidding to provide up to \$400 million of senior restructuring finance.

Eventually, Molycorp filed for bankruptcy protection in late June 2015. At the same time it announced an agreement with major creditors to restructure its \$1.7bn debt load.

### **Neo - Risen from the Dead**

In the final twist to the death throes of Molycorp, the core group of assets acquired with the Neo deal (including Magnequench and Silmet) were rescued from the smouldering wreckage by Karayannopoulos and Molycorp's largest creditor Oaktree Capital Management and were reorganized as Neo Performance Materials.

Poignantly the new entity was launched back onto the TSX. It has done reasonably well in its reincarnation, despite on-going flaccid pricing in the REE space. *Our most recent coverage of the company from July 2019 can be accessed at our website.*

The main business division of the company these days is called Neo Chemicals & Oxides, and it manufactures and distributes a broad range of light and heavy rare earth engineered products. The major rare earth elements produced and sold by the division are Cerium (Ce), Lanthanum (La), Praseodymium (Pr), Neodymium (Nd), Dysprosium (Dy), and Yttrium (Y). The company processes semi-finished light rare earth concentrate and heavy rare earth concentrate into standard- and highly-engineered rare earth oxides and salts.

The main production facilities are in Zibo, Shandong Province, China, and Sillamäe, Estonia, where the company processes light REE concentrates into Ce, La, Nd, and Pr oxides and salts, and produce value-

added, engineered mixed oxide products for use in automotive emission-control catalysts, petroleum refining and other chemical catalysts, hybrid and electric vehicles, water purification, and a number of other applications. The Sillamäe plant also manufactures Tantalum (Ta) and Niobium (Nb), among other rare metals.

Neo has a global platform with manufacturing, R&D and sales offices in China, South Korea, Thailand, Japan, Singapore, Germany, Estonia, Canada, U.K. and the U.S.,

The Jiangyin production facility in Jiangsu Province, China, processes heavy REE concentrates into constituent elements for use in a multitude of industrial applications, including high efficiency lighting & displays, high-end optical lenses and consumer electronics.

Neo's business is organized into three operating business segments (Magnequench, C&O and Rare Metals) as well as a corporate segment. Each segment is run on a standalone basis under the leadership of a business segment head. These segments are responsible for their own production, R&D, sales and marketing and raw materials procurement.

### **Magnequench**

The Magnequench segment is a leading manufacturing of magnetic powders, a stated objective of MP Materials with over thirty years of manufacturing experience. It is a world leader in the production of magnetic powders used in bonded and hot deformed fully-dense NdFeB magnets. These powders are formed through a proprietary process to manufacture Magnequench Powder using a blend of REOs as the primary input.

The powders are used in the production of both bonded and hot deformed NdFeB permanent magnets. Bonded magnets consist of magnetic powder combined with a binding agent, which results in a slight reduction of the magnetic strength of the material, but allows it to be formed into a variety of shapes without further processing. Hot deformed magnets do not require a binding agent, and are instead heated and pressed to form particular sizes and shapes. Approximately 75% of Magnequench's products are used in bonded magnets with the remainder used in hot deformed magnets. Bonded permanent magnets that are components in automotive motors, micro motors, traction motors, sensors and other applications requiring high levels of magnetic strength, improved performance, and reduced size and weight.

Magnequench produces over 30 grades of its powders, each with specific magnetic properties and performance characteristics demanded by its customers. These increase efficiency and enable reductions in the size and weight of motors relative to iron-based ferrite magnets, which are the most common permanent magnet material. These magnets also allow for net shape pressing, which provides greater flexibility to form a wide variety of shapes and sizes without further processing. These factors allow the manufacture of magnets for applications that require small sizes or complex shapes.

Magnequench has been developing grades of material designed specifically for certain applications by

improving the powder's physical or mechanical properties, such as thermal stability. Superior thermal stability is particularly important for magnets subjected to higher than room temperature environments. Such materials maintain their magnetic properties in these relatively high temperatures (such as under the hood of a car) and thus suitable for automotive applications.

In 2016, Magnequench's top 10 customers accounted for over 84% of total segment's sales, with the largest customer accounting for approximately 36%. For example, longstanding customers of the Magnequench segment include Daido Electronics and Shanghai San Huan Magnets Co., Ltd., among others.

Within the ferrite magnet market, Neo primarily competes with TDK Corporation, Hitachi, Ltd. and Beijing General Research Institute of Metals & Metallurgy. Within the sintered magnet market, Neo primarily competes with ShinEtsu Chemical, Hitachi Metals, Ltd. and Beijing SanHuan New Material Hi-Tech, Ltd.

Prior to the expiration of patents protecting the production process of Magnequench Powders in 2014, management believed it accounted for approximately 90% of magnetic powders in the bonded and hot deformed magnetic powder market. Since the expiration those patents, according to management estimates, Magnequench's market share has stabilized at approximately 70 to 75% market share in the bonded NdFeB market. This modest decrease in market share in the face of increased competition post-patent expiration is a testament to the value that customers place on the quality product and technical expertise that Magnequench provides. The remainder of the market is primarily supplied by various Chinese producers. Within the hot deformed and bonded magnet markets, Neo primarily competes with Jiangwu Rare Metals New Material Co. Ltd. and Beijing Sanjili New Materials Co. Ltd.

### **Chemicals & Oxides**

The C&O segment manufactures and distributes a broad range of light and heavy rare earth functional materials for applications such as auto catalysts, consumer electronics, petroleum refining, hybrid and electric vehicles and wastewater treatment.

C&O separates light rare earth concentrate and heavy rare earth concentrate into standard and highly-engineered Rare Earth oxides and salts. In addition to the separation business, C&O is focused on using these REEs to produce higher value, engineered functional materials for use in auto catalysts, wastewater treatment and other end market applications.

From Neo's ZAMR and Silmet production facilities at Zibo in China and Sillamäe in Estonia, Neo processes LREC into products such as cerium, lanthanum, neodymium and praseodymium oxides and salts. From these Neo then produces engineered functional mixed oxide products for use in auto catalysts, petroleum refining and other chemical catalysis, magnets, hybrid and electric vehicles, water treatment, and a number of other applications.

Neo's JAMR production facility in China processes HREC into constituent elements for use in a multitude

of industrial applications, including multi-layer ceramic capacitors (“MLCC”), high efficiency lighting and displays, high-end optical lenses and consumer electronics.

In 2016, C&O’s top 10 customers accounted for approximately 68% of the total C&O segment’s sales, with the largest customer accounting for approximately 26%. Longstanding customers include BASF, Umicore, Murata Manufacturing Co., Ltd., the Mitsui group of companies, the Mitsubishi group of companies and Johnson Matthey.

In the Rare Earth separation market, Neo competes primarily with six state-owned enterprises in China as well as Lynas Corporation.

In the engineered functional materials market, Neo currently competes in the auto catalyst segment with Rhodia S.A. a division of Solvay S.A.), Magnesium Elektron Ltd. (a division of the Luxfer Group) and Daiichi Kigenso Kagaku Kogyo Co. Ltd. (DKKK) and in other high value applications with ShinEtsu Chemicals Co., Rhodia and DKKK.

Neo is subject to annual REE separation quotas in China of approximately 1,600 tonnes at ZAMR and 1,200 tonnes at JAMR that provide a degree of vertical integration as they have the ability to purchase and separate rare earth concentrate for their own internal use or to sell to third parties. The balance of the separated REEs can be purchased from a number of alternative suppliers in Russia and China. Neo’s ability to produce separated Rare Earths is contingent upon quotas received from the Chinese government.

### **Rare Metals**

The Rare Metals segment sources, produces, reclaims, refines and markets high value metals and their compounds. These products include both high temperature metals (tantalum, niobium, hafnium and rhenium) and electronic metals (gallium and indium). Applications from products made in this segment primarily include superalloys for jet engines, medical imaging, wireless technologies and LED lighting. Other applications include their use in flat panel displays, solar, steel additives, batteries and electronics applications.

The Rare Metals segment has six production facilities across three continents in North America (Canada and the U.S.), Europe (Estonia and Germany) and Asia (South Korea).

In 2016, the Rare Metals segment’s top 10 customers accounted for over approximately 77% of the total segment’s sales, with the largest customer accounting for approximately 43%. For example, longstanding customers include the PCC Group, AXT Inc., Polymer Chemicals, LLC, H.C. Starck and Cannon-Muskegon Corporation.

### **Silmet Facility**

The backstory on this asset is that, at the start of April 2011, Molycorp announced that its wholly owned

subsidiary Molycorp Minerals, LLC had acquired a 90.023% in AS Silmet, the Rare Earth processing company in Estonia. Molycorp acquired 80% of the outstanding shares of AS Silmet from AS Silmet Grupp (which retained a 9.977% ownership interest). Molycorp acquired the other 10.023% from the Austrian company, Treibacher Industrie AG. The value of both transactions was approximately \$89 million. It's now fully-owned by Neo.

This facility consists of various manufacturing, research and administration buildings located on 67 acres of land in Sillamäe, Estonia, approximately 200 kilometres from Tallinn, the Estonian capital. The plant (shown below) is one of only two Rare Earth processing facilities in Europe (the other being Solvay's at La Rochelle in France, that they picked up through their acquisition of Rhodia).



Source: US Embassy, Estonia

The acquisition provided Molycorp with a European base of operations as well as doubling the company's then Rare Earth production capacity from approximately 3,000 tonnes per year of REO equivalent to 6,000 tonnes. The idea was for AS Silmet to source its REE feed stocks from the Mountain Pass mine and processing facility.

The facility's main focus was on the production of Rare Earth oxides and metals: including didymium

metal, a critical component in the manufacture of Neodymium-Iron-Boron permanent Rare Earth magnets. This was a significant change from the historic supply-source chain of the Silmet facility.

The transaction also expanded Molycorp's manufacturing capabilities beyond Rare Earths into the production of the specialty metals Niobium and Tantalum as Silmet was one of the world's leading producers of pure Niobium and Tantalum metal, selling products to customers in Europe, North and South America, Asia, Russia, and other previous Soviet Union countries.

The company employs around 550 people and has three plants: one for REE separation, one for REE production and a metallurgical plant. The plant is organized into 25 divisions, and, under the USSR, had annual capacity to supply 3,000 tonnes of separated LREE products, 700 tonnes of specialty metals (mainly Niobium), and substantial fertilizer and chemical by-products per year.

Silmet's Rare Earth element separation factory, according to the USGS, can produce REE fluorides, hydroxides, oxides, carbonates, and solutions, as well as liquid nitric fertilizers. The specialty metals factory can produce metals, hydroxides, oxides, and ammonium bi-fluoride. The metallurgical factory can produce metallic Niobium and Tantalum chips, metallic powders and hydrides, neodymium metal ingots, neodymium-iron-boron alloys, and *mischmetal* (a mixture of light Rare Earth elements in the proportion contained in the host mineral). Silmet also produces small quantities of "samarium-europium-gadolinium" (SEG) concentrate.

### **MP Materials Meets Neo Performance Materials**

Like some children's game where one must choose between two seemingly the same pictures and find the subtle differences, the task of spotting the variations on the previous theme are not easy to do.

The problem that MP Materials management faces is that its Stage III, entitled the "Downstream Expansion Opportunity", sounds spookily like what, at Molycorp, used to be called "buying Magnequench, Silmet and Neo Materials".

The old Molycorp thought it could buy this element of the value chain (and not reinvent the wheel) and it was not wrong in this. Silmet was certainly far from being modern, or even efficient, but it worked. Neo Materials was a very strategic chess piece indeed (in fact it was most of the non-Chinese half of the chess board once Solvay/Rhodia-STER was out of the equation). So how, without going shopping for these businesses (which it can pick up in one fell swoop by buying Neo Performance) does it make this jump to control the "mine to magnets" without reminding investors that we have "been there, done that"?

The company claims that it wants to facilitate the "restoration of the full magnetics supply chain to the U.S.". It hopes it will then be in a position to integrate further downstream into the business of upgrading NdPr into metal alloys and magnets, ultimately expanding MP Materials' presence as a global source for Rare Earth magnetics. Hmmm.... Noble words, indeed.

This downstream integration would be completed either via building a captive magnet production operation or investing in this capability via an acquisition, partnership or joint venture.

### Neo's Finances

For the three months ended September 30, 2020, consolidated revenue was US\$77.9 million compared to US\$102.6 million in the third quarter of 2019; a decrease of US\$24.8 million or 24.1%. Neo reported net income of US\$0.4 million, or \$0.01 per share. Adjusted net income totaled US\$1.3 million, or \$0.03 per share. Neo had US\$74mn in cash and total liabilities of US\$103mn at the end of September 2020.

### Matchmaking

The keys to the castle at Neo are in the hands of the hedge fund, Oaktree Capital, which has called the shots since salvaging Neo from the ruins of Molycorp.



Neo has been in our Model Resources Portfolio for several years now and has been somewhat of a clunker until recently. As the chart above shows its nadir was during the early phases of the pandemic but it has since more than doubled in price.

Earlier this month Neo announced that it and funds managed by Oaktree Capital Management, L.P. had entered into an agreement with Paradigm Capital Inc., on behalf of a syndicate of underwriters to purchase, on a bought deal basis, from the Oaktree et al. some 3,932,500 common shares at a price of \$12.10 each for approximately \$47.6 million.

The vendors held 26,216,655 common shares of Neo, representing approximately 70% of the

outstanding common shares. Following the closing the vendors are reduced to 22,284,155 common shares, representing approximately 59% of the outstanding common shares. Oaktree Capital agreed that their remaining common shares will be subject to a 120 day lock-up period.

The bought deal didn't even produce a hiccup in the price.

With a market cap nearing CAD\$600mn, and with Oaktree's controlling stake valued at CAD\$300mn, one might muse about how much of a dent that buying Neo might put in MP Materials sizeable US\$500mn plus cash-pile. Somehow we doubt that a stock component in any offer would fly in light of history. Vendors will want cash. MP could thus gear up, as both target and prey are cashflowing or MP could raise more cash in the marketplace as the market is hot for these stories. Investment banks just need to be careful they don't ring on the same doorbells that they called in the Molycorp days.

What price might "seal the deal"? We suspect offers of CAD\$800mn or higher will get a receptive hearing.

### **The White Mesa "Gambit"**

In an interesting extra twist it is now being mused upon in the trade that Energy Fuels (NYSE:UUUU) newly announced monazite sands processing operation at White Mesa will be sending its Rare Earth concentrate to Silmet for separation. If it does then MP Materials is checkmated as the "only" Rare Earths (concentrate) producer in the US. However, if MP merges with Neo then its Energy Fuels who are in checkmate and dead in the water. Then of course, UUUU could cut a deal with the mothballed La Rochelle operation of Solvay for processing the concentrate, as White Mesa will have removed the radioactive component in the concentrate, which has long been a sticking point for La Rochelle accepting any more concentrates with U/Th components.

### **Risks**

All one needs is a history book, or rather some old equity research on Molycorp to know the potential pitfalls that may await an investor in this venture. We trust that some lessons have been learnt and in some ways, the whole Rare Earth industry finds itself in a different world with some constants from before, but also quite a few things have changed. However it is worth enumerating some of the risks that may be faced:

- An extended period of weakness in Rare Earth prices
- Financing difficulties for expansion into downstream
- Cost over-runs on processing build-out/reactivation
- The metal flow is still controlled largely by China and instead of being a partner Shenghe could very well be converted to a competitor

- Failure of demand to match rising production (i.e. build it and no-one comes)
- Excessive number of competing projects could crowd the scene and investors attention in the event that REE prices turn up
- A more HREE deposit in the US comes to fruition

Rare Earth prices are not likely to go down, but there is no guarantee that they are going to go up any time soon. The Chinese have learnt their lesson from 2009-11 and that lesson is that the best way to maintain control and discipline market players is by aggressive predatory pricing. Even now there is talk swirling of the Chinese pondering ramping down (!) LREE prices. The ~36% uplift in prices that MPM is factoring in for 2021 looks optimistic indeed.

As for financing, the company goes into its Stage II buildout (post-merger) with a fairly well-padded capital situation with around \$525mn in cash on hand . If (the big “if”) it manages to keep within budget it should be able to meet its foreseeable needs. Stage III though is another kettle of fish and an imponderable.

When reminiscing on the downfall of Molycorp, some part of its fate can be linked to tumbling Rare Earth prices (but the prices of 2009-12 were never based on reality anyway) and the other half of the blame can be apportioned to cost overruns and technical SNAFUs related to Project Phoenix, which turned out to be a flightless bird indeed. Allusions have been made to reactivating the downstream plant and adding value to the ore from Mountain Pass. MPM are arguing they are going to revive much of Molycorp's old kit but NOT have the same problems.... like second marriages this sounds like the triumph of hope over experience!

Shenghe and the Chinese have been “inside the tent” for the last few years and thus MP has not been subject to the well-rehearsed Chinese practice of predatory pricing.

On the demand side, if MPM can get into the separation business it will have a guaranteed market in the US for its Lanthanum output, but likely be producing more Cerium than would be required by US users. Its Nd/Pr would find buyers in-country, or outside, but ultimately we would see it limited in supplying a rip-roaring EV boom with magnet metals, should such a ferocious beast come into existence. The likes of Elon Musk would have us believe that he is working furiously to displace REEs from EVs. But then again his credibility is a busted flush in our circles.

Finally, there is the issue of competing projects. This is a hot topic of contention. Since we last wrote on MP, the Energy Fuels monazite sands processing deal has been announced, proving that MP Materials does not have the sandbox (pardon the pun) all to itself.

## **Conclusion**

The precipitate rise in the stock price on MP Materials since consummation of the RTO of MP into FVAC

has made this company the most expensive quarry on the planet. Let's be frank. At this point that is all that MP is... plus a twinkle in the eye. Major shareholders have clearly thought the same as us and a flurry of announcements has seen insiders selling into strength.

Management needs to now desperately "backfill" the bloated market cap with real content and value-added or this ends up being a balloon, the likes of which has not been seen since the Hindenburg.

The prospectus notes that none of the financial projections assumed implementation of MPMO's Stage III downstream expansion strategy into the production of Rare Earth metal alloys and finished magnets. This is easier said than done. The only dynastic marriage that makes any sense is one with Neo Performance Materials, when then brings us back to déjà vu, all over again.

The then CEO of Molycorp, Mark Smith, commented at the time of the Neo Materials deal that it would bring together the Molycorp's "massive" production capacity at the Mountain Pass mine in California and Neo's advanced rare earth processing capabilities.

"(We are) putting those two together and forming the best full supply chain capability known in the industry," he said.

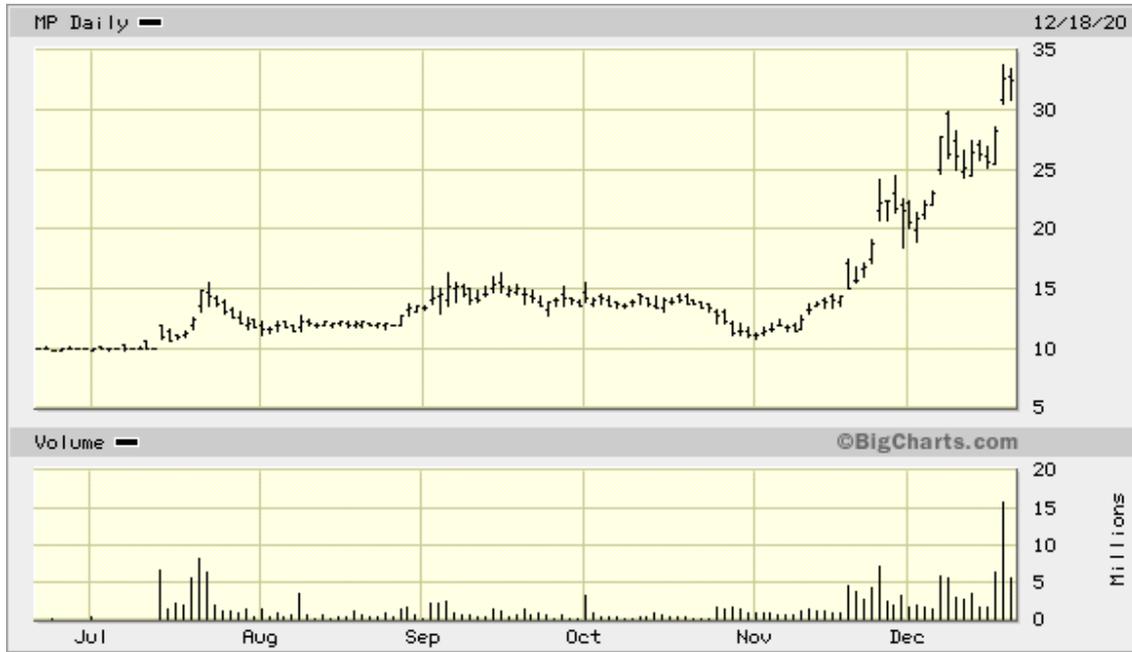
Famous last words....

Achievement of Stage III, despite our scepticism on its doability (short of buying Neo Performance) is pretty much a *sine qua non* of becoming liberated from China-dependency for both the US economy AND for MPM. To achieve the latter the US EV market will have to grow massively and displace China as the taker of MPM's NdPr output. If oil prices stay in their current price range and with the major US automakers pulling their punches on EV adoption, we do not see an EV "revolution" until the second half of the decade (at best). US consumers seem content to sit on their hands regarding any decision to "go electric" and straightened economic circumstances only reinforce this sentiment.

Rare Earth prices have come to the party in the last month and given a mighty last blast of hot air to the stock's market cap. Cynics might say it was the Chinese "powers that be" giving Shenghe the opportunity for a juiced-up exit price. Perish the thought.

Rare Earth prices have had a tendency to disappoint in recent times and are entirely at the discretion of the Chinese. At MP, it is the ritzy REE price rise projections that underpin the bottom line projections (which presumably) underpin the valuation. That the latest price rises are due to Chinese price manipulation rather than real demand increases is without doubt. Those that live by fleeting REE price rises, can also die by them. Need we mention Molycorp, yet again?

Would anyone go long in shares in the Hindenburg? No. Therefore we now rate MP Materials as a **SHORT** position reiterating our 12-month target price of USD\$12.50 and Neo as a **LONG** position with a target price of CAD\$17.



## Important disclosures

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