

HAL QUINN President & CEO

March 31, 2017

Mr. Earl Comstock
Director of Policy and Strategic Planning
U.S. Department of Commerce
H.C. Hoover Building, Rm. 5863
1401 Constitution Ave., N.W.
Washington, DC. 20230

RE: Impact of Federal Regulations on Domestic Manufacturing

82 Fed. Reg. 12786 (March 7, 2017)

Dear Mr. Comstock:

The National Mining Association (NMA)¹ appreciates the opportunity to provide comments on the Department of Commerce's (DOC) Request for Information (RFI) published (82 Fed. Reg. 12786) in furtherance of President Trump's Executive Memorandum issued Jan. 24, 2017 (*Streamlining Permitting and Reducing Regulatory Burdens for Domestic Manufacturing*). Specifically, DOC requests information about: (1) the impact of federal permitting requirements on the construction and expansion of domestic manufacturing facilities; and (2) regulations that adversely impact domestic manufacturers. The RFI is intended to provide DOC with the information necessary to develop a report with recommendations to the president on ways to address obstacles to re-shoring manufacturing and bringing good, high-wage jobs back to the United States.

NMA requests that DOC include within the scope of review and recommendations permitting and regulatory burdens on the mining industry, which provides the essential minerals, metals and raw materials for the manufacturing sector. NMA previously made this recommendation to Secretary Ross in a Feb. 28, 2017 letter.

¹ NMA is a national trade association that includes the producers of most of the nation's coal, metals, industrial and agricultural minerals; the manufacturers of mining and mineral processing machinery, equipment and supplies; and the engineering and consulting firms, financial institutions and other firms serving the mining industry.

The value added to America's gross domestic product (GDP) by major industries consuming mineral materials is \$2.78 trillion – nearly 15 percent of U.S. GDP.² Given the importance of a secure supply of minerals and metals to a successful domestic manufacturing sector, DOC should expand its review beyond the narrow definition of "domestic manufacturers" used in the RFI to include the mining sector—2017 North American Industry Classification System (NAICS) Sector 31-33. There is precedent for a broader definition of manufacturing, and the U.S. tax code includes a 'domestic manufacturing deduction' which includes mining. See 26 U.S.C. §199 (c) (4).

More importantly, there is nothing in the president's memorandum that limits the DOC to examining only the activities or facilities that fit within the narrower NAICS definition listed in the RFI. Permitting delays and regulatory burdens placed on the mining sector, which serves as the front end of the manufacturing supply chain, pose significant burdens on manufacturing enterprises and facilities downstream. Over time, the manufacturing sector—and with it, jobs, GDP and Intellectual Property—will go where it can obtain timely access to valuable minerals and metals. Domestic mineral resource development is the foundation for growing and sustaining U.S. manufacturing.

Minerals are Essential to Domestic Manufacturing

Whether producing next-generation high-tech devices, electric vehicles, lifesaving medical equipment or advanced energy technologies, all manufacturers depend on minerals and metals. Importantly today's products and future technologies rely on combinations of a variety of different minerals—not just single commodities. As new applications are found, markets for mineral commodities will expand considerably along with demand. For example, as cell phone technology has advanced, so too have the number of minerals needed to send an e-mail, take a photo or capture video. Today, cell phones are made from as many as 42 different minerals, televisions can be composed of 35 different minerals and computers are built from 66 different minerals. Rare earths elements are a prime example of how once relatively obscure minerals become critical due to new technological and manufacturing applications.

In 2014, SNL Metals & Mining (SNL) tracked U.S. minerals through to their end-use in finished products and looked at the contributions of U.S. mined commodities to the manufacturing sector. The study, *U.S. Mines to Market*³, found that a gross structural mismatch exists between domestic minerals supply and demand, and this creates an obstacle to continued growth of the U.S. manufacturing industry. In addition, the study highlighted a phenomenon referred to as re-shoring, where manufacturing activity returns to the U.S. This trend is being driven by manufacturers' desire to reduce the risks in their supply chains, which are already highly complex, fragmented and multilayered -- often extending to more than seven tiers of suppliers for any given product. As such, manufacturers are keenly interested in securing access to domestic minerals. However, despite our nation's abundant mineral wealth, we are becoming

² USGS, Mineral Commodity Summaries (2017).

³ U.S. Mines to Market

increasing reliant on foreign sources of minerals to meet the needs of domestic manufacturers. Today less than half of the mineral needs of U.S. manufacturing are met from domestically-mined resources.

This is an issue highlighted by a recent hearing before the Senate Energy and Natural Resources Committee on March 28 entitled, "The United States' Increasing dependence on Foreign Sources of Minerals and Opportunities to Rebuild and Improve the Supply Chain in the United States." Witnesses testified about the U.S.' alarming reliance on foreign sources of metals and minerals, the debilitating impacts of our duplicative and inefficient permitting system, and the immediate need to improve these processes in order to create a safer and more secure supply chain for domestic manufacturers.⁴

Impact of U.S. Reliance on Foreign Sources of Minerals on Manufacturing

According to the most recent U.S. Geological Survey (USGS) *Mineral Commodity Summaries*⁵, the U.S. is now more than 50 percent reliant upon foreign countries for 30 different metals and minerals – and 100 percent import-relaint for an additional 20 minerals. That is half of the naturally occurring elements on the periodic table, and an all-time high for the U.S. In 1978, the year that this information was first reported, the U.S. was 100 percent import reliant on just seven mineral commodities, and more than 50 percent import reliant for 25 mineral commodities.

Import reliance offers a very basic, threshold metric for diagnosing supply chain vulnerability. The level of risk may vary on a case-by-case basis for individual commodities, depending on where they are coming from and what they are being used for. In any case, where the domestic manufacturers are sourcing materials from overseas has very real potential of becoming problematic, and in some cases, already has. Take, for example, the confluence of world events in 2014 impacting the availability and price of palladium. According to the USGS, at that time, the U.S. was 60 percent reliant on foreign sources of palladium. Approximately 33 percent came from Russia and another 28 percent from South Africa. Given the U.S.' and other countries' reliance on these sources, it was no wonder that palladium prices spiked and supply concerns grew with the news of possible Russian sanctions in response to military intervention in Ukraine. This coincided with an extended strike by 75,000 mine workers in South Africa. World events can very quickly alter the ability of domestic manufacturers to access critical metals and minerals.

Even excluding unanticipated geopolitical events, competition for minerals will become increasingly fierce to meet the demand driven by growth in global population and the

⁴ See, e.g., testimony of Alf Barrios, Chief Executive Officer, Rio Tinto Aluminum; Dr. Chris Hinde, Director, S&P Global Market Intelligence; Dr. Roderick Eggert, Colorado School of Mines https://www.energy.senate.gov/public/index.cfm/hearings-and-business-meetings?ID=71944BB9-2A99-4C4C-94F8-709B9D194592

⁵ USGS Mineral Commodity Summaries 2017

rise of new economies. A 2012 KPMG report that examined sustainability mega forces that will impact "each and every business" over the next 20 years pointed out that access to minerals and metals will be of greater concern.⁶ The report predicts that by 2030, 83 billion tons of minerals, metals and biomass will be extracted from the earth --55 percent more than in 2010. The study authors conclude: "the message is clear: over the next 20 years, demand for material resources will soar while supplies will become increasingly difficult to obtain."

Understanding the existing trend of increased import-reliance, in combination with authoritative predictions of scarcity, makes clear that the time is now to take steps to improve U.S. resource security through increased domestic production. As the Rand Corporation warns, a failure to do so could have profound impacts on future growth, particularly for the manufacturing sector:

While the United States has extensive mineral resources, and is a leading materials producer, a high percentage of many materials critical to U.S. manufacturing are imported, sometimes from a country that has the dominant share of a material's global production and export. In this situation, U.S. manufacturers are vulnerable to export restrictions that limit their access to these materials and that can result in two-tier pricing, under which domestic manufacturers in the producing country have access to materials at lower prices than those charged for exports, thereby hindering the international competitiveness of U.S. manufacturers and creating pressure to move manufacturing away from the U.S. and into the producing country. ⁷

The Rand Study also notes a potential ripple effect on U.S. innovation:

The U.S. science and technology base that support manufactured products was built on and depends upon the presence of U.S. manufacturers producing these products from raw and semi-finished materials. Prolonged disruption in the supply of raw and semi-finished materials required by these manufacturers could put the science and technology base in jeopardy, which would further reduce U.S. innovation capability and competitiveness in the development of new, higher-performance products.8

Often overlooked is the reality that many metals and minerals are not only critical to manufacturing in their own right, but they serve as "gateway elements" to other metals critical to innovation. In other words, many high-tech metals are not the targets of primary mining projects, but rather by-products of recovered from the mining of other metals and minerals. 9 Copper, for example, serves as the gateway to molvbdenum. rhenium, selenium and tellurium. Zinc is a gateway metal to indium and geranium.

^{6 2012} KPMG Report – Expect the Unexpected: Building business value in a changing world

⁷ 2013 Rand Study – Critical Materials: Present Danger to U.S. Manufacturing, p. ix

⁸ ld. at p, 1.

⁹ See Daniel McGroarty & Sandra Wirtz, Gateway Metals and the Foundations of American Technology, p. 4 (American Resources Policy Network, Sept. 2012).

These specialty metals and minerals are essential for high-tech devices and engineered systems including miniaturized electronics, advanced weapon systems and batteries, to mention just a few applications.

The U.S. has been slow to develop policies that ensure secure access to the minerals required to support our manufacturers and to spur general economic growth. At the same time, countries around the world have increasingly recognized the connection between minerals and economic growth, and have developed strategies to ensure timely access to the minerals that allow them to compete globally. For example, the European Union's (EU) "Raw Materials Initiative," is designed to ensure a sustainable supply of raw materials to increase European industrial competitiveness. As part of that initiative, the EU maintains and routinely updates a list of critical raw materials, which includes various minerals and metals, while duly emphasizing that even those minerals not "classified" as critical must not be neglected. A balanced policy incentivizes and removes obstacles to new mining activities to support the availability of the metals and minerals for the European economy.

In a similar vein, China, the world's largest consumer of many mineral commodities, including copper, zinc and iron ore, is giving special attention to its "resource security" by making global investments to ensure access to supply. China's "go global" strategy includes investment of \$390 billion in outbound direct investments in the mining sector. Unfortunately, U.S. policies fail to recognize the importance of domestic minerals as an economic driver or as the source of raw materials used by domestic manufacturers.

Permitting Delays are the Primary Impediment to the Domestic Mining Industry's Ability to Meet the Needs of the U.S. Manufacturing Sector

An outdated, inefficient permitting system presents a major barrier to the domestic mining sector's ability to perform to its full potential. The U.S. has one of the longest permitting processes in the world for mining projects. The current permitting process is plagued by uncertainties and delays arising from duplication among federal and state agencies, the absence of firm timelines for completing environmental assessments and failures in coordination of responsibilities between various agencies. In the U.S., necessary government authorizations now take approximately seven to 10 years to secure, placing the U.S. at a competitive disadvantage in attracting investment for mineral development.

¹⁰ 2014 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *On the review of the list of critical raw materials for the EU and the implementation of the Raw Materials Initiative* (available at http://ec.europa.eu/enterprise/policies/raw-materials/files/docs/crm-communication_en.pdf).

¹¹ Congressional Research Service, *China's Mineral Industry and U.S. Access to Strategic and Critical Minerals: Issues for Congress*, March 20, 2015 (available at http://fas.org/sgp/crs/row/R43864.pdf).

This is not a new problem, but it is getting worse. Authorities ranging from the National Academy of Sciences to the Departments of Energy and Defense to international mining consulting firms have identified permitting delays as among the most significant risks and impediments to mining projects in the United States. ¹² Most recently, the U.S Government Accountability Office linked the need to streamline the mine permitting process to mitigating supply risks. ¹³ And these permitting delays have real consequences.

A 2015 study¹⁴ *Permitting, Economic Value and Mining in the United States* shows how delays in the U.S. mine permitting process diminish the value of a minerals project. On average, a domestic mining project can lose a third of its value as it waits for the numerous permits needed to begin production, and the longer the wait, the greater the chance the mine will no longer be worth the investment. In short, lengthy delays in permit reviews compromise the commercial viability of mining projects by increasing costs, reducing the net present value of investments and jeopardizing financing. The efficiency and predictability of the permitting process matters in decisions about where to invest.

To attract investment dollars for mining projects, the U.S. needs to provide more certainty in permitting time frames similar to other major mining countries such as Canada and Australia, where required permits can generally be obtained in two to three years. Importantly, Canada and Australia are known for their rigorous environmental safeguards, including environmental reviews similar to those required by the U.S. National Environmental Policy Act. These countries illustrate that permitting efficiencies can be achieved without sacrificing environmental protection.

The delays that plague the U.S. permitting process play a role in the reduced investment in U.S. mining projects. A recent S&P Global report¹⁵ highlighted that the downturn in U.S. exploration activities reflects a diminished appetite and ability to prospect for new mineral resources in the U.S. Nearly two decades ago, the U.S. attracted almost 20 percent of the world's mining investment. According to S&P's report, the U.S. attracted only 7 percent in 2016, while Canada attracted 14 percent. Last year, the U.S. showed the sharpest pullback in exploration, with its budgets falling more than 30 percent.

¹² See National Resources Council, *Hardrock Mining on Federal Lands*, National Academy Press (1999); U.S. Department of Energy, *Critical Materials Strategy* (Dec. 2010); U.S. Geological Survey USGS, *the Principal Rare Earth Elements Deposits of the United States—A Summary of Domestic Deposits and a Global Perspective*, 2010; Behre Dolbear, *Where Not to Invest* (2015).

¹³ GAO Report 16-699, Advanced Technologies: Strengthened Federal Approach Needed to Help Identify and Mitigate Supply Risks for Critical Raw Materials, Dec. 2016

¹⁴ Permitting, Economic Value and Mining in the United States

¹⁵ Worldwide Mining Exploration Trends Report

The U.S. Needs a More Efficient Permitting Timeframe to Realize the Domestic Mining Industry's Potential to Supply Domestic Manufacturers

Clearly, the efficiency and predictability of the permitting process matters in decisions about where to invest. To address supply chain vulnerability and import dependence, we need to proactively address these permitting delays. This concern extends beyond those in the domestic mining industry. A survey of 400 C-suite manufacturing executives found 95 percent of executives are worried that the lag in the permitting process for new mines has a serious impact on their competitiveness. And more recently, broader public support has been voiced for policies that enable the use of domestic minerals for infrastructure. A new poll conducted by Morning Consult reveals that 71 percent of voters support using domestically-sourced materials for infrastructure, and 65 percent support enacting policies like shorter permitting timeframes for mining projects to ensure timely access to important minerals and metals that build steady and stable supply chains.¹⁶

Only by addressing our permitting delays can we capitalize on our nation's mineral wealth. The U.S. is blessed with a world-class mineral resource base with an estimated value of \$6.2 trillion. The U.S. remains highly prospective, from a geological point of view, with an abundant and diverse mineral potential. According to the U.S. Geological Survey, when it comes to copper, silver, zinc and other key mineral commodities, what is left to be discovered in the U.S., is almost as much as what has already been found. Moreover, with continuing and never ending advances in science and technology, miners in the U.S. exemplify best practices with respect to productivity, sustainability and safety. Services with respect to productivity, sustainability and safety.

Solving the permitting problem will also allow the domestic mining industry to contribute even more to the already significant contributions to our economy and society. The value added by major industries that consume the \$74.6 billion of minerals produced in the U.S. is an estimated \$2.78 trillion (2016). Mining's direct and indirect economic contribution includes nearly 2 million jobs with wage and benefits well above the state average for the industrial sector. In addition, domestic mining generates \$44 billion in tax payments to federal, state and local governments.

The overarching objectives for streamlining the permitting system for mining should be:

- Minimizing delays:
- Setting and adhering to timelines and schedules for completion of the permitting process; and
- Tracking progress and providing for accountability.

¹⁶ NMA Domestic Minerals Poll.

¹⁷ USGS, Geology and Nonfuel Mineral Deposits of the United States, Open File Rep. 2005-1294A, p. 64 (2005).

¹⁸ SNL Metals & Mining, U.S. Mines to Market, p. 4 (2014).

To achieve these objectives, federal agencies involved in reviewing projects for permits or other authorizations should be required to:

- NEPA-Equivalence: Consider adopting a NEPA-equivalence policy that allows the agency to determine the requirements of NEPA—when applicable—has been satisfied if the lead agency determines that any State or Federal agency has addressed or will address the applicable NEPA considerations.
- Avoiding duplicative reviews: the lead agency shall defer to and rely on baseline data, analyses, and reviews performed by state agencies with jurisdiction over the proposed project.
- Concurrent reviews: federal agencies should conduct any consultations or reviews concurrently rather than sequentially to expedite the process.
- Establish timelines for each major step of the process including:
 - Scoping of the analysis
 - Baseline studies required under applicable law and use of existing studies already conducted for state or federal authorizations
 - Draft EIS or similar analysis under NEPA
 - Submission and review of public and agency comments
 - Publication of any required public notices
 - Final decisions
- Directives clearly setting forth that the permitting agency is not required to consider or respond to comments received after the close of any comment period.
- Encourage use of Memorandums of Agreement between the agencies and project proponents that will set goals and timelines for each step of the process.

Many of these recommendations for using best practices in the permitting process are reflected in the regulations from the Council on Environmental Quality (CEQ) on making the National Environmental Policy Act process more efficient. CEQ's NEPA regulations encourage streamlined review, adoption of deadlines, elimination of duplicative work, eliciting suggested alternatives and other comments early through scoping, cooperation among agencies, and consultation with applicants during project planning process. See e.g., 40 CFR 1501.7 (Scoping); 1501.8 (Time limits);1502.20 (Tiering); and 1506.2 (Elimination of duplication). DOC's report should recommend that agencies treat these best practices as mandatory rather than as merely advisory. This can be accomplished easily by revising agency NEPA guidance to more clearly align with these best practices.

In addition, DOC should recommend that the Department of the Interior immediately rescind its policy related to review of *Federal Register* notices related to NEPA. This agency "clearance process" needlessly adds months to the permitting process for mining projects on federal lands as it requires at least 14 separate layers of departmental review of notices developed by state BLM offices. The impact of these delays is significant as most mining operations require at least three of these notices per project. As the clearance process routinely takes four months or longer per notice, this policy adds approximately a year of review time for project approvals. DOI has

never adequately explained the need for this review process, and it does not appear to result in substantive changes to the submitted documents. In fact, in the mining industry's experience, the review process has never resulted in a final product that differed substantively from what was submitted by the state BLM offices. DOI should rescind this policy and return to the previous process where *Federal Register* notices could be submitted directly by BLM state offices without stopping at DOI for additional reviews.

Other Impediments Preventing the Domestic Mining Industry's Ability to Supply the Domestic Manufacturing Sector

Access to Minerals

While the lack of inclusive U.S. policies for mineral development and costly, duplicative permitting processes have a significant impact on domestic manufacturers' ability to get the raw metals and minerals they need when they need them, another issue that is equally important is access to the minerals themselves, which are primarily located on federal lands.

The federal government manages 632 million acres of public land in the U.S. Access to federal lands for mineral exploration and development is critical to maintaining a strong domestic mining industry as these lands historically have, and will continue to, provide a large share of the metals and hardrock minerals produced in this country.

Twelve western states are the source of much of our nation's mineral endowment and federal lands comprise almost 40 percent of the land area in those states. Half of that is either off-limits or under restrictions for mineral development. Unknown amounts of resources on adjacent state and private lands are also sterilized because of federal land restrictions.

While mining is not appropriate on all federal lands, withdrawals from mining activities should not occur without more informed decisions regarding the mineral potential of the underlying lands. Section 204 of the Federal Land Policy and Management Act (FLPMA) governs withdrawals of federal lands and does require mineral assessment of lands proposed to be withdrawn and that any withdrawals should be reviewed periodically to determine if the restrictions continue to be appropriate. Too frequently these assessments are cursory in nature and rarely review, often relying only on existing, dated information. Other times, the withdrawals are simply not justified by any policy rationale. A recent example is Department of the Interior's proposed withdrawal of 10 million acres of federal lands in the western U.S.

The withdrawal would be the largest ever in the history of FLPMA. The department maintains the withdrawal is necessary to conserve sage grouse and its habitat. Mining, however, is not even considered a major threat to the bird or its habitat as evidenced by the department's own supporting documents, which point to wildfires and invasive species as the greatest threats. The draft Environmental Impact Statement for the

withdrawal candidly acknowledges that even under the No Action alternative, the reasonable foreseeable acreage disturbance associated with mining activities is estimated to be less than 0.1 percent of the total withdrawn area.

Another proposed withdrawal in northern Minnesota was clearly motivated by politics rather than science as the previous administration sought to preclude any future mineral exploration or development without evaluating any specific mine permit. The area, known as the Duluth Complex, is a world-class mineral deposit containing copper, nickel and other precious metals. The withdrawal was proposed just days before President Obama left office and would have disastrous impacts on the already fragile economy of northern Minnesotans who stood to gain thousands of potential mining jobs, billions of dollars in future investment, and billions in future revenues for the state's education system.

To remove a significant impediment to the ability of the domestic mining industry to provide a secure supply of minerals and metals to the domestic manufacturing industry, DOC should recommend that DOI issues a policy that ensure all proposed withdrawals comply with FLPMA, including FLPMA's mandate that Congress must weigh in on all withdrawals of more than 5,000 acres. Clearly, FLPMA sec. 204(c) provides for such a role for Congress. While that provision is unconstitutional in its implementation, the intent of the act is clear. It is uncontroverted that had Congress known it was not able to reject large-scale withdrawals by concurrent resolution, it would not have enacted the section as written and would not have granted the authority to withdraw more than 5,000 acres. DOI needs to clarify that the department will adhere to this congressional mandate.

U.S. Environmental Protection Agency's Unnecessary and Duplicative Financial Assurance Requirements for Mining Projects

Producers of domestic minerals and metals operate within a complex and comprehensive framework of state and federal laws and regulations that address every aspect of modern mining from exploration to development, operation, reclamation, closure and post-closure. This framework is designed to minimize environmental impacts and prevent harmful releases. Additionally, mining companies commit tens to hundreds of millions of dollars to ensure that money is set aside to properly close sites and in the unlikely event of a release, to monitor and remediate any long-term environmental issues.

Despite this comprehensive framework of laws and regulations, the U.S. Environmental Protection Agency (EPA) is currently engaged in a rulemaking process to implement a suite of unprecedented, duplicative, and economically burdensome financial assurance requirements under Section 108(b) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or also known as Superfund). Pursuant to this law, EPA was required more than three decades ago to identify "high risk" industry sectors, assess their risk of future hazardous substance releases, estimate the cost of cleanup of those releases, and require companies to set aside capital to guarantee that

it can pay for any necessary cleanup. Seven years ago, EPA identified the hardrock mining industry as the first in line for such a regulation, followed by the chemical manufacturing, oil and gas, and electric utility sectors.

Protecting the public and ensuring that taxpayer money is not used for environmental cleanups is a respectable goal. However, EPA ignores the fact that during 30 years of inaction, state and federal programs have evolved to address the same risks EPA is now targeting and ensure functionally equivalent protections to the public and the environment. A duplicative federal program under EPA's control would effectively displace these successful programs.

Furthermore, repeatedly the agency ignored state and federal government agencies with expertise in regulating the mining industry, summarily dismissing their concerns over preemption and duplication instead of engaging in a robust discussion and analysis of programs that have evolved over the last 30 years. Most importantly, throughout its rulemaking process, EPA failed to make the requisite finding that modern mining facilities actually pose a risk of becoming future Superfund sites that would require expenditure of public funds for cleanup costs. As such, this rule is simply not justified and the regulatory burdens it will impose could jeopardize the viability of the domestic mining industry. Overall, EPA estimates that the rule will require facilities to secure approximately \$7.1 billion in new financial responsibility obligations. Using EPA's own numbers, the rule comes with a \$171 million annual price tag to industry compared to potential annual savings for the government of approximately \$15.5 million in liability.

Given the fatal flaws in the rulemaking, DOC should recommend that EPA initiate a review of the proposed rule, undertake a robust examination of existing state and federal programs, and determine that these programs render the rulemaking unnecessary.

Conclusion

NMA urges the DOC to expand the scope of its review and recommendations to include the mining sector, which serves as the front-end of the supply change for manufacturing. Permitting and other reforms outlined above will help ensure more secure supplies of minerals and metals to grow and sustain a robust domestic manufacturing sector while creating high-wage jobs across multiple industries. Please feel free to contact Justin Prosser on my staff jprosser@nma.org or (202)463-2600 if you have any questions regarding these comments or need any additional information.

Sincerely,

Hal Quinn

President & CEO