U.S. Citizenship and Immigration Services

**Non-Precedent Decision of the Administrative Appeals Office**

MATTER OF F-E-

DATE: MAR. 20, 2017

APPEAL OF NEBRASKA SERVICE CENTER DECISION

PETITION: FORM I-140, IMMIGRANT PETITION FOR ALIEN WORKER

The Petitioner, a metallurgical engineer, seeks second preference immigrant classification as a member of the professions holding an advanced degree, as well as a national interest waiver of the job offer requirement attached to this EB-2 classification. *See* Immigration and Nationality Act (the Act) section 203(b)(2), 8 U.S.C. § 1153(b)(2). After the petitioner has established eligibility for EB-2 classification, U.S. Citizenship and Immigration Services (USCIS) may, as matter of discretion, grant a national interest waiver if the petitioner demonstrates: (1) that the foreign national's proposed endeavor has both substantial merit and national importance; (2) that the foreign national is well positioned to advance the proposed endeavor; and (3) that, on balance, it would be beneficial to the United States to waive the requirements of a job offer and thus of a labor certification. *Matter of Dhanasar*, 26 I&N Dec. 884 (AAO 2016).

The Director of the Nebraska Service Center denied the Form I-140, Immigrant Petition for Alien Worker. The Director found that the Petitioner qualified for classification as a member of the professions holding an advanced degree, but that he had not established eligibility for a national interest waiver.

The matter is now before us on appeal. In his appeal, the Petitioner contends that he is eligible for a national interest waiver based on his work developing mineral and mining safety processes with a focus on sustainable development. The Petitioner maintains that the Director placed undue emphasis on his citation history in analyzing his eligibility for the national interest waiver.

Upon *de novo* review, we will sustain the appeal.

## I. LAW

To establish eligibility for a national interest waiver, a petitioner must first demonstrate qualification for the underlying EB-2 visa classification, as either an advanced degree professional or an individual of exceptional ability in the sciences, arts, or business. Because this classification requires that the individual's services be sought by a U.S. employer, a separate showing is required to establish that a waiver of the job offer requirement is in the national interest.

Section 203(b) of the Act sets out this sequential framework:

> (2) Aliens who are members of the professions holding advanced degrees or aliens of exceptional ability. –
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> > (A) In general. – Visas shall be made available . . . to qualified immigrants who are members of the professions holding advanced degrees or their equivalent or who because of their exceptional ability in the sciences, arts, or business, will substantially benefit prospectively the national economy, cultural or educational interests, or welfare of the United States, and whose services in the sciences, arts, professions, or business are sought by an employer in the United States.
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> > (B) Waiver of job offer –
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> > > (i) National interest waiver. . . . the Attorney General may, when the Attorney General deems it to be in the national interest, waive the requirements of subparagraph (A) that an alien's services in the sciences, arts, professions, or business be sought by an employer in the United States.

While neither the statute nor the pertinent regulations define the term "national interest," we recently set forth a new framework for adjudicating national interest waiver petitions. *See Dhanasar*, 26 I&N Dec. 884.[1] *Dhanasar* clarifies that, after EB-2 eligibility as an advanced degree professional or individual of exceptional ability has been established, USCIS may grant a national interest waiver if the petitioner demonstrates by a preponderance of the evidence: (1) that the foreign national's proposed endeavor has both substantial merit and national importance; (2) that the foreign national is well positioned to advance the proposed endeavor; and (3) that, on balance, it would be beneficial to the United States to waive the requirements of a job offer and thus of a labor certification. If these three elements are satisfied, USCIS may approve the national interest waiver as a matter of discretion.

The first prong, substantial merit and national importance, focuses on the specific endeavor that the foreign national proposes to undertake. The endeavor's merit may be demonstrated in a range of areas such as business, entrepreneurialism, science, technology, culture, health, or education. In determining whether the proposed endeavor has national importance, we consider its potential prospective impact.

The second prong shifts the focus from the proposed endeavor to the foreign national. To determine whether he or she is well positioned to advance the proposed endeavor, we consider factors including, but not limited to: the individual's education, skills, knowledge and record of success in related or similar efforts; a model or plan for future activities; any progress towards achieving the

[1] In announcing this new framework, we vacated our prior precedent decision in *Matter of New York State Department of Transportation*, 22 I&N Dec. 215 (Act. Assoc. Comm'r 1998) (*NYSDOT*).

proposed endeavor; and the interest of potential customers, users, investors, or other relevant entities or individuals.

The third prong requires the petitioner to demonstrate that, on balance, it would be beneficial to the United States to waive the requirements of a job offer and thus of a labor certification. In performing this analysis, USCIS may evaluate factors such as: whether, in light of the nature of the foreign national's qualifications or the proposed endeavor, it would be impractical either for the foreign national to secure a job offer or for the petitioner to obtain a labor certification; whether, even assuming that other qualified U.S. workers are available, the United States would still benefit from the foreign national's contributions; and whether the national interest in the foreign national's contributions is sufficiently urgent to warrant forgoing the labor certification process. In each case, the factor(s) considered must, taken together, indicate that on balance, it would be beneficial to the United States to waive the requirements of a job offer and thus of a labor certification.[2]

## II. ANALYSIS

The Petitioner received a Ph.D. in metallurgical engineering from and a Master's in Business Administration from He seeks to continue his work as a metallurgical engineer and project manager with at its in The Director found that the Petitioner qualified as a member of the professions holding an advanced degree, but that he had not established eligibility for a national interest waiver. On appeal and in a supplemental brief filed after publication of the *Dhanasar* precedent decision, the Petitioner contends that he is eligible for a waiver because his "particular expertise in mineral process engineering with a focus on sustainable development and his project management skills are of utmost importance to the future and security of the United States."

### A. Substantial Merit and National Importance of the Proposed Endeavor

The Petitioner indicated on his petition that he specializes in "combining practice and theory to benefit the mining industry." The Petitioner maintained that his work aims to help the mining industry implement "sustainable, profitable, and environmentally conscious practices to ensure the survival of the planet for future generations." He also explained that he intends to "design, implement, and manage multimillion dollar mining plans and projects" to ensure that mines operate at "maximum profitability with minimal negative impacts on the environment." He claims that his contributions will extend beyond the mine at which he works to the larger economy and environment.

The Petitioner submitted documentation explaining that mining contributes hundreds of billions of dollars to the national gross domestic product annually,[3] and that the where he is

[2] See *Dhanasar*, at 889-91 for elaboration on these three prongs.

[3] The Petitioner submitted several articles discussing the economic impact of the mining industry on the U.S. economy including a report prepared by the entitled, (2012)," prepared in 2014; and the Final Report from the

currently employed, produces more than any mine in North America (902 million pounds in 2015). Furthermore, is the second largest in the world with $58.8 billion in assets and $150 billion in mineral reserves. He further attests that recently underwent a one billion dollar expansion project making it one of the largest hydrometallurgical processing plants in the world.

The Petitioner stated that he intends to continue to lead multiple large-scale projects developing safe and environmentally sustainable mining practices, similar to his most recent project, a $10 million initiative to improve extraction processes. The Petitioner also described in detail how this work improves mining processes, advances metallurgical research, and ameliorates critical environmental problems. Specifically, he pointed to his development of a novel method to utilize activated carbon to reduce yield losses during the extraction of gold, his identification of the effects of carbon particle size and magnetic activated carbon, and his leadership in updating and validating recovery curves. He maintains that due to the significance of the to the mining industry in the United States, its impact on the U.S. economy, and the potential environmental risk that a mine of this scale represents, his proposed endeavor to continue developing safer and more productive mining processes, such as the ones noted above, should be considered nationally important. We agree.

The Petitioner provided letters from colleagues and professors discussing the critical need for developing profitable mining methods that improve operational capabilities. The letters describe the importance of initiating sustainable mining practices and affirm that the Petitioner's work stands to significantly influence recovery procedures in the mining industry, reduce lead exposure, and exponentially reduce pollution for companies utilizing his methods. He provided several research reports from the and the outlining the importance of mine safety and sustainability to both U.S. national security interests and economic growth, and discussing the formidable cost of mining accidents to the economy as a whole.

Therefore, the record sufficiently establishes that the proposed endeavor offers positive economic effects and environmental consequences that reach beyond the Petitioner's employer to affect the mining industry more broadly, and therefore, the U.S. economy, due to the size and scope of the operation and the Petitioner's integral role in its safe and profitable operation. Therefore, given the importance of the to the mining industry generally, the essential role that the Petitioner stands to serve, and the potentially grave environmental and economic consequences of mining accidents, we find that the Petitioner's proposed work has both substantial merit and national importance.

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entitled ' published in 2002.

B. Well Positioned to Advance the Proposed Endeavor

The Petitioner submitted his résumé and educational credentials, documentation of his published and presented work, evidence of his peer review activities, and reference letters discussing his work in the field. As discussed below, given the Petitioner's notable experience on high-profile projects in the area of metallurgical engineering at one of the largest and most impactful mines in the world, we find that he is well positioned to advance his proposed endeavor.

The Petitioner provided letters from colleagues and independent professionals attesting to the importance of his project management accomplishments. The Petitioner explained that one of his significant impacts on the field of metallurgical engineering was his development of a novel method to utilize activated carbon to reduce yield losses during the extraction of gold from gangue material. Chief Mining Engineer, described how the Petitioner's "outstanding contribution to science in the field of extractive metallurgy has had far reaching consequences and impact as well as a high degree of influence in the scientific community." He stated that the Petitioner's work on the effects of activated carbon particle size and magnetic activated carbon effects on gold absorption and elution has "helped the mineral industry to maximize recovery in such a manner that reduces gold losses through recovery." also explained that the Petitioner is the project manager for a $10 million project at to improve extraction processes which improved operations culminating in "huge savings" for the mine. He noted that the Petitioner "served as the project lead for updating and validating recovery curves that are over 15 years old, which will allow management to make strategic decisions about our business into the future." He also stated that the Petitioner has been "essential" to continuously improving the leaching process by monitoring and evaluating performance indicators which are "fundamentally critical to our extraction process," culminating in "huge savings" for the mine given the capital intensity of the operation.

Similarly, senior metallurgist and section head at described how the Petitioner developed "better recovery curves to accurately estimate the amount of metal the company can expect to extract from different and varying ore minerology." characterized the Petitioner's work as "instrumental in the re-evaluation of the life of mine" resulting in "10 more years of life, which by implication, offers additional job security for employees." also with discusses how the Petitioner successfully managed/led a multi-million dollar research and development project involving leaching methods, chemical analysis of the leaching heaps, using state-of-the-art software for validating leach parameters. attests that the Petitioner's work has led to "significant contributions" to efficient pulse planning, and enhancing the iron recovery needed for effective leaching of sulfide minerals thus "yielding great dividends."

The Petitioner has also submitted evidence that his work has impacted metallurgical engineering processes at competing companies and with other scholars in the field. senior engineer at stated that he encountered the Petitioner's research in "technical journal publications," and contacted the Petitioner directly to further inquire. He attested that the

Petitioner's work, despite proprietary limitations, has "contributed immensely to my own research work in the powder metallurgy industry." also commended the Petitioner's "less aggressive method" of washing to reduce lead pollution in waste water. He indicated that the Petitioner's unique process improvement "produced a 2% reduction in the rejection rate of lead plated due to lead oxide contamination," and that his "significant contribution" has "culminated in exponential reduction of pollution."

a metallurgical engineering professor at the noted that the Petitioner's work on the effects of carbon particle size and magnetic activated carbon effects on gold absorption and elution has "precisely addressed" an "age-old problem" of developing innovative ways to reduce gold losses through recovery, which is "significantly improving" mining procedures throughout the industry. Furthermore, associate professor of metallurgical engineering, explained how the Petitioner's work on the effects of current reversal on coated titanium anodes "breaks new ground in this field." He stated that it "helps to significantly improve coated material lifetimes of materials used in adverse/harsh industrial conditions" and in doing so "drastically reduce environmental pollution and hence improve companies' profitability." He maintained that this achievement "influences our entire field." also attested that he and his peers in the scientific community are using the Petitioner's work instructionally in their graduate level classes.

a senior research engineer at described how the Petitioner's work has influenced his own research. He explained that the Petitioner developed a novel method to clean lead anodes in the electromining industry that "enhances lead anode life and significantly reduced the lead footprint." He stated that "lead poisoning is a global environmental hazard as prolonged exposure can lead to fatalities and/or debilitating chronic illnesses with associated enormous social cost," and that the Petitioner work "reduces lead exposure" and "has broken new ground in the field."

Acknowledging the letters but focusing primarily on the number of citations, the Director stated that the Petitioner had not demonstrated that his contributions "have enjoyed widespread implementation in the field."[4] Under *Dhanasar*, the relevant inquiry is whether the Petitioner has established that he is well positioned to advance the proposed endeavor. On appeal, the Petitioner contends that his lack of citation history is not an accurate reflection of his influence and achievement within the broader field of metallurgical engineering because he works for a private company that funds and "owns" his research, making it "proprietary in nature, and therefore unlikely to result in well-cited journal publications." He also reiterates that his proposed endeavor is primarily project management, not research.

[4] The analytical framework in place at the time of the Director's decision was *Matter of New York State Department of Transportation*, 22 I&N Dec. 215 (Act. Assoc. Comm'r 1998) (*NYSDOT*), under which a petitioner was required to establish some degree of influence on the field as a whole.

Supporting the Petitioner's claim on appeal, an engineer at a competing company, [redacted] discusses the differences between industrial application research, which is driven by needs in the industry, and pure academic research, which is motivated by the researcher's own inclinations. He states that the results of the Petitioner's research are delivered directly to the organizations that request and fund the work, and have "proprietary limitations," preventing publication of key technological information. He further explains that the impact of industrial research is best measured by its direct practical use, rather than its use by academic researchers. [redacted] states that "due to the efforts by sponsoring organizations to maintain secrecy, most of [the Petitioner's] works are held as "trade secrets." However, the Petitioner "continues to demonstrate his scholarly attributes and high degree of influence in his field by developing solutions to very complicated technical problems within his industry."

While a strong citation history can be useful in establishing the influence or significance of an individual's work within the broader field, the evidence in the aggregate supports the Petitioner's affirmation that his past work has found practical application in industry settings, rendering him well positioned to advance the proposed endeavor. The submitted letters describe with specificity how his work has been used by his employer who relies upon him to manage multi-million dollar projects at the [redacted] in North America, as well as how his work has impacted other independent mining companies. Thus, the significance of his leadership role in research projects and, most importantly, his track record managing large scale mining projects, position him well to continue to advance his proposed endeavor of developing and implementing sustainable mining techniques.

C. Balancing Factors to Determine Waiver's Benefit to the United States.

Third and finally, we conclude that on balance, it would be beneficial to the United States to waive the requirements of a job offer and thus of a labor certification. The labor certification process is designed to certify that the foreign worker will not displace, nor adversely affect the wages and working conditions of, U.S. workers who are similarly employed. Job requirements must adhere to what is customarily required for the occupation in the United States and may not be tailored to the foreign worker's qualifications or unduly restrictive, unless adequately documented as arising from business necessity.

As noted above, the Petitioner holds a Ph.D. in metallurgical engineering, along with considerable experience and expertise in field. He has established a proven record of innovation and leadership developing cutting-edge mining processes that further productivity while minimizing environmental impact, and he has documented his past success advancing high-profile projects such as spearheading multi-million dollar projects that enable the mineral industry to maximize recovery while reducing gold losses and lead exposure resulting in reduction of pollution for companies utilizing his methods. The Petitioner notes that his leadership experience developing and improving intricate mining processes, his record of proven innovation, and his ability to use creative thinking to solve technical and multifaceted problems in the mining industry cannot be articulated on an application for labor certification because such requirements are not customarily required for the occupation of a

metallurgical engineer. They would be considered narrowly tailored to the Petitioner's qualifications.

Furthermore, numerous experts in the field attested to their use of the Petitioner's work in their own metallurgical engineering research, extending the benefits of the Petitioner's work beyond any one employer. Because of his demonstrated history of managing large-scale mining projects that improve both the safety and environmental sustainability of mining operations, we find the Petitioner offers contributions of such value that the United States will benefit from his work even assuming that other qualified U.S. workers were available.

## III. CONCLUSION

The Petitioner has met the requisite three prongs set forth in the *Dhanasar* analytical framework. We find that he has established eligibility for and otherwise merits a national interest waiver as a matter of discretion.

**ORDER:** The appeal is sustained.

Cite as *Matter of F-E-*, ID# 46885 (AAO Mar. 20, 2017)