

Golden Harmony: A study on the coexistence of artisanal and small-scale gold miners and processing plants to mitigate mercury use in Peru

By

Alejandra del Campo Farro

Candidate for the Master of Environmental Management

Advisor

Alexander Pfaff, Ph.D.

Professor of Public Policy, Economics, and Environment at the Sanford School of Public Policy

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Executive Summary

This Master's project focuses on describing Dynacor's business model, a Canadian Mining Company operating in Peru through its subsidiary Veta Dorada, in line with the ore-selling coexistence model proposed by authors Veiga and Fadina in the paper "A review of the failed attempts to curb mercury use at artisanal gold mines and a proposed solution."

This paper is based on fieldwork carried out in December 2023 in the Arequipa Region of Peru. It describes Dynacor's business model, identifies its strengths and attractiveness in the Artisanal and Small-Scale Mining industry, and provides recommendations for the business's long-term sustainability.

This Master's Project stemmed from Duke's Bass Connections Impacts of Artisanal Gold Mining Project, and the fieldwork was possible thanks to Duke University's Center for Latin American and Caribbean Studies and the Dynacor Group.

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1. Introduction

Peru is the largest gold producer in Latin America and the seventh largest in the world (World Gold Council, 2023). The mining industry contributes 14% of the national GDP (CONFIEP, n.d.), yet illegal and informal mining, mostly comprised of artisanal and small-scale gold miners (ASGM), represents between 22% and 28% of the country's total gold production (USAID, 2022).

ASGM use rudimentary techniques to refine gold based on mercury amalgamation and without proper management of the substance, causing an alarming contamination that has become of great concern, as multiple studies have evidenced. Notwithstanding, and as noted by authors Marcello Veiga and Otomayo Fadina, governments and organizations have focused their attention on quantifying and monitoring mercury pollution caused by ASGM, rarely providing feasible, realistic, and tailored solutions to eliminate its use (Veiga & Fadina, 2020). Veiga and Fadina propose an ore-selling coexistence model that could potentially curb mercury use where “*miners mine, and processors process.*” The model suggests that miners can be convinced that selling their raw ore to a processing plant is the most economically efficient alternative they have, thus curbing mercury use by these individuals.

This project focuses on said coexistence model in Peru, and it is based on fieldwork carried out in December of 2023 in the Arequipa Region of Peru. The case study is based on Veta Dorada, a subsidiary of the Canadian Mining Company Dynacor, which has been operating in line with this model for over 27 years in Peru. Characteristics of the model, strengths, and attractiveness, as well as recommendations for long-term sustainability, have been identified.

2. Peruvian Mining Regulatory Framework

The Peruvian Mining Regulatory framework is based on the Constitution and the General Mining Law (Decreto Supremo 014-92-EM). The Peruvian government is the legal owner of all of the country's natural resources, but the concessions system is utilized to grant mining rights to private parties. Three main concession types are identified in the General Mining Law: Exploration concession, exploitation or extraction concession, and processing or benefit concession; each of them requires a set of permits and licenses to obtain. These concessions give exclusive rights over natural resources and are irrevocable when fulfilling legal obligations such as paying an annual fee or meeting the yearly minimum required production or investment.

ASGM constitute a core part of the development of many remote and rural communities and localities in Peruvian territory, playing a central role in their economies and contributing to almost one-fifth of total gold production in the country (University of Oxford, 2024).

However, the Peruvian government has focused its efforts on promoting medium and large-scale mining and has developed public policies for the formalization of ASGM that are highly questionable and disconnected from the reality surrounding this group. It was not until 2002, with the modification of the General Mining Law by Law No. 27651, 10 years after promulgating the General Mining Law, that ASGM were legally recognized and incorporated into the regulatory framework.

The difference between artisanal and small-scale miners is based on the mining concessions' size and production or processing installed capacity. According to the General Mining Law's article 91 (Decreto Supremo No. 014-92-EM, modified by Decreto Legislativo No. 1040), an artisanal miner is an individual, group, or family that mines using basic tools and minimal or no mechanization and has up to 1,000 hectares of mining concessions or benefit installed capacity not exceeding 25 MT/day, while small-scale miners hold up to 2,000 hectares of mining concessions or have a production or benefit installed capacity not exceeding 350 MT/day.

Although much more complex, the formalization process starts with the miners' registration in the Integral Registry of Mining Formalization (REINFO). This solely allows them to legally conduct their activities (extract, process) while in the process of getting formalized. Not surprisingly, there is no enforcement for miners to finish the formalization process. It is very important to note that the window for miners to get formalized ends on December 31, 2024.

Another important distinction to make is the difference between illegal and informal miners. While illegal miners operate without any licenses or permits, and their activities are penalized by the government and constitute a crime, informal miners are the ones who have started the formalization process and operate while in the process of getting formalized.

3. Failed attempts to curb mercury use and the proposed coexistence model by Marcello Veiga and Otomayo Fadina

Veiga and Fadina categorized the failed approaches to curb mercury use in ASGM into three categories: Environmental and health approaches, technological approaches, and legal approaches.

The environmental approaches are focused on quantifying and monitoring the impacts of mercury contamination as a result of ASGM activities, but the results of these studies rarely reach the communities affected by mercury pollution. On the other hand, technical approaches aim to train the miners in new ways to refine their ore without mercury, but these attempts are often not sustainable as they change the status quo of the miners' operations and are hardly adopted by them.

The third approach attempts to legalize miners and require them to comply with environmental and safety regulations. However, miners face heavy bureaucratic burdens to formalize: securing land tenure and the licenses to mine within a state's rules can be costly, time-intensive, and cognitively demanding. Given the low enforcement of the rules that would penalize informality and the lack of incentives for formality, many miners choose to stay informal.

Based on these failed attempts to curb mercury use, authors Veiga and Fadina proposed a new innovative solution: coexistence between ASGM and processing plants. The model suggests that miners can be convinced that selling their raw ore to a processing plant is the most economically efficient alternative they have, thus curbing mercury use by these individuals. The proposed model starts with ASGM selling and sending their ore to an independent processing plant where the product will go through fine dry crushing, homogenization, sampling, and chemical analysis to determine the gold grade. The authors emphasize that miners must be engaged and educated in the sampling and chemical analysis process to accept the fact that the model is economically efficient for them. After the chemical analysis and the determination of the gold grade, miners are paid by the processing plants, and the ore will be processed in non-mercury plants.

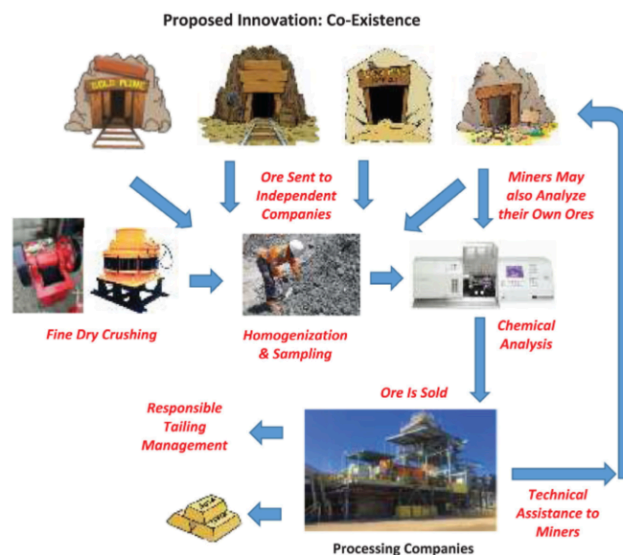


Figure 1 Veiga and Fadina's Proposed Coexistence Model

(Veiga & Fadina, 2020)

Ore-Selling Link to Formalization in Peru:

The formalization process in Peru has been disorganized and criticized from the beginning. On one hand, the initial or ordinary process that began in 2002, aimed for ASGM to follow the already established process to become conventional miners, which was initially set up for medium and large-scale miners. This ordinary process was completely out of sync with the realities and possibilities of ASGM, as it began with the request for a mining area before starting operations, despite these miners already being engaged in extraction/processing activities.

In 2017, the Peruvian Government promulgated the Decreto Legislativo No. 1293, creating the new “Integral Mining Formalization Process” aiming to simplify the requisites for ASGM formalization. The Registry for Mining Formalization (REINFO) was created as the first step for miners to get formalized, allowing them to keep conducting their extraction/processing activities while in the process. However, the process itself is still a burden for miners, and a large number of them opt to start the process and register in REINFO to be able to legally conduct their activities rather than conclude it.

In Peru, the formalization process has significantly failed. There are approximately 200,000 ASGM (Alliance for Responsible Mining, n.d.) , and to date, only 22,091 are registered in REINFO, and 64,843 have been suspended from the registry (Ministerio de Energia y Minas, 2024):

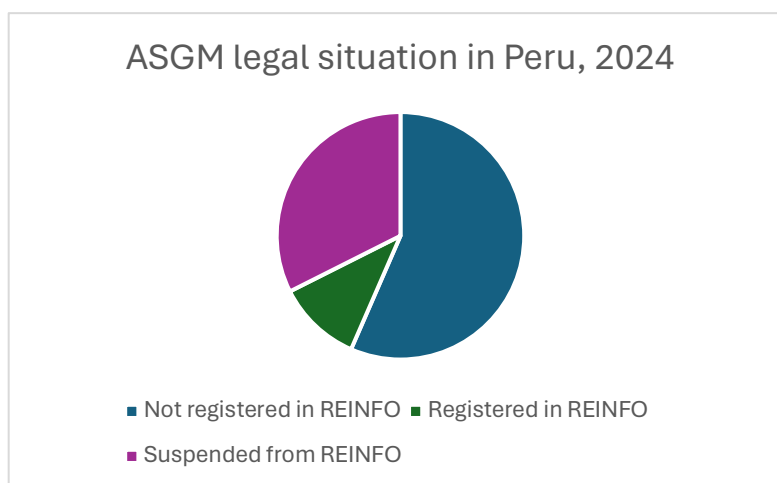


Figure 2 Artisanal and Small-Scale Gold Miners legal situation in Peru - April 2024

As mentioned before, registration in REINFO is the first step towards formalization. However, reliable data on how many miners have actually finished the formalization process is lacking.

4. Dynacor's operations in Peru using the proposed model

Dynacor is a Canadian industrial gold ore processor headquartered in Montreal that has been operating in Peru through its subsidiary Veta Dorada for more than 27 years. Its processing plant, located in the town of Chala in the Arequipa Region, is authorized by the Peruvian government to process 516 metric tons/per day (Rumbo Minero, 2022), it buys and processes ore from formal ASGM and those that are in the process of getting formalized.

Veta Dorada started operations in Huanta, located in the Ayacucho Region, buying ore from the ASMs that had their operations around the processing plant's location. With time, more ASMs from different parts of the country were interested in selling ore to them; word of mouth was imperative for this outcome. The company even explored the possibility of expanding its business to extraction around the area, but the project did not go further.

According to the processing plant's chief, Veta Dorada moved to Chala, Arequipa, one of Peru's mining hubs, motivated by a more accessible location for the company to transport the final gold to Lima and their suppliers to send their ore to the plant. They also have a collection point close to Trujillo, in La Libertad Region in northern Peru, where a crushing station is placed, and ASMs that are closer to that point can drop their ore that will later be transported by the company to the plant in Chala for testing and processing.

Their ASGM suppliers come from all over the country, including Piura, La Libertad, Ica, Ayacucho, and Cusco. They are driven to sell their ore by transparency, trustworthiness, and, most importantly, liquidity.

Dynacor operations can be described in 4 stages: Ore sourcing, purchasing and ore control, processing, and export. Although a final stage through its non-profit organization Fidamar, in line with its CSR initiative, will be discussed later on.

Ore Sourcing

The sourcing starts with Veta Dorada's acopiadores, and they serve as vital intermediaries between ASMs and the processing plant. They are, in this particular case,¹ people employed by the company who are in charge of finding new ore suppliers, verifying their legal status, asking for the required documentation, verifying the existence of the mining operations to ensure the origin of the ore, and assessing current suppliers' needs. They are scattered around the country, and each of them has a portion of the territory they oversee.

They are the first filter for ASMs to become suppliers of Dynacor. They ensure the legality and compliance of the mining activities being carried out by ASMs and verify miners' documentation and concession rights. They arrange for geologists to visit mining sites to provide miners with guidance on optimal mining practices and to assist them with troubleshooting when, for example, miners encounter difficulties in locating or following a vein of ore.

Financial assistance is another critical aspect of an acopiador's role. They often provide cash advances to miners to support ongoing operations and upon delivery of ore. For example, if a miner needs to purchase equipment or cover operating expenses, the acopiador would ask the company for cash as an advance payment to help meet their immediate needs.

They also deliver water via trucks for free to ensure miners have it for their extraction operations. Miners use water to suppress dust during the drilling process, which is crucial

¹ Other types of acopiadores exist in the Peruvian mining industry. They are not employed by any processing plant, but they source ore, typically from illegal sources, and buy it at a lower price to commercialize it in the illegal market.

for maintaining visibility and reducing the health risks associated with airborne particulates. Likewise, water is used to cool the drill bits in order to prolong their lifespan and enhance efficiency. Without this service, many of their activities would halt due to the lack of water infrastructure in remote locations.

Purchasing and Ore Control

In most cases, ASMs are responsible for covering the costs of transporting the ore to the processing plant in Arequipa. However, in some cases where the mining sites are difficult to access and located very far from the processing plant, Dynacor assumes that cost. The process once the ASMs get to the processing plant goes as follows:



Figure 3 Ore Stockpile in Veta Dorada's Processing Plant

ASMs arrive with their trucks and “guias de remisión,” documents containing data on where the mineral comes from and the weight of the cargo. These are mandatory for use as required by the tax authority SUNAT (Gobierno del Peru, 2023). After inspecting the document and several other legal requirements (Exhibit 1), the security guard lets them in.

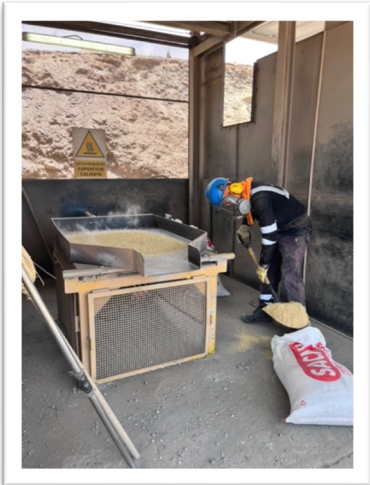


Figure 4 Ore Primary Crushing in Veta Dorada's Processing Plant

The truck goes into a big scale, and miners can directly watch the scale's number as a **transparency** measure taken by the processing plant. Then, the product is dumped into the mineral storage yard, and the empty truck goes into the scale again to find the definitive and accurate weight of the cargo. After this process, a lot number is assigned to the ore to identify it and the ASM who brought it.

Then, moisture is removed in front of the miner, and a sample of between 50 and 60 kgs is taken. The sample is taken for drying, to remove moisture and milling. The ore is put into tire tubs and then into a mill for about 45 minutes to 1 hour. Miners are present in these steps as well.

The powdered ore is then taken to the chemical laboratory and divided into 4 parts of approximately 500gr each. One envelope with the sample is given to the miner to analyze in a private laboratory in case they want to do so, two envelopes are analyzed by the processing plant's laboratory², and one is stored for dispute resolution in case the miner and the processing plant's analyses do not yield the same gold



Figure 3 Ore envelopes ready for chemical analysis

grade. It is important to note that if the miners decide to question the results of the analysis, the cost of the dispute resolution made by a laboratory in Lima is paid by the party that gets a result further away from the third-party lab tiebreaker. The cost of this test is about \$75 USD.

Once the analysis is done, Dynacor pays the miners for the gold grade using the international price of gold at the exact moment the ore enters the processing plant.

² Two samples are analyzed in the processing plant's laboratory to determine an accurate ore grade

Dynacor's policy is to pay for up to 90% of the grade, and typically, payments are transferred to miners' bank accounts as direct deposits within 24-48 hours of finalizing this process.

If there is a queue, this process can take more than one day, but Dynacor has built a camp for miners with beds, bathrooms, and a kitchen where they can rest and wait until the final payment sheet is ready.

A simplified version to describe the formula used to pay miners for their ore is as follows:

$$\text{Total payment} = (\text{quantity} * \text{price}) - \text{maquila} - \text{security discount} - \text{penalty}$$

Where the quantity is determined by the mineral recovery percentage, price is the international price of gold at the time the truck gets to the processing plant, maquila is the cost of refining and processing the concentrate to obtain the gold, which includes the operational and chemical costs. The security discount is a set number per ton and the penalty is the partial cost of cyanide, as the processing plant assumes one portion as well. Miners can negotiate the maquila amount.

After this entire process in front of the miner, the concentrate is owned by Dynacor and processing begins in the plant.

Processing

The process begins with primary and secondary milling using milling balls. Then, through a belt, the pulverized concentrate mixed with water undergoes a lixiviation process to separate the particles. Subsequently, the gold particles undergo a cyanidation and absorption process. The remaining material is disposed of in the tailings pond while the gold undergoes desorption and electrodeposition processes to move on to refining and

foundry finally. The final product is the doré, a semi-pure bar of gold typically containing between 50-75% pure gold (Bullion by Post, n.d.).

Export

The doré is transported from Chala to Lima's International Airport. From there, it goes to Switzerland, while the little silver they get is exported based on other buyers' locations.

The role of Fidamar

Dyncor's gold has been certified by PX Precinox (Dynacor's client) with the PX Impact certified clean gold program, based on which their buyers pay a premium for the purchase of ecologically and socially responsible gold they buy from Dynacor (Dynacor, 2023). The funds go directly to Fidamar (International Fund to Aid Artisanal Miners), non-profit organization that manages the funds and invest in programs and project focused on the sustainable development of the communities where artisanal miners who supply Veta Dorada live and work.

Fidamar's primary goal is to enhance the well-being and welfare of people in artisanal mining communities, focusing specifically on children, women, and those living in extreme poverty. The organization aims to improve the quality of life for these community members and support their sustainable development by bridging gaps in health and education.

This creates a positive feedback loop that makes it possible for the company to give back to the mining communities based on the commercialization and processing of sustainable gold. Fidamar has focused its activities in Chala, where the processing plant is located, and Secocha, which is also in the Arequipa Region. Although their suppliers also come from other regions of the country, such as Piura, La Libertad, Ica, Ayacucho, and Cusco.

5. Dynacor's business model strengths and attractiveness to ASGM

In Peru, the ASGM sector employs three primary mineral processing techniques. The first approach involves miners owning or collaboratively building their own processing facilities. However, as the head of the Veta Dorada Plant notes, it is relatively uncommon for individual miners or mining communities to have private processing plants due to the cost that it implies. The second method, which has been gaining popularity, involves leasing cyanidation processing plants. In this model, the facility's owner leases the processing capacity to miners. Sometimes, the owner may opt to purchase the processed gold directly from the miners; in other instances, miners rent the facility to process their ore and then take the gold for sale themselves. The third and most favored method involves the purchasing of processed concentrate, a strategy exemplified by the practices of Dynacor.

Dynacor's strength relies on trustworthiness, and it is attractive to ASGM based on liquidity prompt payments and silver recognition and payment.

Veiga and Fadina emphasize the need for miners to be engaged in the process of getting samples and gold grades, and Dynacor has efficiently managed to make the ore control and purchasing process transparent by allowing miners to take part in it as trust is the foundation of their relationship with ASGM. They rely on transparency and have an ore control process that is designed for ASGM to be present until the final invoicing, fostering a sense of collaboration and transparency aimed at strengthening the bond of trust further.

The only moment in which ASGM are not allowed to participate is during the chemical analysis of the ore, but they receive a sample so that they can conduct an independent analysis in a laboratory if necessary. This trust-building policy has brought great benefits to Dynacor. In a conversation with Veta Dorada's processing plant chief, it was noted that some miners who have been suppliers for the company for long periods of time don't even feel the need to engage in the ore control process. Dynacor's Veta Dorada Processing Plant

Chief mentioned that: *“Some of our suppliers no longer feel the need to come all the way here [the processing plant] and be present during the ore control process, but they trust us enough to send their ore by truck and stay in their mining operations working”.*

Additionally, prompt payments to miners are highly valued. In a conversation with a supplier from the Apurimac region who has waiting for his ore’s analysis in the designated camps inside the processing plant, this was the main reason for his decision to sell his ore to Veta Dorada: *“The payments are quick; it only takes a day for me to get my money. Other processing plants can take up to 15 days”.*

A second supplier representing an indigenous community that sells ore to Veta Dorada, also waiting for the chemical analysis of his ore, emphasized the importance of getting paid for the silver found in the ore as the main reason for the decision to sell it to Veta Dorada: *“The community likes selling the ore to them [Veta Dorada] because they not only pay us for the gold but also for the silver that can be found in the concentrate. Other plants only recognize gold”.*

6. Potential challenges

As mentioned before, Dynacor buys ore from formal ASGM and those in the process of formalization, meaning those registered in REINFO. As the window to formalize ends in December 2024, Dynacor could face significant challenges and disruptions in its supply chain as miners who did not conclude formalization by the end of that window will lose their legal status and no longer be able to legally sell their ore.

There is significant tension in the Peruvian mining sector about extending the formalization window, as it has already been extended on other occasions, and the link between illegal and informal ASGM with criminal actions. In fact, in March of this year, Congress reversed an executive measure to change the deadline for mining formalization to March of this year due to two nationwide protests led by ASGM organizations advocating for the repeal (Aquino, 2024). Medium and large-scale mining associations expressed their strong

opposition to this measure. The president of the National Mining, Petroleum, and Energy (SNMPE), Victor Gobitz, “suggested that criminal elements lay behind illegal mining, and he hinted at the possible connections between these and certain members of Congress” (Peru Supporting Group, 2024).

Further analysis could determine how impacted Dynacor will be after December 2024. For instance, information regarding how many already legalized suppliers they have versus how many are in the process of formalization would help determine the scale of the impact.

On the other hand, potential problems with *acopiadores* could arise. Despite being employees of Dynacor, they could have critical information on the state of the ASGM operations and not report those to the company. For instance, there could be miners who have one active and legal extraction concession in one specific mining site, but also several other sites where they are actively extracting ore without the required permits. They could pass the mineral extracted from those non-legal sites through the legal one, giving the ore the appearance of legality and thus being able to sell the concentrate to the processing plant.

Other problems may arise as miners potentially lose trust in the processing plant. For example, if there is a misunderstanding or miscommunication with the processing plant, they could believe they are not being fair with their payments. Instead of selling the ore, they could build their own processing plant, go back to using mercury, and only sell the tailings to Dynacor. Without proper equipment to detect traces of mercury in the ore, Dynacor would not know if this could be happening.

Similarly, it is not clear if ASGM suppliers are aware of the premium that Dynacor’s clients pay for the gold through the PX Impact certification. Finding out about that, and the fact that they are not receiving that premium could potentially become a source of conflict for Dynacor. Even though the funds go to Fidamar, and this organization is the one that manages what the money is being used for within the objectives of the organization, the primary idea behind the premium is that it enhances the well-being and welfare of the

miners that supply Dynacor, but not all of them are benefiting from this. As mentioned before, Fidamar is only conducting educational and health projects in Chala and Secocha in the Arequipa Region, but not in all communities where suppliers come from.

7. Recommendations for the long-term sustainability of the business

Four recommendations have been identified for Dynacor to preserve the long-term sustainability of its business.

The first one is to increase the supervision of acopiadores. As mentioned before, acopiadores could have information on the state of the miner's operations, and they are the ones that would know if they were conducting illegal activities. For instance, although not completely reliable, it would be beneficial for Dynacor to require monthly reports from acopiadores on the state of the miners' operations within the territories they are responsible for. These reports should be comprehensive and include photos if necessary. To complement this measure, Dynacor could corroborate the acopiadores' reports in the field with non-scheduled visits to their areas of responsibility. This way, the company could identify miners conducting illegal activities and ban them from their suppliers' list.

Similarly, Dynacor should consider purchasing mercury analyzers to test the ore that comes to the processing plant and determine any concentration of mercury. The plant chief mentioned during the field visit that this was already on the company's radar and that he was pushing for it to happen. With these devices, Dynacor would be able to detect if miners are selling tailings to them that contain traces of mercury and act not to jeopardize their clean product offering. In fact, PlanetGOLD incentivized the Peruvian Government to buy 2 mercury analyzers as part of the efforts to reduce mercury use in ASGM for the protection of public health and the environment (PlanetGOLD, 2023). These devices are used by the Ministry of the Environment and the General Directorate of Environmental Health.

A third measure Dynacor could take is to engage with their ASGM suppliers to promote finishing the formalization process. They could conduct workshops and even provide legal advice as well as set deadlines for them to complete the formalization process to keep engaging as suppliers with the company.

Finally, Dynacor should redirect the premium from the PX Impact certification directly to suppliers. In-cash contributions to the miners' bills could increase the loyalty of miners to the company and could help convince them that selling their ore is the most economically effective for them. They would get a tangible incentive to keep engaging in the practice and could even increase word of mouth, potentially benefiting Dynacor by increasing their supplier's quantity.

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Exhibit 1 Documentation Requirements to become a supplier of Veta Dorada

Requirements for Businesses

1. Declaration of commitment signed by the corresponding Regional Board or Certificate of Data Reception for the Registry of Mining Formalization (REINFO)
2. Be active in REINFO listing
3. Copy of the certificate of inclusion and/or update of coordinates in case it is not declared in your REINFO certificate
4. Copy of the National Identity Document of the legal representative and their final beneficiary
5. Public Deed or Constitution Document of the Company
6. Registration of the Company in the Public Registry
7. RUC form
8. Payroll of workers according to their production
9. Indicate the productive headquarters (place where the mineral is extracted)
10. RUC form should list the following economic activities:
 - Main: 4662 - Wholesale of metals and metal ores
 - Secondary: 1:0729 - Extraction of other non-ferrous metal ores
11. PDT 621 – Monthly IGV Income Tax for the three periods prior to the month of application submission
12. Copy of the first page of the Purchase and Sales Register
13. A copy of any of your invoices and a copy of a shipping guide issued with the seal or printed from your productive headquarters as declared in SUNAT in the option of annexed establishments, which must also match the REINFO declaration
14. The invoice must be presented with a seal or print of the deduction account number
15. Have an email address for sending your invoices
16. Have a bank account in dollars for the deposit of the payment of your mineral
17. Complete IGAFOM and proof of submission
18. Consultation on the validity of the mining concession (SIDEMCAT)
19. Verification of work (in person – satellite)

20. Sign the Mineral Commercialization Contract (mandatory)
21. Protocol: Plan for surveillance, prevention, and control of Covid-19
22. Registration of Protocol with the Ministry of Health
23. Sign the Sworn Declaration of Supplier Knowledge

Requirements for Sole Proprietorship

1. Declaration of commitment signed by the corresponding Regional Board or Certificate of Data Reception for the Registry of Mining Formalization (REINFO)
2. Be active in REINFO listing
3. Copy of National Identification Document
4. RUC form
5. Payroll of workers according to their production
6. Indicate the productive headquarters (place where the mineral is extracted)
7. RUC form should list the following economic activities:
 - Main: 4662 - Wholesale of metals and metal ores
 - Secondary: 1:0729 - Extraction of other non-ferrous metal ores
8. PDT 621 – Monthly IGV Income Tax for the three periods prior to the month of application submission
9. Copy of the first page of the Purchase and Sales Register
10. A copy of any of your invoices and a copy of a shipping guide issued with the seal or printed from your productive headquarters as declared in SUNAT in the option of annexed establishments, which must also match the REINFO declaration
11. The invoice must be presented with a seal or print of the deduction account number
12. Have an email address for sending your invoices
13. Have a bank account in dollars for the deposit of the payment of your mineral
14. Complete IGAFOM and proof of submission
15. Consultation on the validity of the mining concession (SIDEMCAT)
16. Verification of work (in person – satellite)
17. Sign the Mineral Commercialization Contract (mandatory)
18. Sign the Sworn Declaration of Supplier Knowledge