

1. Scope of the Environmental and Social Review

The Project consists of a corporate loan to Varmoxz SA de CV (“Varmoxz”) and Arzyz Industrias SA de CV (“Arzyz Industrias”), subsidiaries of Arzyz SA de CV (“Arzyz”, which together with Varmoxz and Arzyz Industrias form “Grupo Arzyz”). Grupo Arzyz has an operating plant dedicated to the manufacture of aluminum alloys in Apodaca, located northwest of the city of Monterrey, State of Nuevo Leon, in Mexico. It intends to build a second aluminum recycling plant in the municipality of Cienega de Flores, 20 km from the former. The environmental and social (E&S) assessment includes the plant in operation (Apodaca), as well as the construction plans for the Cienega de Flores plant.

The Environmental and Social Due Diligence (ESDD) process included inspecting the plant currently in operation in Apodaca, as well as the location where the new facility will be built. It also included interviews with two supply chain scrap suppliers; a review of the plant design information, policies, and operating procedures; and conversations with Grupo Arzyz’s Occupational Health and Safety (OHS), Human Resources (HR), and E&S Management and staff.

1.1 Environmental and Social Categorization and Rationale

The Project is classified as a Category B (medium risk) operation under the IDB Invest Environmental and Social Sustainability Policy, as the majority of the environmental impacts identified are considered to be limited, site-specific, and easily mitigable. The environmental, social, health, and safety impacts identified for the construction phase of the Cienega de Flores plant include: (i) generation of both hazardous and non-hazardous solid waste; (ii) air emissions; (iii) noise pollution; (iv) wastewater generation; (v) earthworks and soil vibrations; (vi) vegetation removal; (vii) worker occupational health and safety (direct and indirect); and (viii) road safety due to increased heavy transit. During the operation and maintenance (O&M), the risks include: (i) worker occupational health and safety, (ii) generation of both hazardous and non-hazardous solid waste; and (iii) use of resources such as energy, water, and local services, (iv) fires. Natural disasters, such as earthquakes, fires, floods, and thunderstorms, may also pose limited risks for the Project.

The operation will trigger the following Performance Standards (PS): PS 1: Assessment and Management of Environmental and Social Risks and Impacts; P2: Labor and Working Conditions; P3: Resource Efficiency and Pollution Prevention; P4: Community Health, Safety and Security.

The following Performance Standards are not triggered: PS-5 Land Acquisition and Involuntary Resettlement, given that the company’s land is leased from Volkram (the real estate company of Grupo Arzyz) and was acquired as part of a voluntary purchase and sale agreement; PS-6 Biodiversity Conservation and Sustainable Management of Living Natural Resources, given that the Project is located in a heavily altered industrial site with no natural or critical habitats; PS-7 Indigenous Peoples, since there are no indigenous communities or territories in the Project area; and PS-8 Cultural Heritage, given that there is no evidence of archaeological or heritage finds in the area.

2. Environmental and Social Context

Grupo Arzyz’s facilities date back to the 1980s, when they operated as a zinc recycling plant. However, since 2010, the plant—with a built area of 14 hectares (ha)—operates as an aluminum smelter with a production capacity of 5,000 ton/month.

The aluminum recycling plant to be built on a 20-hectare site in the neighboring municipality of Cienega de Flores will have two production lines, each with a capacity of 7,000 ton/month. Grupo Arzyz plans to acquire an additional 30 ha in Cienega de Flores to relocate and modernize the

entirety of the Apodaca plant, increase its production, and move away from the urban sprawl that has surrounded the plant currently in operation.

The raw material of the Apodaca plant is mostly non-ferrous scrap, which comes mainly from the State of Nuevo Leon. However, it also processes primary aluminum. The raw material is transported in company-owned trucks (with outside support during high production times) whose weight is controlled when they enter the plant.

The process of the Apodaca plant comprises three stages: (i) cleaning/grinding, (ii) melting, and (iii) pouring. The first stage, during which 90% of impurities (ferrous metals and dust) are removed, consists of the inspection and classification of scrap by type, its crushing, magnetic separation, sifting, and separation of non-metallic impurities. The melting phase is carried out in 2 multi-chamber ovens (with a 45-ton capacity), 1 fuser oven (20 tons), and 2 holding ovens (20 tons), all fueled with natural gas. Once the aluminum has melted, oxides^[1] and impurities are removed from the liquid metal. During this stage, metals can be added to form different alloys.

The third stage, i.e. pouring, takes the molten aluminum (with the specifications required by the buyer), and pours it into molds that use water recirculation for cooling, to achieve four product presentations: 10 kg ingots, 700 kg ingots, cones, or shot. Grupo Arzyz also sells liquid aluminum in special thermal containers.

In 2016, Grupo Arzyz installed an osmosis vessel (for well water), several cooling towers, and four dust collectors located in the grinding process and smelter areas (currently, five collectors in total). These E&S performance improvements were undertaken in response to the inspection^[2] carried out by the Secretariat for Environment and Natural Resources (SEMARNAT, for its acronym in Spanish) in 2014, which revealed five breaches of the Environmental License. In 2017, these irregularities were corrected, and the corresponding fines were paid.

The Cienega de Flores plant will follow the same three stages as the Apodaca plant but will incorporate efficient and automated technology^[3] that will allow for: (i) greater impurity segregation capacity; (ii) better use of water and energy; (iii) reduced waste generation; (iv) reduced resource utilization; (v) increased emissions reductions; (vi) improved cleaning, enabling the use of raw material that would have been discarded previously; and (vii) reduced air emissions. In a first phase, it will consist of two parallel stripping and melting lines whose main difference lies in the type of raw material to be processed. Line 1 will process low-density light material with an average grinding of 180-200 kg/m³ and line 2 will use high-density coarse material with an average grinding of 500-600 kg/m³. The plant will have six natural gas-fired ovens supplied by the central grid.

3. Environmental Risks and Impacts and Proposed Mitigation and Compensation Measures

3.1 Assessment and Management of Environmental and Social Risks and Impacts

a. Environmental and Social - E&S Assessment and Management System

The Apodaca plant has a Single Environmental License,^[4] an Environmental Impact Study (EIS), an “Environmental Impact Regularization Report” (2016) that was submitted to the State Environmental Authority (Undersecretariat for Environmental Protection of Nueva Leon) and an Environmental Impact Statement - Local submitted to the Secretariat of Environment and Natural Resources (SEMARNAT, for its acronym in Spanish) as a requirement to obtain the authorization to recycle contaminated aluminum. The corresponding EIS, prepared by the company HidroAmbiental, was submitted to SERMANAT in October 2019 for consideration.

Grupo Arzyz will implement an Environmental and Social Management System (ESMS) that promotes a sound and sustainable E&S performance, which will include: (i) policy, (ii) identification of risks and impacts, (iii) management programs, (iv) organizational capacity and competency, (v) emergency preparedness and response, (vi) stakeholder engagement, and (vii) monitoring and review.

b. Policy

Grupo Arzyz has a Safety, Health, Environment, and Social Responsibility Policy it prepared in 2019, by means of which it undertakes to comply with all applicable regulations, assess and mitigate risks, maintain ongoing communication with stakeholders, and work with the communities, among others. This policy, approved by the General Management, is in the process of being revised to include psychosocial aspects, in observance of a recently enacted federal law.

Grupo Arzyz lacks an HR policy.

c. Identification of Risks and Impacts

i. Direct and indirect impacts of risks

Federal law^[5] requires some procedures to identify the risks and impacts of key activities in the plant currently in operation in Apodaca, including: contingency plan, personal protective equipment, and emissions and noise monitoring. The Environmental Administration Program contained in the updated EIS for the Apodaca plant contains relevant mitigation measures commensurate with the identified impacts.

The greatest impacts identified in the EIS of the Cienega de Flores plant are: land clearing and clear-cutting; excavations and earthworks; fills and embankments; and foundation. The EIS includes an environmental monitoring program that defines preventive and mitigation measures, as well as indicators and the schedule of activities to address impacts during construction. The EIS for the Operation stage is pending.

The impacts of the Apodaca plant on neighboring communities (Fernando Amilpa and Valle de Las Palmas colonies) have to do with noise generation and particulate emissions. The impacts that construction of the Cienega De Flores plant would generate are associated to possible traffic accidents due to the increase in traffic of trucks and heavy machinery transporting equipment and materials, and are considered moderate-low due to the distance of more than 4 km between the location of the plant and the nearest community.

Grupo Arzyz will develop a robust risk identification system, which will be reviewed and updated regularly with internal and external inputs and will be part of the continuous improvement plan. The procedures will apply to contractors and their subcontractors, as well as to the supply chain.

ii. Analysis of alternatives

Different site, technology, and supplier alternatives have been assessed for the Cienega de Flores plant. The land where it will be located was selected due to the availability of parcels (50 ha in total), access roads, the provision of public services (natural gas, water, electricity), and land use (industrial). As for technology, the following was considered: (i) for grinding, the use of blades vs. hammers; for melting, the use of rotary kilns vs multi-chamber and holding furnaces; and for pouring, conventional ingots vs. continuous casting ingots to improve the quality of the final product. The criteria used to evaluate these alternatives were: improving raw materials exploitation, reducing emissions, and increasing efficiency in the use of water and energy.

d. Management Programs

Grupo Arzyz has plans, programs, and actions aimed at preventing, controlling, and mitigating adverse effects during the operation of the Apodaca plant. The procedures allocate responsibilities and mitigate E&S risks in Project activities. For the most part, such procedures are required by either local regulations (federal, state, or district) or by the ISO9001 auditors.

To adhere to local regulations and to the Quality Management System, Grupo Arzyz has the following management tools (among others): (i) safety, health, and environmental requirements for third-party employees, (ii) work at height authorization, (iii) hot work authorization for cutting and welding, (iv) radiation safety program, (v) procedures to investigate incidents or accidents, (vi) accident or incident investigation matrix, (vii) lists of personal protective equipment, (viii) contingency plan for civilian protection issues, (ix) training plan according to legal requirements, (x) annual drills plan, (xi) prior risk analysis system for each job function, (x) aluminum spill kit management program.

Grupo Arzyz will develop management programs for the Cienega de Flores plant and strengthen existing programs in observance of the IDB Invest Sustainability Policy, verifying progress in the objectives and goals intended to improve E&S performance and showing its commitment to continuous improvement.

e. Organizational Capacity and Competency

Grupo Arzyz has an organizational structure that defines the roles and responsibilities of its staff in terms of environmental, social, and work performance, which is headed by the Environment and Industrial Health and Safety Management under the Human Capital Management. The organizational structure will place the Cienega de Flores plant under its supervision.

Grupo Arzyz has an annual training plan that includes, among others, 70 recommended courses, intended to comply with federal laws and the Quality Management System, which cover the following topics: handling of chemical substances, work at height, and safety in confined spaces. Other courses will include issues such as community engagement, road safety, etc.

Oversight of Health, Safety, Environment, and Community (HSEC) matters during construction of the Cienega de Flores plant will be the responsibility of the company ESCALA, the project manager. ESCALA will appoint a person in charge of HSEC oversight who, to ensure the implementation of the Environmental Monitoring Program and other mitigation measures identified, will coordinate his or her activities with the Environment and Industrial Health and Safety Management.

f. Emergency Preparedness and Response

The Civilian Protection Contingency Response Plan for the Apodaca plant was prepared in May 2019 following federal requirements in the Rules of Operation of the State Civilian Protection System. This plan includes identifying internal and external risks and possible adverse scenarios; it also defines training needs, requires the performance drills, and contains recovery programs.

However, the plan does not consider the engagement of neighboring communities; along these lines, it fails to provide for coordinating with external stakeholders, nor does it consider the possibility of explosion or leakage of the diesel tank in its yard, approximately 50 meters from a dwelling. It has not been disseminated to stakeholders (fire brigades, police, communities).

The Cienega de Flores plant also lacks a Contingency Response Plan.

g. Monitoring and Review

Grupo Arzyz has a legal, environmental, and labor requirements follow-up matrix. As part of the E&S monitoring, some of its clients hire external auditors. These audit processes have resulted in the adoption of internal action plans for continuous improvement in OHS matters.

Grupo Arzyz is audited annually as a requirement for the renewal of its ISO 9001 certification. As a result of this external monitoring and evaluation process, an action plan to close any gaps found has been adopted. However, this action plan is limited to OHS in the Apodaca plant, where the progress registered for this year stands at approximately 29%.

h. Stakeholder Engagement

There is little stakeholder engagement. Contact with the communities adjacent to the Apodaca plant improved in 2018 but was discontinued in 2019. To date, there have been no activities to identify or contact the Cienega de Flores stakeholders.

The company's website has a local telephone number, an email, and an online contact form. However, Grupo Arzyz lacks a procedure to register, respond to, or follow up the community's concerns, which are submitted through these means.

i. External Communication and Grievance Mechanisms

i. External Communication

In terms of external communication, Grupo Arzyz only uses the telephone listed on its website, the online contact form, and an email address. To comply with the provisions of PS-1, however, Grupo Arzyz will develop an external communication mechanism that will include methods for: (i) receiving and registering external communications from neighbors and other stakeholders; (ii) analyzing and evaluating the concerns raised in these communications and determining how to address them; (iii) responding to the concerns, performing the actions required to satisfy the demands made, effecting the corresponding follow-up and documenting the process, and (iv) adjusting the management program, as appropriate. In this line, and following these guidelines, it will develop an internal grievance mechanism.

ii. Neighbors' Grievance Mechanism

The Apodaca plant has a toll-free telephone number enabled to attend to neighbors' demands, which has been disseminated using flyers. Even so, it will need to develop a formal grievance mechanism and a grievance and claims follow-up and resolution protocol.

j. Ongoing Reporting to Affected Communities

Since operations began in 2010, Grupo Arzyz has failed to make proactive contact with the communities neighboring the Apodaca plant. In 2015 and 2016, it held meetings with neighbors by reason of the growth of the urban sprawl, to explain the plant's operation, analyze the observations made by SEMARNAT (see Section 2), and attend to the Municipality's concerns regarding air quality.

In 2018, a Neighborhood Committee was formed, which held monthly meetings with the neighboring communities to explain issues related with day and night operations and Corporate Social Responsibility. The meetings were discontinued in the first quarter of 2019, but the company plans to continue them as part of its risk communication and Corporate Social Responsibility framework.

Communities have a direct line of communication with Grupo Arzyz personnel, through a WhatsApp

group.

Grupo Arzyz will continue its efforts to engage the communities neighboring the Apodaca plant and will disclose regular reports on its operations and risks.

3.2 Labor and Working Conditions

a. Working Conditions and Management of Worker Relationships

Grupo Arzyz has 446 employees (of which 235 are unionized), whose monthly wages exceed the minimum wage. Employees have access to permanent medical staff at the Apodaca plant. They are required to undergo full annual medical check-ups and benefit from yearly training. They can also enjoy an on-site cafeteria. The Company provides personal protective equipment that is renewed at the request of the employee. All workstations have water fountains, and there are designated smoker's areas for employees.

i. Human Resources Policies and Procedures

In keeping with the Federal Labor Code, Grupo Arzyz has an "Internal Labor Regulation", a collective agreement between the Union of Industrialized Metallurgical Workers (*Sindicado de Industriales de Trabajadores de la Rama de Metalmecánica* - CTM) and the Company Arzyz, which, strictly speaking, is an HR procedure that also applies to workers who are not unionized. This Regulation details the duties and responsibilities of the employer compared to Arzyz Human Capital, a Grupo Arzyz company that employs most of the staff and provides services to Varmoxz.

This agreement will be updated to comply with the provisions of Performance Standard 2.

ii. Working Conditions and Terms of Employment

The construction of the new plant will require the recruitment of 72 people, while its operation will require 412 people: 125 in administrative positions and 287 in operational functions. All of these people will be hired following the procedures used at the Apodaca plant. They will have good working conditions, suitable wages and benefits, personal protection equipment (PPE), and suitable conditions at the work site (including water, break areas, and dining areas).

iii. Workers' Organizations

The majority of Grupo Arzyz's workforce is unionized. The employment agreement with the union is revised annually in terms of contributions and adjustments for inflation. Relations with the union are good, and there have been no industrial conflicts. This same modality is expected to be applied at the newly-constructed plant.

iv. Non-discrimination and Equal Opportunity

Employees enjoy equal opportunity, regardless of gender, sexual preference, or ethnicity. However, Grupo Arzyz lacks a specific non-discrimination policy. The company is preparing policies on fundamental recruitment principles and drafting a Code of Ethics.

v. Retrenchment

Grupo Arzyz's workforce has increased over the past few years, i.e. there has been no staffing level reduction. On the contrary, in the past year it hired 100 employees: 50 operational staff members and 50 administrative staff. The Cienega de Flores plant is expected to generate 412 jobs until

2022.

vi. Grievance Mechanism

Grupo Arzyz has an employee grievance mechanism that is disseminated through posters, suggestion boxes, and diverse informative mechanisms, which detail how to file a grievance and the Company's duty to receive and respond to the grievances received. The mailboxes and the 24-hour hotline, which are part of the mechanism, provide an option for grievances to be submitted anonymously. This mechanism will be adapted and implemented at the Cienega de Flores plant.

b. Protecting the Workforce

Grupo Arzyz complies with the Federal Labor Code the Federal Rules on Occupational Health and Safety and the Mexican Official Standards, which prohibit both forced labor and child labor.

c. Occupational Health and Safety

Grupo Arzyz has a risk matrix for every job function and a list of the minimum personal protection equipment to be worn to prevent or mitigate said risks. It also has a register of the principal diseases (the majority of which are neuralgias) associated with each job function. However, it lacks an analysis of these records and the identification of possible causes.

That being said, Grupo Arzyz will develop an Occupational Health and Safety Management System that will include the obligation to report and investigate occupational accidents, diseases, and incidents; as well as to monitor the health and safety statistics of its employees and those of workers engaged by its contractors and subcontractors.

The fire prevention system in the Apodaca plant will be revised to meet the standards of the National Association of Fire Protection Systems (NFPA).

d. Workers Engagement by Third Parties

Employees hired by third parties enjoy the same privileges and obligations as those employed directly by Grupo Arzyz.

e. Supply Chain

Grupo Arzyz has 11 scrap raw material suppliers at the national level,^[6] with medium to high collection capacities. Suppliers register through a supplier approval form after having been vetted to ensure that each of them fulfills all legal requirements for operation, has corporate charter documents, has submitted its legal representative's power of attorney, has a letter from its shareholders, has submitted documents to certify its tax status, has submitted evidence of fulfilling all applicable tax obligations, and has signed the privacy notice. These scrap suppliers have no direct contact with garbage pickers (waste miners); rather, they purchase scrap as it is generated.

3.3 Resource Efficiency and Pollution Prevention

a. Resource Efficiency

i. Greenhouse Gases

Grupo Arzyz currently records the greenhouse gas (GHG) emissions associated with the production of aluminum ingots, in addition to those generated by diesel fuel, liquefied petroleum gas, and

gasoline.

ii. Water Consumption

The main source of water for industrial use is a well that is treated through a reverse osmosis process. A recirculation mechanism is used to reduce consumption. Drinking water obtained from tanks is used for domestic purposes (dining room). Grupo Arzyz has two water concessions granted by the National Water Commission (CONAGUA, for its acronym in Spanish): one for 58,320 m³/year and another for 16,566 m³/year (currently under renewal). Water consumption for cooling at the Apodaca plant is 22,054 m³/year.

The use of industrial water from the municipal network and possibly well water is considered for the Cienega de Flores plant. There are also plans to build an osmosis plant (for well water) and tanks to supply water for domestic use at the site.

iii. Energy Consumption

The main energy source at the Apodaca plant is natural gas, which is used to fire the furnace (kilns); it is distributed through a municipal central network. In 2018, natural gas consumption was 6 million m³. In 2018, 166,833 liters of liquefied petroleum gas (LPG) were used to fuel forklifts and 35,950 liters of gasoline were used to fuel vehicles.

Grupo Arzyz also uses diesel to fuel trucks and heavy machinery. In 2018, diesel consumption was 101,519.21 liters. This fuel is collected in a tank located in the raw materials stockyard. It lacks suitable secondary containment, a spill kit, and a medium fire extinguisher to address any contingency.

The same four principal fuel sources are considered for the Cienega de Flores plant: natural gas, LPG, gasoline, and diesel.

b. Pollution Prevention

i. Emissions

The register of air emissions for the Apodaca plant is submitted to the District Environmental Authority every 15 days. The environmental monitoring points have been modified to adhere to the requirements defined in federal and district law.

The emission reports contained in the Annual Certificate of Operation show compliance with Mexican regulations. However, there is no evidence of compliance with the [World Bank's General Environmental, Health, and Safety Guidelines](#).

ii. Wastes

In terms of waste generation, in 2018 the highest was dust from the collectors (665 tons), common waste (145 tons), organic waste (14 tons), waste wood (100 tons), scrap iron (77 tons), refractory debris (94 tons), and tires.

iii. Hazardous Materials Management

Grupo Arzyz keeps a monthly record of hazardous waste: fluorescent lamps, lubricating oils, fabrics or cardboard impregnated with oil or paint, plastic or metal containers impregnated with oils, solvents and paints, black dross,^[7] and medical or other sharps. Hazardous waste is collected by the

company CIMARI and disposed of as required by Mexican law.

3.4 Community Health, Safety and Security

The Cienega de Flores plant will be located in an industrial area, with no dwellings in its vicinity. The Apodaca production plant, while also located in a historically industrial area, has been overtaken by the urban sprawl and there are homes in its surrounding areas.

The emergency response plan does not consider community's participation. The transport of raw materials and products is outsourced to specialized transport companies and there are set times for the trucks to load and unload materials. However, there is no road safety plan for the construction stage of the Cienega de Flores plant.

In 2016, Grupo Arzyz introduced dust filters in its stacks and grinding areas to prevent disturbing the surrounding communities. However, the main raw materials (scrap, including shavings) stockyard is in the open.

In 2019, a third-party company (PROFASI) was hired to measure noise in five points and its impact on the surrounding communities, concluding that no residential areas are affected by the Company's operations.

Security personnel is employed and provided by a security services company. The security guards are unarmed and mostly control entry to the premises. Grupo Arzyz also uses closed circuit cameras as a security mechanism.

3.5 Land Acquisition and Involuntary Resettlement

Land acquisition has been performed under a voluntary purchase and sale process with no physical or economic displacement.

3.6 Biodiversity Conservation and Natural Habitats

The Project will not affect sensitive natural habitats, critical habitats, or places with high biodiversity.

3.7 Indigenous Peoples

The Project will not affect indigenous communities or populations.

3.8 Cultural Heritage

The Project will not affect any cultural heritage.

4. Local Access of Project Documentation

Information on this Project can be accessed through the following electronic links:

<http://www.arzyz.com/>

5. Environmental and Social Action Plan. (Please see attached document)

6. Contact Information: For project inquiries, including environmental and social questions related to an IDB Invest transaction, please contact the client (see Investment Summary tab), or IDB Invest using the email requestinformation@idbinvest.org. As a last resort, affected communities have access to the IDB Invest Independent Consultation and Investigation Mechanism by writing to

mecanismo@iadb.org or MICI@iadb.org, or calling +1(202) 623-3952.

[1] Slag, aluminum oxides, and other oxides, which are collectively called dross. Aluminum oxide is mostly recovered through a process patented by Grupo Arzyz; the remaining dross is disposed of as hazardous waste by a certified company called CIMARI.

[2] Administrative Procedures No. PFPA/25.2/2C.27.1/0004-14 of the Federal Delegation of the Federal Prosecutor's Office for Environmental Protection.

[3] Grinding with blades and cleaning equipment that generates fewer particles.

[4] Granted by the Federal Delegation of SEMARNAT under No. LAU/19/00144-11 in July 2011.

[5] Federal Labor Code (Art. 153.A), NOM-043-SEMARNAT-1993, NOM-081-SEMARNAT-1994, Rules of Operation of the State Civilian Protection System Art. 23.

[6] Five in Monterrey, 1 in Merida, 1 in the State of Mexico, 1 in Toluca, 1 in Chihuahua, 1 in Guadalajara and 1 in Leon.

[7] Final waste of the rotary kiln: sodium chloride, potassium chloride, aluminum oxides, aluminum hydroxide